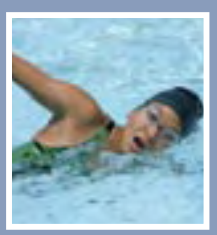
TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH

THE UNIVERSITY OF DUBLIN

UNDERGRADUATE COURSES 2011




www.tcd.ie

Welcome from the Provost

I hope that you will consider joining us as a student at Trinity College Dublin.

Trinity College Dublin is recognised internationally as Ireland's premier university and as one of the top universities in the world*. Founded in 1592, it is the oldest university in Ireland. Today the College has a vibrant community of 16,840 students representing every county in Ireland, 118 nationalities, and a wide range of social backgrounds and age-groups. Some of the most famous people in Irish history have been educated at Trinity College; writers like Oscar Wilde and Samuel Beckett; scientists like William Rowan Hamilton and E.T.S. Walton, who won the Nobel Prize for his work on the atom, as well as two Irish presidents and many industry leaders.

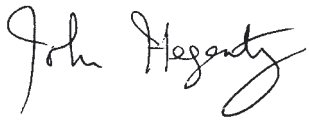
Trinity College has a number of important priorities for its students. Each incoming student is assigned a Tutor, a member of the academic staff, who is there to advise you and help if any personal problem arises. This tutorial system is unique in Ireland. In addition, a student-to-student mentoring programme for first year students has been initiated. Other high quality student services include the Careers Advisory Service. There are also possibilities of studying abroad in other leading universities through Trinity College's partnership agreements.

Students benefit from a scholar-teacher model where you have the opportunity of being taught by world-leading experts in their field. Offering a unique educational experience across a range of disciplines in the Arts, Humanities, Engineering, Science, Human, Social and Health Sciences, TCD's curriculum is aimed not just at acquiring knowledge but at developing critical thinking and facilitating research at every stage of the undergraduate programme. You will learn to think for yourself, to learn from your mistakes, and refine your mind to be able to manage whatever the changing world may throw at you. These skills are for life.

Located in the heart of Ireland's busy capital city, TCD students can avail of the many attractions and facilities Dublin has to offer. The campus's state-of-the-art facilities include a modern Sports Centre, the Science Gallery – which is the first of its kind in the world, and the Trinity College Library, the largest research library in Ireland. In addition to collections gathered over four centuries, the College has had 200 years of legal deposit, allowing Trinity College to claim a copy of every book published in Ireland and the UK. It is also home to an extensive collection of manuscripts, the most famous being the Book of Kells.

The 'Trinity Experience' is a chance in a lifetime for personal development in the broadest sense. Trinity College has many diverse and colourful societies and clubs which contribute much to the life and fabric of the University and community. There are some 50 sports clubs and almost 100 student societies to participate in, with something to suit all interests.

Committed to excellence in teaching, research and innovation, Trinity College Dublin guarantees a distinctive all-round undergraduate experience that will change your life forever. As a student you feel a great sense of history, of walking in the footsteps of famous graduates, many of whom have and are helping shape the history of Ireland and the wider world. I hope you will consider joining us to study here and look forward to welcoming you on campus for an exciting new journey that will open your mind to new experiences, ways of thinking and friendships, many of which will last for a lifetime.



John Hegarty
Provost

July 2010

**Trinity College Dublin was ranked 43rd in the world in the 2009 Times Higher Education-QS world league tables, which also ranked Trinity College as the 13th best university in Europe.*

Fáilte ón bPropast

Tá súil agam go smaoineoidh tú ar theacht go Coláiste na Tríonóide mar mhac léinn.

Tá aitheantas idirnáisiúnta bainte amach ag Coláiste na Tríonóide mar an ollscoil is fearr in Éirinn, agus mar cheann de na hollscoileanna is fearr ar domhan*. Bunaíodh Coláiste na Tríonóide sa bhliain 1592. Is é an ollscoil is sine in Éirinn é. Tá pobal bríomhar 16,840 mac léinn againn, as gach contae in Éirinn, as 118 tír, agus ó chúlraí sóisialta agus aoisghrúpaí éagsúla. Fuair roinnt de na daoine is iomráití i stair na hÉireann a gcuid oideachais i gColáiste na Tríonóide — scríbhneoirí cosúil le Oscar Wilde agus Samuel Beckett, eolaithe cosúil le William Rowan Hamilton agus E.T.S. Walton (a bhuaigh duais Nobel as an obair a rinne sé ar an adamh), maille le beirt d'Uachtaráin na hÉireann agus neart cinnirí tionscail.

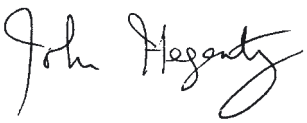
Tá roinnt tosaíochtaí tábhachtacha againn dár gcuid mac léinn. Ceaptar Oide do gach mac léinn, ball den fhoireann acadúil a chuirfidh comhairle ort agus a chuideoidh leat má bhíonn aon fhadhb phearsanta agat. Níl a leithéid le fáil in aon ollscoil eile in Éirinn. Agus tá córas nua meantóireachta 'mac léinn go mac léinn' againn, trína dtugann mic léinn eile treoir agus tacaíocht do mhic léinn úra. Tá an tSeirbhís Ghairmthreorach ar cheann eile de na seirbhísí ardchaighdeáin a chuirimid ar fáil do mhic léinn. Tá féidearthachtaí ann freisin le staidéar a dhéanamh thar lear i bpríomhollscoileanna eile a bhfuil comhaontú comhpháirtíochta acu linn.

An cur chuige atá againn anseo i gColáiste na Tríonóide ná gur scoláire agus múinteoir gach léachtóir. Sa chaoi seo, bíonn deis foghlaim ó ard-shaineolaithe domhanda sna réimsí éagsúla. I gColáiste na Tríonóide, cuirimid oideachas den scoth ar fáil thar réimse disciplíní: sna hEalaíona, sa Sruithléann, san Innealtóireacht, san Eolaíocht agus sna hEolaíochtaí Daonna, Sóisialta agus Sláinte. Ní ar bhailiú eolais amháin atá curaclam an Choláiste dírithe, ach ar an smaointeoireacht chriticiúil a fhorbairt agus an taighde a éascú ag gach leibhéal den chlár fochéime chomh maith. Foghlaimeoidh tú conas smaoineamh as do stuaim féin, conas foghlaim ó bhotúin, agus conas d'intinn a mhúnlú chun gach rud a thiocfaidh i do threo a láimhseáil. Is scileanna buana iad na scileanna seo.

Agus an Coláiste suite i gcroílár phríomhchathair ghnóthach na hÉireann, is féidir le mic léinn teacht ar na háiseanna agus nithe spéise go léir atá ar fáil i mBaile Átha Cliath. I measc áiseanna úrscothacha an champais, tá ionad spóirt nua-aimseartha, an tÁiléar Eolaíochta (an chéad tionscnamh dá leithéid ar domhan), agus Leabharlann Choláiste na Tríonóide, an leabharlann taighde is mó in Éirinn. Anuas ar bhailiúcháin éagsúla a cuireadh le chéile thar 400 bliain, tá cnuasach dlíthiúil 200 bliain ag an gColáiste, agus an ceart aige cóip a fháil de gach leabhar a fhoilsítear in Éirinn nó sa Ríocht Aontaithe. Tá bailiúchán leathan lámhscríbhinní sa Choláiste, ina measc an lámhscríbhinn is cáiliúla acu, Leabhar Cheanannais.

Soláthraíonn Coláiste na Tríonóide deis iontach don fhorbairt phearsanta. Tá a lán cumann agus clubanna spleodracha sa Choláiste, a chuireann go mór le saol agus le bríomhaireacht na háite. Tá breis agus 50 club spóirt agus nach mór 100 cumann againn, agus ábhar spéise do chách iontu.

Agus muid tiomnaithe don sár-chleachtas múinte agus taighde araon, cuirtear eachtra fochéime den scoth ar fáil anseo, eachtra a athróidh do shaol. Mar mhac léinn sa Choláiste, braithfidh tú an stair i do thimpeall agus tú ag leanúint lorg na gcéimithe cáiliúla a d'imigh romhat; céimithe a chuir (agus a chuireann) le stair na tíre seo agus le stair an domhain. Tá súil agam go dtiocfaidh tú anseo mar mhac léinn, agus beidh mé ag súil le fáilte a chur romhat ar an gcampas agus tú ag cur tús le haistear iontach, a osclóidh d'intinn ar eispéireas nua, bealaí agus modhanna smaointe úra, agus a sholáthróidh deiseanna úra cairdis duit, roinnt mhaith acu a rachaidh chun tairbhe duit ar feadh do shaoil.



John Hegarty
Propast

Iúil 2010

**Tá sé sa 43ú háit de réir shraithliosta domhanda ollscoileanna Times Higher Education - QS 2009, a deir freisin gur muid an 13ú hollscoil is fearr san Eoraip.*



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Arts, Humanities and Social Sciences

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This document is also available in alternative formats upon request. For further information contact the Admissions Office, Trinity College, Dublin 2. Phone: +353 1 896 4444, E-mail: admissions@tcd.ie

Trinity College's location

Trinity College Dublin's campus is situated in the heart of Dublin's city centre. Its state-of-the-art modern facilities include the Trinity College Library, Sports Centre, the new Trinity Long Room Hub (see photo on this page), Science Gallery and the Nanoscience research centre, situated in a 47-acre campus of cobbled squares, historic buildings and green playing fields.

Trinity College's central location makes it highly accessible for all forms of public transport, such as both LUAS (light rail transit) lines, the DART line (Dublin's suburban rail system) and a large number of Dublin's bus routes. The many national bus routes are a few minutes walk away, Dublin's main two train stations are in close proximity, while Dublin airport is 13km from the campus and is directly accessible via bus or taxi.

Dublin has a well deserved reputation as one of Europe's leading cities for tourism and entertainment. Many of its best cultural, historical and entertainment centres are within easy walking distance of the College gates. The vibrant social scene in the city and on campus ensures that students enjoy a wonderful social life while studying at Trinity College.

Student life at Trinity College

Student societies

There is more to the Trinity experience than lectures and study. One of the core elements of student life is the activities organised by students for students. Almost 100 Trinity societies, covering a broad range of interests, constitute the most dynamic and active set of university student societies in Ireland.

There is something for everyone – from societies like the Philosophical Society and the College Historical Society with their established debating tradition and impressive list of guest speakers (adding in the past year Jack White, John Voight, Noam Chomsky, Alex Ferguson, Dara O'Brien and Damien Rice to name but a few) to the Players (drama) society who hold over 48 shows a year, making it the most productive theatre company in the UK and Ireland, while still organising large scale events such as the first Dublin Shakespeare Festival. You can join the Filmmakers Society, Trinity FM, or the Photography Society who each have a studio on campus and hold regular screenings, broadcast weeks, exhibitions and classes respectively.

You can try your hand to everything from singing to sci-fi, juggling to jazz and politics to paintballing – relax with the Yoga society or de-stress in a different way with the Comedy society who have played host to internationally recognised comedians such as David O'Doherty, Neil Delamere, Andrew Maxwell, Ardal O'Hanlon, Frisky and Mannish, Dead Cat Bounce and many more, as well as cultivating a thriving comedy circuit on campus with student comedians performing weekly.

Joining societies is an ideal way to meet people and offers invaluable support as well as an introduction to Trinity life. And if you don't find a society that interests you, you can always set one up yourself!

You cannot miss the array of society stands in Front Square during Freshers' week (your first week in College), but never fear if you don't make it in! Societies are open to new members throughout the year.

Florence Welch (aka METEOR and BRIT Awards winner Florence and the Machine) launched the Fringe Festival this year, organised by the Comedy and Players societies.

Find out more about Trinity College's student societies at:
www.trinitysocieties.ie

Sport at Trinity College

Trinity College now boasts a state-of-the-art Sports Centre on campus with outdoor facilities located at on and off campus locations. The Sports Centre includes a vast array of facilities, including a swimming pool, sauna and steam rooms, fitness theatre, holistic treatment rooms etc. The main hall hosts soccer and many racquet and ball sports.

Also on-campus are squash courts, tennis courts, a futsal pitch, rugby, soccer and cricket pitches and a grass athletics track in the summer.

Many recreational classes are organised throughout the year in which all level of sports enthusiasts can take part.

Two miles upstream from the College is a boathouse accommodating the Ladies' and Mens' Boat Clubs and at Santry Avenue, five miles north of the campus, there are additional pitches for rugby, soccer, hockey and gaelic games.

The University's Athletic Club (D.U.C.A.C.) provides membership to approximately 50 different clubs. D.U.C.A.C. prides itself on catering for everyone, whatever your level and commitment to sport, from beginners to international sports stars. The Ladies Hockey Club competes at the first division of the Leinster League and hosts 5 different teams for all levels. The Fencing Club has won their Intervarsity Competition for the last 3 years and the Harriers and Athletics Club celebrated their 125th year last year.

Clubs are run by students and this gives them a sense of belonging and dedication and certainly helps to contribute to team success and personal development; it is a great way to meet people and develop communication, organisation, leadership, financial and administrative skills.

Sport Clubs include: Aikido, American Football, Badminton, Basketball, Boat, Boxing, Camogie, Climbing, Cricket, Croquet, Cycling, Equestrian, Fencing, Gaelic Football, Golf, Handball, Harriers and Athletics, Judo, Karate, Kayak, Kenpo, Lawn Tennis, Netball, Orienteering, Rifle, Rugby, Sailing, Snowsports, Soccer, Squash, Sub Aqua, Surfing, Swimming, Table Tennis, Tae Kwon Do, Trampoline, Triathlon, Ultimate Frisbee, Volleyball and Windsurfing.

E-mail: **sport@tcd.ie**
Tel: **+353 1 896 1812**
Website: **www.tcd.ie/sport**

For details of Sports scholarships see page 30.

Students' Union

The Students' Union is the main representative body for all students in Trinity College. It exists to work on behalf of students. The Students' Union provides a broad range of services such as two shops, a bookshop, a café, a travel card and information office and job listings. There is a confidential welfare service and confidential academic assistance and advice is available to students. Further to this, the union organises a comprehensive entertainment programme including class parties, gigs, nights out, mystery tours, comedy nights and the famous Trinity Ball.

Five full-time sabbatical officers are elected to work as union officers every year. These are: the President, Education officer, Welfare officer, Communications officer and Entertainments officer. The Communications officer is responsible for the publication and distribution of The University Times – the union newspaper and source of Trinity, national and international news as well as listings, reviews and more.

Part-time officers work on representing and promoting specific areas of College and every class has a class representative who organises class parties as well as helping with student problems and acting as a link between students and officers.

The officers of the union represent students on many important College committees including the College Board and University Council. The Students' Union is also affiliated to the Union of Students in Ireland (USI).

All students are automatically members of the union and it's very easy to get involved as a class rep, by writing for The University Times or by being on the Ents crew. It's your union, so we hope that you will use it!

For more information visit **www.tcdsu.org**

Restaurants and coffee shops

On-campus, students can choose from three restaurants (the historic Old Dining Hall, the modern Buttery Food Court and the Hamilton Restaurant), two 'Java City' speciality coffee shops and two other coffee shops. Trinity's food outlets only serve 'Fair-trade' certified tea and coffee.

In addition, Dublin city's wide selection of restaurants, cafés, delis and coffee shops are within a few minutes walk of College.

An Ghaeilge/The Irish language

Tá an Ghaeilge faoi bhláth anseo i gColáiste na Tríonóide i gcroílár Bhaile Átha Cliath, agus bíonn sí á labhairt ar fud an Choláiste. Tá sí le feiceáil i bhfoilseacháin oifigiúla an Choláiste agus i nuachtáin na mac léinn. Tá líon mór ball sa Chumann Gaelach (féach **www.cumann.ie**), ceann de na cumainn mac léinn is bríomhaire sa tír, a chuireann clár spleodrach imeachtaí sóisialta ar fáil.

Tá Oifig na Gaeilge (féach www.tcd.ie/gaeloifig) ann chun an Ghaeilge a chur chun cinn ar fud an Choláiste, mar aon le comhairle a thabhairt maidir leis an Acht Teanga. Bíonn an Oifig ag feidhmiú i gcomhar le Coiste na Gaeilge, le tacaíocht ó údaráis an Choláiste agus ón Údarás um Ardoideachas. Leagtar amach gealltanais maidir le seirbhísí dátheangacha i Scéim Teanga an Choláiste.

Cuirtear ranganna Gaeilge ar fáil saor in aisce do mhic léinn agus cuirtear fáilte ar leith roimh mhic léinn úra nach bhfuil ag déanamh staidéir ar an nGaeilge mar ábhar acadúil. Tá dhá Scéim Chónaithe Ghaeilge againn do mhic léinn: Scéim Chónaithe Dhartraí i Halla na Tríonóide (do dhaoine atá ag tosú sa Choláiste) agus Scéim Chónaithe an Champais (ar phríomhchampas an Choláiste, do dhaoine atá sa dara bliain nó níos airde).

Sa dara téarma, bíonn féile mhór Gaeilge an Choláiste – Éigse na Tríonóide – ar siúl ar feadh seachtaine, le réimse leathan imeachtaí, idir spóirt, díospóireachtaí, ceolchoirmeacha agus eile. Bain sult as do shaol trí Ghaeilge i gColáiste na Tríonóide!

Irish is flourishing here in Trinity College in the heart of Dublin. You will hear it being spoken throughout the campus and will see it in College and student publications. College's Cumann Gaelach (see www.cumann.ie) is one of the most vibrant Irish-language student societies in the country, with an exciting programme of social events.

The Irish Language Office/Oifig na Gaeilge (see www.tcd.ie/gaeloifig) promotes the Irish language in College generally as well as advising in relation to the Official Languages Act. The Irish Language Office operates in conjunction with Coiste na Gaeilge, Trinity College's Irish Language Committee, and with the support of the College authorities and the Higher Education Authority. Commitments in relation to bilingual services are set out in TCD's Irish Language Scheme.

Irish classes are available free of charge to all students, including those who are not studying Irish as part of their academic course. Trinity College has two Irish-speaking student residential schemes – Scéim Chónaithe Dhartraí (in Trinity Hall, for first-year students) and Scéim Chónaithe an Champais (on the main campus, for continuing students).

In the second term, College's annual week-long Irish festival, Éigse na Tríonóide, takes place. Its programme features a wide range of activities – including sport, debates, concerts and tours. Enjoy the Irish language as part of your Trinity College experience!

Trinity Publications

The award-winning magazines and newspapers that constitute Trinity College's vibrant student media are supported by Trinity Publications. These include Icarus (literary review), TCD Miscellany (commentary), The Piranha (satire), Trinity Film Review (film review), Trinity News (broadsheet newspaper), The Attic, The Social and Political Review and The Histories and Humanities Journal, to name but a few.

2010 was a successful year for Trinity Publications with twenty-two nominations at the National Student Media Awards, winning 'Website of the year' and 'Short Story of the year'. Trinity News was nominated for 'Newspaper of the year' and 'Editor of the year' with a number of staff nominated in categories such as 'Journalist of the year' and 'Travel Writer of the year'. TCD Miscellany and the Piranha were also nominated for the 'People's Choice Award'. In 2009 Trinity News won 'Newspaper of the year', 'Editor of the year', 'Journalist of the year (national press)', 'Magazine of the year', 'Layout and Design of the year', 'Colour Writer of the year' and 'Travel Writer of the year'.

Trinity Publications celebrated alumni include author and journalist Mark Little; Peter Murtagh and Eoin McVey – Managing Editors of The Irish Times; Brian Lenihan – Minister for Finance; Paul McGuinness – Manager of U2; and Ed Mullhall – Managing Director of News at RTÉ.

All students are encouraged to contribute to our publications. We also welcome applications to start up new student publications in College, and can offer funding to cover print costs and the use of our industry-standard design software and equipment

Find out more at **www.tcdlife.ie/publications**, **www.trinitypublications.info, www.trinitynews.ie,** or **www.miscellany.ie**

Trinity College theatres

The Samuel Beckett Centre comprises the Samuel Beckett Theatre (a 208-seat black box performance space), Players Theatre (the studio theatre of the student drama society), a dance studio/rehearsal space, seminar rooms and offices. During term time the Samuel Beckett Theatre showcases the work of Drama and theatre studies. It has also hosted visits from some of the most prestigious dance and theatre companies from Ireland, Europe, Japan and the United States. Regular events at the Samuel Beckett Theatre include the Dublin Theatre Festival, as well as an on-going series of lectures in contemporary theatre by practitioners and scholars.

Find out more at **www.tcd.ie/Drama**

Gallery

The Douglas Hyde Gallery, located within Trinity College, is one of Ireland's leading contemporary art galleries. The gallery regularly hosts exhibitions by established artists from Ireland and abroad.

The gallery was opened in 1978 and is located at the Nassau Street entrance to Trinity College. It is a non-profit making company, funded jointly by Trinity College and the Arts Council of Ireland. The Gallery, whose reputation is firmly established in the international contemporary art world, has a diverse programme of exhibitions, and its publications are widely distributed in Ireland and abroad. Activities such as tours, lectures and discussion groups encourage audience participation and evaluation of the work on show; there are also frequent film screenings and occasional concerts. The Gallery has a small bookshop which stocks a wide range of art magazines and catalogues of current and past exhibitions.

Admission to the gallery is free. Private tours can also be arranged.

Find out more at **www.douglashydegallery.com** or call +353 1 896 1116.

Accommodation

There is accommodation both on campus and at Trinity Hall a short distance away. New entrants are predominantly accommodated at Trinity Hall which is in Dartry, near Rathmines – about 2.5 miles from the city centre and easily accessible from Trinity College by bus and the LUAS tram system. There are over 1,000 residential rooms at Trinity Hall and a significant number are reserved for new entrants to College.

Trinity Hall

Rooms are arranged in self-catering apartments, with each typically accommodating six persons and consisting of a mix of single and twin en-suite bedrooms with a large kitchen/living room. All rooms are centrally heated, all floors are serviced by lifts, electric appliances are supplied in the kitchens, and for security, electronic swipe card locks are used throughout and are fitted on bedroom doors. Residents of Trinity Hall also become members of the Junior Common Room which organises a range of extra-curricular activities.

Ar mhaith leat páirt a ghlacadh i Scéim Chónaithe Dhartraí, scéim i Halla na Tríonóide do lucht na chéad bhliana? Would you like to take part in Scéim Chónaithe Dhartraí, an Irish speaking residential scheme for Junior Freshman students in Trinity Hall?

Tuilleadh eolais/For further information, go to **www.tcd.ie/gaeloifig/sceim-chonaithe/sceim-dhartrai/**

Cost of rooms in Trinity Hall 2010/2011

Single en-suite room	€4,941
Twin en-suite room	€3,789

How to apply for Trinity Hall

As soon as you have accepted a place in Trinity College you may submit an application for Trinity Hall online at **http://www.tcd.ie/accommodation/StudentsandStaff/Students/ApplyforaRoom/**

On-campus rooms

Rooms on campus are mostly reserved for students in their final year and Trinity Scholars (see page 30). There are a number of rooms on the campus suitable for students who have mobility difficulties and who are capable of independent living. Where, due to medical or other particular circumstances, participation in College may be facilitated by the provision of accommodation, applications will receive special consideration. Applications from students with special needs should be addressed to the Registrar of Chambers, Accommodation Office, West Chapel, Trinity College, Dublin 2 as soon as an offer to a course at Trinity College is received. A supplementary form will then be sent requesting information from a medical practitioner and other relevant professionals, this form can also be downloaded from the web.

Find out more at **http://www.tcd.ie/accommodation/StudentsandStaff/Students/ApplyforaRoom/**

Other options for first-year students

For students who do not apply for or do not secure a place in College accommodation the alternative is to seek private rented accommodation, usually sharing an apartment or a house with other students.

The Accommodation Advisory Service operates annually from late August to the beginning of term in cooperation with the Students' Union. It provides information and contacts for students wishing to secure rented accommodation and offers guidance on what to look for when renting. Phones are provided so that students may make contact with landlords. The Advisory Service may also be able to give some information on digs or lodgings (residing in a room in a house with meals provided).

For further information and advice see **www.tcd.ie/accommodation/StudentsandStaff/UsefulInformation/PrivateRentedAccommodation**

Student Support Services

Orientation for new entrants

The first week of the new academic year is called Freshers' Week. During this week Trinity College offers a comprehensive orientation programme to new entrants. The programme includes general orientation meetings, specific meetings for your course, library tours, sports tours, as well as advice sessions about issues such as managing your finances. You will begin to make lots of new friends during Freshers' Week by joining some of the 50 sports clubs and 100 student societies, all of which will be in Front Square to welcome you to College and to encourage you to join them. The Students' Union also organises social occasions which will allow you to make more new friends and to begin to enjoy Trinity College's wonderfully vibrant social scene as soon as you enter College!

Personal tutor

The Tutorial Service is a key aspect of the Trinity Experience. Each undergraduate student at Trinity College is assigned a personal tutor on entry to College. Tutors are members of the academic staff who are specifically appointed to tutorship to provide personal and academic support to undergraduate students, in addition to their normal academic duties. Their main function is to advise, listen to concerns, help tutees deal with issues as far as possible and refer more serious difficulties to the appropriate student services. Tutors provide a welcoming confidential ear for students allowing them the freedom to talk about their problems and worries. In the majority of situations, they may be the student's first contact within College. They know how College works and are a valuable source of information on various aspects of College affairs: financial assistance, academic progress, student support services and College regulations. They also act as a communication channel between students and the College administration and represent their tutees before the College authorities on academic or disciplinary matters.

You should visit your tutor during Freshers' Week. During your time in College you should make your tutor aware of any difficulty that interferes with your studies and prevents you from performing to the best of your ability.

Find out more at **www.tcd.ie/Senior_Tutor**

Peer mentoring programme

The 'Student 2 Student' peer mentoring programme trains current TCD students and then links them with groups of incoming students. First-year students meet their 'Peer Mentor' during the first week in College, who are then available throughout the academic year to offer support with any issues that may arise. They arrange both social events and individual check-ins to see how things are going. Be it social, practical, emotional or academic concerns, the peer mentors are there to help.

Currently peer mentors are allocated to students in Science, Two Subject Moderatorship (TSM), Medicine, Nursing and BESS (Business, Economics and Social Studies).

If you are taking any other course, then Student 2 Student also has 'Peer Supporters' that you can avail of. Peer supporters are student volunteers who have received further training to listen to and support you on a one to one basis. Many students find the peer supporter service very helpful, as it is provided by other students whom they might feel more comfortable approaching.

The Student 2 Student volunteers have a lot of experience in student life, and it is a confidential service.

For more information:
http://student2student.tcd.ie/
E-mail: **student2student@tcd.ie**
Phone: **01 896 2438**

Careers Advisory Service

The Careers Advisory Service (CAS) offers a range of services and resources to assist students in preparing for, making, and implementing informed decisions about their future careers. We also work closely with the academic faculties in providing students with the necessary skills and knowledge to independently manage their careers after College.

Included in the many services provided by CAS are an extensive Careers Information Centre and an award-winning website. Both contain information on all aspects of the career-planning process, employment search, internships and further study options, as well as details of ongoing career and graduate recruitment events. We also deliver an extensive programme of seminars including 'CV Preparation', 'Application Forms' and 'Interview Techniques (with provision for practice interviews on video)'. In addition, students are invited to meet with an experienced careers advisor and to avail of our computer-based guidance tools and aptitude testing programme.

At Trinity College, all students are encouraged to develop skills and confidence through participation in clubs and societies, voluntary and vacation work as well as undergraduate research. Our VACWORK programme offers students the opportunity to secure work experience during the summer before their final year. Our dedicated Civic Engagement Office can also help you to identify and pursue a volunteering opportunity which suits your needs, interests and availability while you are a student in Trinity College. Opportunities include community volunteering both in Ireland and abroad, support in obtaining your Gold Gaisce- the Irish President's Award, as well as participation in the European Voluntary Service.

CAS continues to provide careers support after graduation and this year, in association with Alumni Relations and Trinity Research and Innovation, the very successful Trinity Alumni Career Network was launched to provide assistance to graduates seeking employment.

Find out more at **www.tcd.ie/Careers**

College Health Service

The College Health Service aims to take a holistic approach to student health. In addition to providing on-campus, primary health care for registered students, it focuses on the psychological and occupational aspects of student health and health education. Student consultations are free of charge with modest fees for additional services.

As well as general practice and nurse-run clinics there are specialised clinics in physiotherapy, psychiatry, travel health, sexual health, eating disorders and minor surgery.

To arrange an appointment, either drop into the reception of the College Health Service, House 47, Trinity College, Dublin 2 or telephone the reception at +353 1 896 1591 / 1556.

Find out more at **www.tcd.ie/College_Health**

Health care provision in Ireland

All EU students from outside the Republic of Ireland pursuing a full degree programme should contact the Health Service Executive for advice regarding healthcare provision – see **www.hse.ie**

All EU students should bring with them a European Health Insurance Card issued in their country of origin. This will entitle them to free primary health care under the General Medical Services Card scheme in the College Health Service.

Non-EU students are not entitled to free national health services in Ireland, and are advised to take out insurance cover for hospitalisation or to extend private health insurance before leaving their home country. You may also join one of the private healthcare schemes operating in Ireland.

Students without private health insurance who will be resident in the country for a minimum period of one academic year may apply to the Health Service Executive to be assessed for entitlements to support for hospitalisation under the same conditions as an Irish citizen.

Health Service Executive – see **www.hse.ie**

Student Counselling Service

The Student Counselling Service is staffed by professional counsellors and learning support psychologists. It provides a range of free services to TCD students including:

- Short-term individual counselling for personal issues, including a daily emergency slot
- Individual learning support sessions and self-help literature on many learning difficulties
- Groups and workshops on a variety of topics: e.g. study and writing skills, depression, anxiety, eating problems, bereavement, and support for new international students
- The Student-2-Student network, connecting you with other TCD students to smooth your transition (e-mail: **student2student@tcd.ie**, tel: +353 1 896 2438)
- An after-hours Niteline telephone service run by students for students. Free-phone: 1 800 793 793, Thurs-Mon, 9pm-2.30am
- The Student Learning Development website, with a range of resources including podcasts, downloads and interactive workshops that provide academic support to students. Topics include time management, study skills, exams, academic writing, presentation skills and more. Please visit **http://student-learning.tcd.ie**.
- The Online Mental Health Portal, a TCD web community for sharing info and getting anonymous counselling support: **www.trinitymentalhealth.com**

For more information and resources:
www.tcd.ie/student_counselling

Chaplaincy

There are four College chaplains who work closely together and who represent four of the Christian traditions in Ireland: Roman Catholic, Anglican, Presbyterian and Methodist. The chaplains are happy to assist students of these or other churches, or students of other faiths, who wish to make contact with their own religious community in Dublin.

The Chaplaincy seeks to be a place of hospitality for all members of the College community, and we welcome the presence and participation of students of all faiths or none. During term time, tea and coffee are available all day in the Chaplaincy Common Room in House 27, and students are invited to call in for lunch on Tuesdays. A variety of events are organised during the year, and pastoral guidance, spiritual accompaniment and bereavement support are also available. Traditional (and non-traditional) Christian services in both denominational and ecumenical forms take place weekly in the College Chapel.

Find out more at **www.tcd.ie/Chaplaincy**

Day nursery

Trinity College's day nursery takes care of children from 3 months to 4.5 years of age. There are five different rooms for children of different age groups, with a maximum capacity of 52 places.

See www**.tcd.ie/about/services/daynursery** for further details.

Mature students' officer

Trinity College has a long and proud tradition of mature student participation and recognises the unique contribution and commitment that mature students make to College academic and social life.

A full-time mature students' officer provides guidance and support to both prospective applicants and current mature students.

> A Mature Student Information Evening will take place on Thursday 13 January 2011. Please see page 15 for more information.

For further information on studying in TCD as a mature student please phone +353 1 896 1386, e-mail: **mature.student.officer@tcd.ie** or visit **www.tcd.ie/maturestudents**

Mature students should follow the application process detailed on page 17.

Disability Service

Trinity College is committed to a policy of equal opportunity in education and to ensuring that students with a disability have as complete and equitable access to all facets of College life as can reasonably be provided. This includes students with a physical, sensory, medical, mental health condition or specific learning difficulty that impacts on their ability to achieve academic goals.

The Disability Service is staffed by experienced professionals with knowledge and expertise in access and equity issues. The service works closely with academic staff, tutors, administrators and other support services to meet the support requirements of students with a disability.

Comprehensive information about the full range of services is available from **www.tcd.ie/disability** or by phoning the Disability Service directly on +353 1 896 3111.

Students with a disability should follow the application process detailed on page 16.

Access services

TAP (the Trinity Access Service) provides a range of post-entry supports to students who enter undergraduate programmes in TCD through the Higher Education Access Route (HEAR), Foundation Course for Young Adults, Foundation Course for Mature Students and the CDVEC University Access Courses (Pearse College, Plunkett College, Liberties College). These supports may include:

- pre-university orientation programmes
- academic support (TAP writing resource centre, peer tutors, laptop lending service, designated study space equipped with IT resources)
- social support (TAP student socials)
- personal support
- financial support (when available and applicable)

Learning Supports

Library

Trinity College's library is the largest research library in Ireland, with collections built up since the University's foundation in the sixteenth century and supplemented by Legal Deposit for UK and Irish publications for over 200 years.

The collections include 4.5 million printed volumes, almost 300,000 electronic books and journals and an extensive collection of literary, historical and political manuscripts, including the Book of Kells. The library has the country's largest collection of maps and printed music.

All of the library's collections are accessible by Trinity College's students, providing an unparalleled resource for courses as well as for personal research and interests. Library staff offer programmes of tours, seminars and workshops as well as a reference service for individuals seeking specific advice.

The library's reading rooms are in a number of buildings, many of which are architecturally distinctive in their own right. All have access to the College wireless network.

- The Berkeley/Lecky/Ussher library complex contains the collections for arts, humanities, social sciences, geography, geology, and nursing, together with the Map Library
- The Hamilton Science Library holds the collections for engineering, mathematics, science and some health sciences
- Clinical health science material is held at the John Stearne Medical Library at St. James's Hospital and in the hospital library at the AMNCH Hospital, Tallaght
- The Old Library (1732) is one of Ireland's greatest buildings, and the Long Room is one of the most famous library spaces in the world (see inside back cover). It contains the reading rooms for manuscripts and for early printed books, as well as providing a public exhibition space with the Book of Kells (entrance is free for Trinity College students)
- An increasing range of library resources is delivered electronically and students can access this on campus or from home

See more about the Library at **www.tcd.ie/Library**

IT services for students

Undergraduate students at TCD are provided with access to a wide range of computer facilities and services provided by the Information System Services department. These include:

- Access to hundreds of personal computers located in over twenty student computer rooms across the campus. Many of these rooms are open on a 24 hour, 7 day week basis. In addition to the standard software packages such as MS Office, some computer rooms have specialist software to support particular courses or projects. Dedicated e-mail/web stations located close to large lecture theatres enable students to check their e-mail and to use the web between lectures
- All student residences are networked to provide a fast broadband service. In addition, some residences, and many areas of the campus, have Wi-Fi access to the College network. Students register their computers to gain access to this network which is designed to the highest security standards
- At registration each student is issued with a Trinity College e-mail account, together with a range of other applications, hosted by Google. Students retain this account for life after leaving Trinity College
- E-learning now plays an important role in the learning experience of students in Trinity College. Resources for many courses are available in the College's learning management system
- All students have access to the IS Services' Helpdesk where queries regarding any of the above services are dealt with by a team of IT professionals

Find out more at **isservices.tcd.ie**

Optional courses

Broad Curriculum

The University of Dublin is renowned internationally for the breadth and depth of the degrees it awards. Trinity College is dedicated to encouraging the following qualities in its students and graduates: inquisitiveness and analytical ability; creativity and reflectiveness; adaptability; breadth of reading; ethical responsibility; international outlook; articulacy; literacy; and numeracy.

To assist with the development of these qualities, Trinity College offers students the opportunity to study one module outside their chosen course, via the Broad Curriculum.

These Broad Curriculum modules are usually available to students in the Senior Freshman (second) or Junior Sophister (third) year. The chosen module would typically account for approximately 10% of the teaching for the year.

At the time of publication, Trinity College offers 16 broad curriculum modules in literature, film studies, language and society, philosophy, psychology, political science, development economics, human impact on the environment, criminal law, business and finance, physical geography, earth sciences, Irish visual culture, science and technology, gender and society, and history.

Find out more at **www.tcd.ie/Broad_Curriculum**

Optional language courses

Some places in optional evening language courses (specifically for students who are not studying a language as part of their degree) are available. The courses, which take place at the Centre for Language and Communication Studies (CLCS) are designed to help you develop practical communication skills for study or work experience abroad. CLCS language modules may also be taken for credit (5 ECTS) by undergraduate students under the Broad Curriculum.

Options available are:

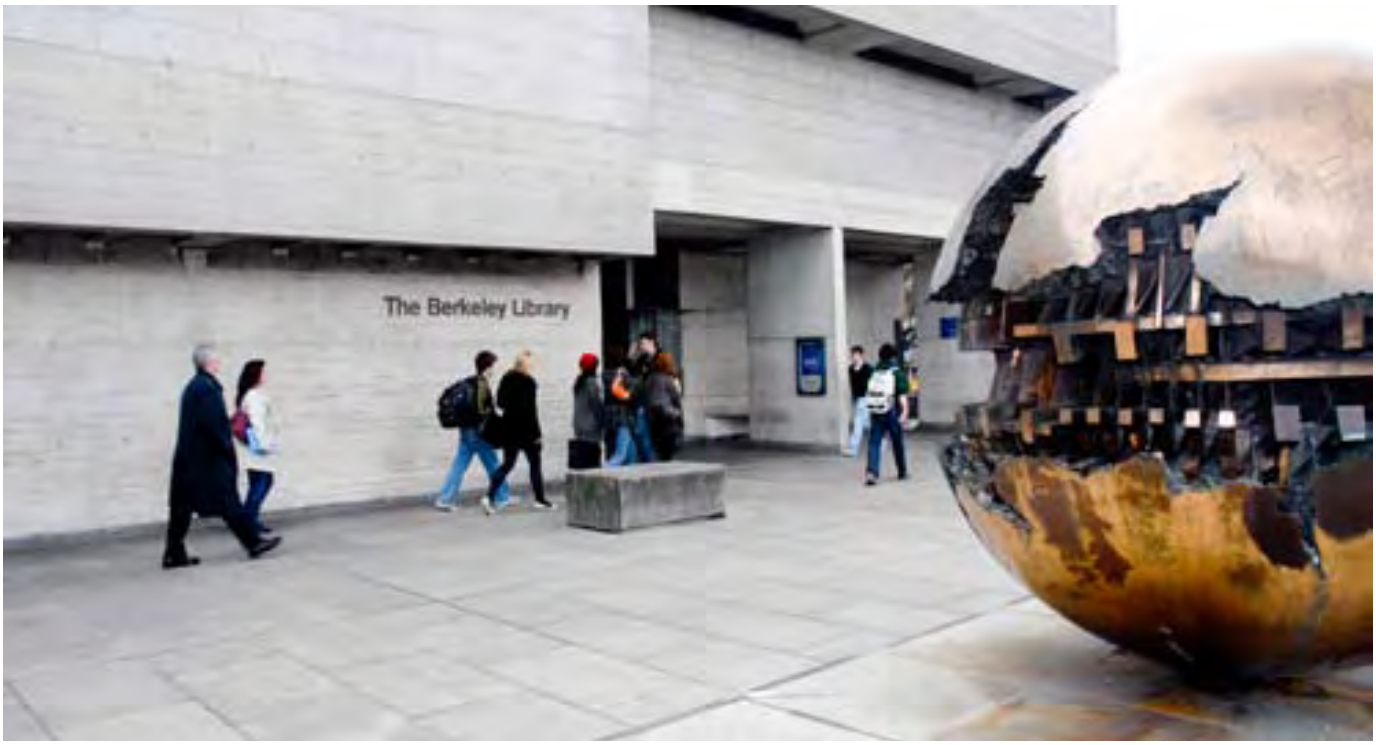
- French, German, Irish or Spanish for non-beginners
- French, German, Italian, Spanish or Turkish for beginners

For French, German, Irish or Spanish for non-beginners, the minimum entry requirement is a Leaving Certificate (or equivalent) qualification in the relevant language. Further details and an application form will be included in the information/ orientation pack sent to new students. The number of places available for first-year students is limited, but students may apply for the optional and credit-bearing language courses in subsequent College years.

Find out more at **www.tcd.ie/Broad_Curriculum/languagemod**

Peer learning in languages

If you are a first-year student studying a language at Trinity College you will be given the opportunity to participate in Peer learning sessions. Sessions are held weekly and are facilitated by a second-year student (peer tutor) from your course. Peer tutors are trained volunteers and can offer advice and suggestions about how to study at university level. Students who participate tend to manage their studies better, gain a greater understanding of their subject and are better prepared for exams and assignments.

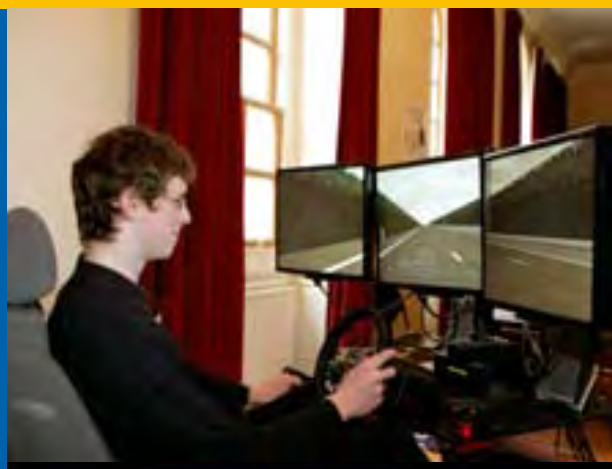


OPEN DAY 2010

Wednesday 1 December 9.00am to 3.00pm

The exciting and informative programme of events will include:

- Presentations covering most of Trinity College's courses
- Presentations about student sports, societies and the Students' Union
- Specific sessions for mature students, access students, parents, and guidance counsellors
- Individual stands for each course, where you can meet academic staff and current students and obtain detailed course information
- Demonstrations and laboratory tours
- Campus tours and tours of College facilities, including the sports centre



Full details will be available at **www.tcd.ie/Admissions/undergraduate** in late November.

WE LOOK FORWARD TO MEETING YOU ON OPEN DAY!

Find Out More About Trinity College

Open Day 2010

The staff and students of Trinity College would like to invite all final-year students, their parents/guardians, mature students, teachers and guidance counsellors to attend our Open Day. This event will take place on Wednesday 1 December 2010, from 9am to 3pm. See the preceeding page for further details.

Mature students' open evening

An information evening for prospective mature students will take place on Thursday 13 January 2011 from 4.30 pm to 7.30 pm. In addition to subject specific presentations there will be a wide range of information stands available on the evening with both staff and students available to answer questions and provide information. Please visit our website in December 2010 for a full schedule of events: **www.tcd.ie/maturestudents**

Mathematics/Physics open day

Did you know that the Schools of Mathematics and Physics organise a specific Mathematics/Physics open day every year on a Saturday in November as part of 'Science Week'? This is a special event for students interested in studying maths or physics, parents and teachers are also very welcome to attend. There are interesting talks by our professors and lecturers on topics like particle physics, string theory, complex numbers, nanophysics or the physics of the sun and lots of useful information on how to apply and about career opportunities for maths and physics graduates. We will also provide lunch (a great time to meet the lecturers and students currently studying in Trinity College) and a tour of the laboratories and other facilities. See **www.maths.tcd.ie** or **www.physics.tcd.ie** for more details closer to the date.

Trinity College websites

Main website: **www.tcd.ie**

Courses: **www.tcd.ie/courses**

Admissions: **www.tcd.ie/Admissions/undergraduate**

Virtual tour: **www.tcd.ie/virtualtour**

Student life: **www.tcdlife.ie**

Sports clubs: **www.ducac.tcdlife.ie**

Student societies: **www.trinitysocieties.ie**

Accommodation: **www.tcd.ie/accommodation/StudentsandStaff/Students/TrinityHall**

Nationwide careers fairs

Trinity College is represented at all of the major nationwide IGC careers fairs and at many other regional careers fairs each year. At these events prospective students can obtain copies of the prospectus and can find out about Trinity College's courses, specific entry requirements and student life at Trinity College. For details of careers fairs in your area contact the Guidance Counsellor in your school, your local adult education college, or see **www.qualifax.ie**.

School visits

Staff from Trinity College are available to visit schools on an individual basis. If you would like to arrange a visit to your school please contact the Admissions Liaison Officer by telephone at +353 1 896 3992 or by e-mail to **schools.liaison@tcd.ie**.

Visiting Trinity College

The Trinity College campus is an open campus and visitors are welcome at all times. The Book of Kells is on display in the Old Library and second-level students may visit the Book of Kells and library exhibition free of charge. It is advised that groups book in advance – please contact 01 896 2320.

Guidance counsellors may also request an on-campus presentation about Trinity College from the Admissions Liaison Officer (for visiting 5th and 6th year school groups). See the 'School visits' section for contact details.

The Admissions Office is located in Regent House (which is just inside the front entrance of Trinity College) and is open daily, Monday-Friday from 10.00-12.45 and from 2.00-4.00. Potential applicants are more than welcome to drop in to discuss Trinity College's application procedures.

How to Apply

EU applicants

Application for admission (except where otherwise stated) should be made to the Central Applications Office. See page 204 for application deadlines.

Applications may be submitted online: **www.cao.ie**

Alternatively, application forms may be obtained from your school or from:

The Central Applications Office (CAO)
Tower House, Eglinton Street, Galway
Tel: +353 91 509 800, Fax: +353 91 562 344

Note: Applications to Medicine must be submitted online.

Am I an EU applicant?

An EU applicant is a person:

1 who is ordinarily resident[1] in the EU[2]

AND

- who will have received full-time post primary education

AND/OR

- who has worked full-time[3] in the EU

for three of the five years immediately preceding admission to Trinity College

OR

2 who holds a passport from an EU state and has received all full-time post primary education in the EU

OR

3 who has

- official refugee status[4]

OR

- been granted humanitarian leave to remain in the State

and who has been ordinarily resident in the EU for three of the five years immediately preceding admission to Trinity College

Notes:

1 For students aged under 23, the student's parent(s) must also have been ordinarily resident (that is - principal residence for the purpose of taxation) in an EU[2] Member State for three of the five years prior to the student's entry to Trinity College.

2 EU or EEA countries (Norway, Iceland and Lichtenstein) or Switzerland.

3 Where an applicant can show that they have been in receipt of social welfare payments this may be taken in lieu of full-time employment.

4 Applicants who have written confirmation that they have been allowed to come to Ireland as part of the family re-unification scheme may also be eligible.

5 The Admissions Office may contact some applicants in order to seek supporting documentation regarding their status (EU/non-EU).

6 A student's registered status (EU/non-EU) cannot be changed during a programme for which he/she is registered.

All other applications are considered to be non-EU applications (see page 20 for further information).

EU enquiries

All enquiries from EU applicants concerning undergraduate admission should be addressed to:

The Admissions Office, Trinity College, Dublin 2
Tel: +353 1 896 4444, Fax: +353 1 872 2853
E-mail: **admissions@tcd.ie**
Website: **www.tcd.ie/Admissions/undergraduate**

Applicants with a disability

Students may require particular supports or reasonable accommodations due to a disability or specific learning difficulty; therefore it is important that Trinity College has notification of these requirements in advance of admission to College. Disclosure of a disability or specific learning difficulty will not adversely affect your application in any way.

Disability Access Route to Education (DARE)

The Disability Access Route to Education (DARE) is a supplementary admissions scheme for school leavers with disabilities. DARE was established by a number of Higher Education Institutions as clear evidence shows that disability can have a negative impact on educational attainment at school and on progression to higher education.

School leavers who meet the eligibility criteria compete for a quota of places allocated to DARE applicants on a reduced points basis. All applicants must satisfy the matriculation requirements of the University (see p. 21) and meet any course specific requirements.

Who should apply to DARE?

DARE is for school leavers (under 23 years old as at January 1 2011) who have the ability to benefit from and succeed in higher education but who may not be able to meet the points for their preferred course due to the impact of a disability. Mature students (i.e. at least 23 years of age on the 1st January of the proposed year of entry) with disabilities should not apply to DARE, instead they should apply via the supplementary admissions procedure for mature students (see below) as well as applying via CAO.

How to apply to DARE?

School leavers who wish to be considered for DARE must apply as part of their CAO application (**www.cao.ie**) by 1 February 2011. Applicants should note that there is no late application facility for this scheme. Applicants must indicate that they have a Disability/Specific Learning Difficulty and are then directed to the separate online application form. This form asks applicants to provide additional information about their disability or specific learning difficulty and to provide evidence of disability. Applicants must also indicate their wish to be considered for DARE. Supporting documents must be sent to the CAO by 1 April 2011.

More information on DARE is available from your school Guidance Counsellor or Trinity College's Disability Service. Information can also be found on: **www.accesscollege.ie**, **www.cao.ie**, **www.tcd.ie/Admissions/undergraduate/apply/eu/disability**.

DARE Closing Dates

By 1 February 2011:	Complete all elements of DARE application as part of the CAO application process
By 1 April 2011:	Supporting documents submitted to the CAO

Language or mathematics waiver

Students with significant learning difficulties and hearing disabilities may apply for a waiver of the modern language requirement.

In addition, students with dyscalculia may be eligible to request exemption from the matriculation requirement of a pass in mathematics, where mathematics does not form any component of their intended course.

See **www.tcd.ie/Admissions/undergraduate/apply/eu/disability/** for further details. Please note:

1. This is a separate application to the DARE supplementary admissions process and written application must be made to the Admissions Office, Trinity College Dublin before 1st July of the year of entry
2. Students should be aware that the criteria for waiving the language or mathematics requirement are different to that required for the DARE scheme. Therefore the granting of a language waiver does not mean that a student is automatically eligible for the DARE scheme

Allocation of places

Where demand for places exceeds the number of places available, places are awarded on merit.

Further information

If you wish to clarify any issues or concerns you may have in relation to your disability and the demands of a course, or on professional practice after qualification, please contact a member of the Disability Service staff by phone or e-mail at:

Phone: + 353 1 896 3111
E-mail: **disab@tcd.ie**
Website: **www.tcd.ie/disability**

Mature students

All undergraduate courses in Trinity College are open to mature applicants. Mature-student applicants are not required to satisfy the normal matriculation requirements and are not required to meet competitive academic entry levels, (e.g. Leaving Certificate points), but are considered in the first instance on the basis of how relevant their life, work and educational experiences are to the course(s) that they wish to pursue.

In addition, all applicants should demonstrate an interest in and a knowledge of their course choice(s).

In order to apply to Trinity College as a mature applicant you must:

- be an EU applicant (see page 16)
- be at least 23 years of age on 1 January 2011

- submit a CAO application form to the Central Applications Office (CAO) by 1 February 2011
- submit a Trinity College Mature-Student Supplementary Application Form (required for all CAO courses with the exception of nursing) to the Admissions Office by 1 February 2011

Late applications will not be considered from mature students. If posting your application form to Trinity College please retain proof of postage.

CAO applications may be made online at **www.cao.ie** or forms may be obtained from and returned to the CAO, Tower House, Eglinton Street, Galway. Tel: +353 91 509 800.

Mature-Student Supplementary Application Forms should be obtained from and returned to the Admissions Office, Trinity College, Dublin 2. Tel: +353 1 896 4444. The forms are also available to download at **www.tcd.ie/Admissions/undergraduate/apply/forms**

Applicants to all courses may be required to attend an interview. Interviews are held between mid-March and the end of April.

Certain courses may also require applicants to meet other assessment criteria:

- Applicants to Engineering, MSISS, Engineering with management and Computer science courses are required to present HC3 in Leaving Certificate mathematics or equivalent
- Applicants to English may be required to write an essay
- Applicants to Music will be required to attend a written entrance test (see course information for further details)
- Applicants to Nursing will be required to sit the Nursing Careers Centre written assessment (see **www.nursingcareers.ie**)
- Applicants to Psychology will be required to attend an aptitude test
- Mature applicants for Medicine are considered for admission to the first year of the five-year full-time degree programme. Mature applicants will also be required to complete the HPAT – Ireland admissions test within the 2-year period immediately preceding admission. Additional criteria will apply

Please refer to the Mature-Students Guidelines booklet, available with the application form, for information on additional assessments for specific courses.

Trinity College will inform mature applicants of the outcome of their application before the end of May to allow successful applicants the maximum time possible to prepare for the start of the academic year 2011. Official offers to successful applicants are made through the CAO in early July. To secure your place you must return a formal acceptance notice to the CAO by the specified reply date.

An information session on preparing for College will take place for all successful mature applicants in July 2011. An orientation programme for all successful mature applicants will take place in September 2011.

A Mature-Student Information Evening will take place on Thursday the 13th of January 2011. Please see page 15 for more information.

For further information on studying in TCD as a mature student please contact the mature student officer, phone +353 1 896 1386, e-mail: **mature.student.officer@tcd.ie** or visit **www.tcd.ie/maturestudents**

Access initiatives

The Trinity Access Programme (TAP) co-ordinates initiatives to facilitate increased participation at third-level of students whose social, economic and educational experiences have prevented them from realising their full academic potential.

Since 1993, TAP has developed partnerships with designated disadvantaged primary and second-level schools in the Inner-City and greater Dublin area. Through a variety of pre-entry outreach initiatives, TAP aims to promote positive attitudes to education within families and the community at large, and to increase the number of students who complete their second-level education and who proceed to third-level education. TAP also organises over thirty annual activities for students, teachers and parents including summer programmes, educational achievement awards, maths and science exploration programmes, student shadowing days, parents' evenings and early visits to Trinity College, as well as preparatory foundation courses for third-level in partnership with further education colleges.

TAP offers a range of application routes to students of all ages and various post-entry supports including a writing resource centre, peer tutors, a laptop lending service and a designated study space equipped with IT resources.

Higher Education Access Route (HEAR)

The Higher Education Access Route (HEAR) is a third-level admissions scheme for school leavers (under 23 years of age), from socio-economically disadvantaged backgrounds. HEAR has been established by a number of Higher Education Institutions based on clear evidence that socio-economic disadvantage has a negative impact on educational achievement at school and progression to higher education.

School leavers who provide the necessary supporting financial documents relating to their socio-economic circumstances and meet the Irish Leaving Certificate matriculation/minimum entry requirements and any course specific requirements are eligible to compete for a quota of places allocated to applicants on a reduced points basis in TCD.

School leavers who wish to be considered for HEAR must complete the online HEAR Application Form as part of their CAO application by 1 February 2011. Applicants must provide information on their family's financial situation; employment status of parent(s)/guardian(s); school(s) attended. Supporting financial documents must be sent to the CAO by 1 April 2011. HEAR applications can only be made online at **www.cao.ie**.

More information on HEAR is available from your school Guidance Counsellor or from the Trinity Access Programme. Information can also be found at: **www.accesscollege.ie**, **www.cao.ie**, **www.tcd.ie/trinity_access**

Students who accept places in TCD through HEAR are offered a variety of academic, personal and social supports while studying at third-level. Details of post-admission supports for HEAR entrants can also be found at: **www.accesscollege.ie** and **www.tcd.ie/trinity_access**

HEAR Closing Dates

By 1 February 2011	Complete all elements of online HEAR application as part of the CAO application process
By 1 April 2011	Send supporting financial documents to the CAO

TAP foundation course for young adults

This one-year course aims to equip students with the skills they will need to benefit from and participate in a third-level education course. It is open to Leaving Certificate pupils from schools affiliated to third-level access programmes. Applicants should have taken the Leaving Certificate in the year of application or not more than two years prior to that. Minimum entry requirements are grade OD3 or above in five subjects and grade HC3 or above in one subject.

Application forms are available from the TAP Liaison Officers or Guidance Counsellors in schools. Applications are normally submitted in February of the year applying. Students are not required to apply to the Central Applications Office.

TAP foundation course for mature students

This one-year course prepares mature students (EU students who are over twenty three years of age on 1 January of the proposed year of entry) for entry to undergraduate studies at Trinity College and other third-level institutions. There are no standard educational requirements but evidence of a particular interest in studying at university and strong personal motivation is essential. In addition, if English is not your first language you will be required to provide evidence of English language proficiency, see page 23.

Application forms are available from **www.tcd.ie/Trinity_Access/courses/mature_students.php** or from the TAP office. Students are not required to apply to the Central Applications Office.

Find out more at **www.tcd.ie/Trinity_Access** or phone +353 1 896 2751.

Receiving an offer

Offers to all successful EU applicants (school leavers) are made through the CAO in August following the publication of Leaving Certificate and GCE A-Level results. The University does not make conditional offers prior to the publication of examination results; however, the level at which entry was granted in 2010 may give an indication of the level of achievement required for 2011. Applicants are advised that the competitive entry level may fluctuate (see the 2010 entry levels at **www.tcd.ie/Admissions/undergraduate**).

Offers to successful mature student applicants and to candidates who have deferred entry from the previous year will be issued by CAO in early July.

Accepting an offer

Applicants who wish to accept an offer of a place must return a formal acceptance notice to CAO, either online or in hard copy, within the specified time period. If an acceptance is not returned in time the offer will lapse.

Please note that if an applicant does not follow the instructions in full, the right is reserved to cancel the offer.

Deferred entry

Students who have received an offer notice may apply to defer their entry to Trinity College for one year. On receipt of a CAO Offer Notice:

1. Do NOT accept the offer.
2. Write IMMEDIATELY to the Admissions Officer, Trinity College, Dublin 2 setting out the reason(s) for the request.
3. The part of the Offer Notice relating to the relevant Trinity College course must be attached to the letter.
4. The letter must arrive in the Admissions Office at least two days before the 'Reply Date' shown on the Offer Notice. Trinity College will notify the applicant of the decision in writing.
5. In order to take up the deferred place, the applicant must reapply through the CAO by 1 February 2012 and the deferred course must appear as the first and only choice on this application.
6. After reapplying, the applicant must send their new CAO application number to The Admissions Office E-mail **admissions@tcd.ie**.

Students who were permitted to defer their place will receive an offer of a place on the course in July of the following year.

A place may be deferred for one academic year only.

Transferring course and Advanced entry

Students seeking to transfer from a course in another third-level institution to the second or third year in Trinity College (Advanced entry) should consult: **www.tcd.ie/Admissions/undergraduate/apply/transferred/from-third-level**

Non-EU applicants

Enquiries from non-EU applicants concerning undergraduate admission to courses other than Medicine and/or Dental science should be addressed to:

The International Office, East Theatre, Trinity College, Dublin 2
Tel: +353 1 896 3150, Fax: +353 1 677 1698
E-mail: **international@tcd.ie**
Website: **www.tcd.ie/international**

Non-EU applicants to Medicine and/or Dental science should download the non-EU application form from **www.tcd.ie/Admissions/undergraduate/apply/forms** and return it to the Admissions Office, Trinity College, Dublin 2 by 1 February 2011.

The Admissions Office may be contacted by:
Tel: +353 1 896 4444, E-mail: **admissions@tcd.ie**

The normal closing date for applications is 1 February 2011. Late applications may be considered for courses other than Medicine and Dental science.

In order to be considered for admission all applicants are required to satisfy the University matriculation requirements (see page 21) and, where relevant, meet any specific course requirements (see pages 24-29).

Due to restrictions on the number of clinical placements available in the School of Nursing and Midwifery, non-EU students may only be considered for vacant places.

Receiving an offer and accepting a place

Successful non-EU applicants will be notified in writing by Trinity College. Students who wish to accept an offer of a place in the College will be required to return an acceptance fee within a specified time. Details of the due date and method of payment will be included in the offer letter.

Deferred entry

Non-EU students applying for deferred entry should contact the Admissions Officer, Trinity College, Dublin 2 in writing prior to the deadline for acceptance of their offer.

One-year and one-term students

A limited number of places are available for EU and non-EU students who are already enrolled in another university and do not wish to undertake a four-year course in Trinity College. While students may wish to be admitted for one term only, preference is given to those who wish to attend for a full academic year, particularly in the case of EU visiting students.

Application forms and further information are available from the International Office (see above for contact details).

Completed applications must be received by 1 March 2011.

Applying for accommodation

Applicants may only apply for accommodation in Trinity Hall after they have been offered a place on a course at Trinity College. See page 7 for further details.

Fees information

Students who accept an offer of a place via CAO will be contacted by the College Fees Office with regard to payment of fees due. Students eligible for inclusion in the Irish government's Free Fees Initiative will be liable for the Student Charge (€1,500 in 2009), the Union of Students in Ireland (USI) membership levy (€8 for 2010) and the Student Sports Centre charge (€77 for 2010) but will not be liable for tuition fees.

Students eligible for a local authority grant will be liable only for the Union of Students in Ireland (USI) membership levy (€8 for 2010) and the Student Sports Centre charge (€77 for 2010).

EU students who are not eligible for inclusion in the Free Fees Initiative pay the EU portion of the fees.

Students who are classified as non-EU students (see p. 16) pay higher fees, termed 'economic fees', than those payable by EU students.

Students will not be permitted to register without bank-receipted evidence of payment of all relevant amounts.

Note: The above information was correct at the time of publication. Any changes to this information after publication will be listed at **www.tcd.ie/admissions/undergraduate/fees**.

Further information:
www.tcd.ie/Admissions/undergraduate/fees

Applicants' appeals process

Applications are assessed on the basis of criteria listed in this publication and on the Admissions Office website. This is also the case in categorising students for the purposes of tuition fees.

Where an applicant appeals a decision the initial appeal is considered by the Admissions Officer. If the applicant wishes to appeal the matter further it is passed to the Senior Lecturer for consideration.

Admission requirements 2011

To qualify for admission to a degree course at the University you must:

(i) meet the matriculation requirements

(ii) satisfy course specific requirements (where applicable)

(iii) where there is competition for places, have good enough examination results to be included among those to whom offers are made (see the Leaving Certificate scoring system or Advanced GCE (A-level) scoring system)

Matriculation requirements: Irish Leaving Certificate

To be considered for admission to the University you must:

- Present six subjects, three of which must be at grade C or above on higher Leaving Certificate papers or at least grade C in the University matriculation examination

The six subjects above must include:

- A pass in English
- A pass in mathematics (or foundation-level mathematics) and a pass in a language other than English

  OR
- A pass in Latin and a pass in a subject other than a language

Notes:

1 A pass means grade D or above on ordinary or higher papers in the Leaving Certificate and grade D or above in the University matriculation examination.

2 Irish at foundation-level is not acceptable for matriculation, course requirements or for scoring purposes. Mathematics at foundation-level is acceptable for matriculation purposes only.

3 Students may combine grades achieved in different sittings of their Leaving Certificate/Matriculation examinations for the purpose of satisfying matriculation and/or course requirements, but not for the purposes of scoring. This is not permitted for Medicine – see note 3 on page 28.

4 Combinations of Leaving Certificate subjects not permitted:

- Physics/chemistry may not be presented with physics or chemistry
- Biology may not be presented with botany or zoology
- Biology and agricultural science may both be used for scoring purposes but biology may not be presented with agricultural science as the two higher level subjects required for Dental science, Earth sciences, Medicine, Medicinal chemistry, Physiotherapy or Science
- Art and music may not be offered as two of the three higher Leaving Certificate grades for matriculation purposes but both may be used for scoring purposes

Leaving Certificate scoring system

Grade	Higher Level	Ordinary Level
A1	100	60
A2	90	50
B1	85	45
B2	80	40
B3	75	35
C1	70	30
C2	65	25
C3	60	20
D1	55	15
D2	50	10
D3	45	5

An applicant's six best results from one sitting of the Leaving Certificate will be counted for scoring purposes. Applicants may combine results from the Leaving Certificate and the Trinity College matriculation examination of the same year for scoring purposes.

Leaving Certificate Vocational Programme Link Modules are accepted for scoring purposes only and are awarded the following points: Distinction 70, Merit 50, Pass 30.

The minimum entry levels (points) for 2010 are available at **www.tcd.ie/Admissions/undergraduate**

Matriculation requirements: GCSE/Advanced GCE (A-level)

To be considered for admission to the University you must:

- Present six subjects at grade C or above on GCSE or Advanced Subsidiary GCE (AS) papers. Two of these subjects must be at grade C or above on Advanced GCE (A-level) papers.

The six subjects above must include:

- A pass in English
- A pass in mathematics and a pass in a language other than English

  OR
- A pass in Latin and a pass in a subject other than a language

Notes:

1 A pass means grade C or above on GCSE or Advanced Subsidiary GCE (AS) papers.

2 Students may combine grades achieved in different sittings of their Advanced GCE (A-level) examinations for the purpose of satisfying matriculation and/or course requirements, but not for the purposes of scoring. This is not permitted for Medicine – see note 3 on page 28.

3 Acceptable subjects:
   - Applied A-level, Vocational Advanced Subsidiary, Vocational A-level, National Vocational and Key Skills qualifications are not accepted for matriculation or scoring purposes
   - GCSE/Advanced GCE (A-level) subjects set by recognised examination boards are, in principle, acceptable for consideration with the following exceptions
     - Physical education, General studies and Media studies are not acceptable
   - Applicants who require advice about subject eligibility should contact the Admissions Office

4 Combinations of A-level subjects not permitted:
   - Art may not be presented with History of art
   - Biology may not be presented with Botany or Zoology
   - English literature may not be presented with English language
   - Environmental science may not be presented with Biology or Geography
   - Film studies may not be presented with Media studies
   - Science may not be presented with Chemistry, Physics or Biology
   - Not more than one specialised endorsed programme in art may be presented
   - Art and Music may not be offered as the two Advanced GCE (A-level) grades for matriculation purposes but both may be used for scoring purposes

Advanced GCE (A-level) scoring system for exams taken in 2010 & 2011

	AS	A2
A*	–	150
A	65	135
B	60	120
C	50	100
D	35	75
E	20	40

Advanced GCE (A-level) scoring system for exams taken before 2010

	AS (pre-2010)	A2 (pre-2010)
A*	-	-
A	60	150
B	50	130
C	40	105
D	30	80
E	-	-

An applicant's score will be calculated on the basis of either of the following:

1 their best 4 GCE Advanced level (A2) subjects from one academic year

  OR

2 their best 3 GCE Advanced level (A2) subjects from one academic year plus one Advanced Subsidiary level (AS) in a different subject from the same or the preceding academic year only.

Students may not combine grades achieved in different sittings of their GCE Advanced level (A2) examinations for the purpose of scoring. However, examinations taken in January and June of the same year are counted as a single sitting.

The minimum entry levels (points) for 2010 are available at **www.tcd.ie/Admissions/undergraduate**

Notes:

1. For admission from 2012 onwards, applicants will be scored based on the 2010/2011 scheme above, with the exception of the pre-2010 A grade, which will be awarded 145 points.
2. Cambridge Pre-U: Principle subjects will be accepted as alternatives to A-Levels in meeting general entry requirements. The scoring scheme for Principle subject results is available at **www.tcd.ie/Admissions/undergraduate/requirements/matriculation/gcse**

Allocation of places

Trinity College applies a two-stage admissions procedure whereby it, in the first instance, allocates ranges of CAO points to A-level grades in order that A-level applications can be compared with Leaving Certificate applications. Places on courses will then be determined based on the proportions of eligible applications coming from the Leaving Certificate and A-level examination systems or, in a small number of cases, equivalent EU systems. Once these proportions are determined, places on the course in question will be offered to applicants coming from each respective examination system group on the basis of ranking within that group.

Trinity College will continue to allocate fixed points to A-level grades for the purpose of determining student's ranking only. These points will not be used to compare A-level students against Leaving Certificate students. Further details are available at **www.tcd.ie/Admissions/undergraduate/requirements/matriculation/gcse**

Trinity College reserves the right to make the final decision in all matters pertaining to the admissions process.

Other school leaving qualifications

Applicants who are presenting a second-level qualification other than Leaving Certificate or Advanced GCE (A-level) should consult the Trinity College website (**www.tcd.ie/Admissions/undergraduate/requirements/matriculation/other**) or contact the Admissions Office (see page 16) for details of the relevant matriculation and course requirements.

English language requirement

If English is not your first language you will be required to provide evidence of English language proficiency.

- TOEFL
  - Paper-based 570 (with a TWE score of 4.5)
  - Computer-based 233 (with a score of 4.5 in essay)
  - Internet-based 90 (with a written score of 21)
- Cambridge Proficiency Grade C
- Cambridge Advanced Grade A
- IELTS (academic version) 6.5 (no individual band below 6)

Note that examination results are only valid for 2 years.

Age requirement

Applicants seeking admission in 2011 must have a date of birth before 15 January 1995.

University matriculation examination

A matriculation examination, graded in equivalent terms to grades used in higher Leaving Certificate examination papers, is held in Trinity College every year, usually in April. The subjects of the matriculation examination are Biblical studies and Geology. You may take one or both of the subjects available, but you should note that the range of University matriculation examination subjects available is not sufficient for the fulfilment of all matriculation requirements.

The closing date for application for the examination is 1 March. Application forms and a syllabus can be obtained from the Admissions Office, Trinity College, Dublin 2,

Tel: 01 896 4444, E-mail: **admissions@tcd.ie.**

Additional requirements

Garda vetting

Students on courses with clinical or other professional placements may be required to undergo Garda vetting procedures prior to commencing placements. If, as a result of the outcome of the Garda vetting procedures, a student is deemed unsuitable to attend clinical or other professional placement, he/she may be required to withdraw from his/her course. Students who have resided outside Ireland for a consecutive period of 6 months or more will be required to provide police clearance documentation from the country in which they resided.

Garda vetting forms will be distributed (as part of the student orientation pack) to students who have been offered a place in Trinity College. The completed forms must be returned to the Admissions Office prior to registration.

Fitness to practice

Professional courses demand that certain core competencies are met by students in order to graduate and practice professionally after qualification. College has special responsibility to ensure that all students admitted to all professional programmes will be eligible for registration by the relevant professional body upon graduation. It is important to us that our students are able to fulfil the rigorous demands of professional courses and are fit to practice.

Precautions against infectious diseases

Offers of admission to a number of Health sciences courses are made subject to certain vaccination requirements and/or certain negative test results. See page 198 for further details.

Course requirements 2011: Two-Subject Moderatorship (TSM/TR001) – Level 8 (Honors Degrees)

The two-subject moderatorship (TSM) is a joint honor programme. Students select two subjects from the list below (for permitted combinations see next page) and pursue both to honors degree level. Usually both subjects are studied for three years and one subject only is studied in the fourth and final year. An honors degree is awarded in both subjects.

Note: Students are not permitted to commence two new languages. Students wishing to combine two of: Greek, Italian, Latin, Russian, Spanish within TSM are required to present at least one of the chosen languages at grade C3 or better on a higher level Leaving Certificate paper or equivalent.

	Subject Name	Specific Subjects Required (reference is to higher level Leaving Certificate or Advanced GCE (A-level) grades)	Available Places in 2010	Minimum Points Range 2009**	Page
AH	Ancient history and archaeology	none	23	410*-530*	91
CC	Classical civilisation	none	29	455*-530*	93
DR	Drama studies	see note 12	24	485*-560	49
EI	Early Irish	C3 in Irish	10	420-495*	51
EC	Economics	see note 1	43	470*-560*	95
EN	English literature	C3 in English	85	525*-560*	54
FS	Film studies	none	30	470*-560	97
FR	French	C1 in French	84	400*-560*	98
GG	Geography‡	none	45	380-560*	100
GE	German	C1 in German	32	355-530*	101
GK	Greek	C3 in Greek or C3 in a language excluding English	8	450-530*	103
HS	History	none	40	495*-560	59
AR	History of art and architecture	none	40	400-560	104
IT	Italian	C3 in Italian or C3 in a language excluding English	30	400-560*	106
JS	Jewish and Islamic civilisations	none	10	405-560*	107
LT	Latin	C3 in Latin or C3 in a language excluding English	10	430-530*	109
MT	Mathematics	B3 in mathematics	25	460*-560*	160
MI	Modern Irish	C3 in Irish	30	430-560	51
MU	Music	see note 5	10	550*-560*	73
PH	Philosophy	none	43	460*-560*	76
PS	Psychology	none	17	560*	83
RU	Russian	C3 in a language excluding English	36	355-530*	110
SC	Sociology	none	59	430*-560*	112
SP	Spanish	C3 in a language excluding English	41	435*-530*	113
BT	World religions and theology	none	24	420*-560*	88

‡ Geography may also be read as part of a moderatorship course in science – TR071. See page 134 for specific course requirements for Science.

** Not all applicants at this level were offered places.*

*** The minimum points required depend on which two subjects are chosen. A grid displaying the minimum points required in 2010 for all combinations of subjects is available at **www.tcd.ie/Admissions/undergraduate**. Note that there are different minimum entry levels for A-level applicants for some TSM combinations.*

Two-Subject Moderatorship (TSM/TR001): Permitted combinations and CAO course codes

TR001 must NOT be entered on the application form.

Each possible combination of two subjects has a unique three-digit code. TR followed by the three-digit code of your chosen TSM combination should be entered on the application form, e.g. French and German TR289.

The absence of a code in a grid position indicates that the corresponding combination of subjects is not permitted.

	AH	AR	BT	CC	DR	EC	EI	EN	FR	FS	GE	GG	GK	HS	IT	JS	LT	MI	MT	MU	PH	PS	RU	SC	SP
AH	–	113	102	–	–	–	–	106	107	–	–	–	110	112	115	547	116	–	–	–	–	–	121	–	123
AR	113	–	143	173	485	–	486	263	293	–	353	–	–	443	475	555	476	–	–	478	479	–	–	482	483
BT	102	143	–	133	–	–	156	136	137	310	139	–	140	142	–	–	146	144	–	–	149	150	151	152	153
CC	–	173	133	–	185	–	–	166	167	–	–	–	170	172	175	548	176	174	–	–	179	–	181	–	183
DR	–	485	–	185	–	–	–	276	306	311	366	–	395	–	545	–	575	515	–	635	–	–	725	755	785
EC	–	–	–	–	–	–	–	–	–	–	199	198	–	202	–	–	–	–	207	–	209	210	211	212	213
EI	–	486	156	–	–	–	–	–	–	–	–	–	–	456	–	549	576	–	–	–	–	–	–	–	–
EN	106	263	136	166	276	–	–	–	257	312	259	–	260	262	265	550	266	264	267	268	269	270	271	272	273
FR	107	293	137	167	306	–	–	257	–	313	289	–	–	292	295	551	296	294	297	298	299	300	301	302	303
FS	–	–	310	–	311	–	–	312	313	–	314	–	–	–	316	319	–	315	–	320	–	–	317	–	318
GE	–	353	139	–	366	199	–	259	289	314	–	321	–	352	355	552	–	354	357	–	359	–	361	362	363
GG	–	–	–	–	–	198	–	–	–	–	321	–	–	322	–	–	–	–	327	–	329	330	–	332	–
GK	110	–	140	170	395	–	–	260	–	–	–	–	–	382	385	553	–	–	–	–	389	–	391	–	393
HS	112	443	142	172	–	202	456	262	292	–	352	322	382	–	445	554	446	444	–	448	449	–	451	452	453
IT	115	475	–	175	545	–	–	265	295	316	355	–	385	445	–	–	536	505	–	–	539	540	541	542	543
JS	547	555	–	548	–	–	549	550	551	319	552	–	553	554	–	–	557	556	–	–	558	559	560	561	562
LT	116	476	146	176	575	–	576	266	296	–	–	–	–	446	536	557	–	506	–	–	569	–	571	–	573
MI	–	–	144	174	515	–	–	264	294	315	354	–	–	444	505	556	506	–	–	508	509	–	511	512	513
MT	–	–	–	–	–	207	–	267	297	–	357	327	–	–	–	–	–	–	–	598	599	600	–	–	–
MU	–	478	–	–	635	–	–	268	298	320	–	–	–	448	–	–	–	508	598	–	629	630	–	–	–
PH	–	479	149	179	–	209	–	269	299	–	359	329	389	449	539	558	569	509	599	629	–	660	661	662	–
PS	–	–	150	–	–	210	–	270	300	–	–	330	–	–	540	559	–	–	600	630	660	–	–	692	–
RU	121	–	151	181	725	211	–	271	301	317	361	–	391	451	541	560	571	511	–	–	661	–	–	–	723
SC	–	482	152	–	755	212	–	272	302	–	362	332	–	452	542	561	–	512	–	–	662	692	–	–	753
SP	123	483	153	183	785	213	–	273	303	318	363	–	393	453	543	562	573	513	–	–	–	–	723	753	–

Course requirements 2011: Level 8 (Honors Degrees)

Course Code	Name	Specific Subjects Required (reference is to higher level Leaving Certificate or Advanced GCE (A-level) grades)	Available Places in 2010	Minimum points in 2009**	Page
TR002	Music	see note 5	20	420*	73
TR003	History	none	38	445	59
TR004	Law	none	90	520*	65
TR005	Philosophy	none	17	450*	76
TR006	Psychology	none	31	545	83
TR007	Clinical speech and language studies	see note 4	34	515	44
TR008	World religions and theology	none	29	340	88
TR009	Music education	see note 5	10	465	75
TR010	Computer science, linguistics and German	C3 in mathematics and C1 in German	10	435	118
TR011	Computer science, linguistics and French	C3 in mathematics and C1 in French	10	550	118
TR012	History and political science	none	24	500	61
TR013	Computer science, linguistics and Irish	C3 in mathematics and B3 in Irish	5	–	118
TR014	Philosophy and political science	none	10	485*	77
TR015	Philosophy, political science, economics and sociology	see note 1	25	515*	78
TR016	Deaf studies	See note 20	20	–	46
TR017	Law and business	see note 1	25	555	69
TR018	Law and French	C1 in French	15	550	68
TR019	Law and German	C1 in German	15	470	68
TR020	Law and political science	none	20	555	71
TR021	Classics	C3 in Greek or Latin	15	445	43
TR022	Early and modern Irish	C3 in Irish	15	335	51
TR023	English studies	C3 in English	40	475*	54
TR024	European studies	see note 8	45	510*	56
TR025	Drama and theatre studies	see note 12	16	500*	49
TR027	Irish studies	See note 21	20	340	63
TR028	Ancient and medieval history and culture	none	15	385*	34
TR029	Political science and geography	none	20	430	81
TR031	Mathematics	B3 in mathematics	30	415	160
TR032	Engineering	C3 in mathematics	155	405	122
TR033‡	Computer science	C3 in mathematics	80	350	117
TR034	Management science and information systems studies	C3 in mathematics	45	400	120
TR035‡	Theoretical physics	B3 in mathematics and B3 in physics	40	470	164
TR038‡	Engineering with management	C3 in mathematics	20	370	132
TR051	Medicine	see notes 3A and 3B	109	723	177
TR052	Dental science	see note 3A	32	570*	172
TR053	Physiotherapy	see notes 1 and 6	40	520*	192
TR054	Occupational therapy	see note 7	40	495*	187

Course Code	Name	Specific Subjects Required (reference is to higher level Leaving Certificate or Advanced GCE (A-level) grades)	Available Places in 2010	Minimum points in 2009**	Page
TR055	Radiation therapy	see note 14	30	515*	193
TR056	Human health and disease	see note 18	33	515*	175
TR071‡	Science	see notes 1 and 2	340	440*	134
TR072	Pharmacy	see notes 1 and 9	75	545*	189
TR073‡	Human genetics	see notes 1 and 10	15	500	158
TR074‡	Chemistry with molecular modelling	see note 11	5	430	156
TR075‡	Medicinal chemistry	see notes 1 and 2	28	460	161
TR076‡	Nanoscience, physics and chemistry of advanced materials	see note 13	10	445	163
TR077	Earth sciences	see notes 1 and 2	12	470	157
TR081	Business, economic and social studies	see note 1	236	475*	35
TR082	Business and computing	see note 19	30	365	41
TR083	Sociology and social policy	none	28	435*	87
TR084	Social studies (Social work)	none	45	450*	85
TR085	Business studies and French	C1 in French and see note 1	15	480	39
TR086	Business studies and German	C1 in German and see note 1	15	420	39
TR087	Business studies and Russian	C3 in a language excluding English and see note 1	7	410	39
TR089	Business studies and Polish	C3 in a language excluding English and see note 1	5	385	39
TR090	Business studies and Spanish	C1 in Spanish and see note 1	10	445*	39
TR091	General nursing	See note 15	92	395	183
TR092	General nursing (mature applicants)	See note 17	14	159*	183
TR093	General nursing – Adelaide School of Nursing	See notes 15 and 16	29	385	183
TR094	General nursing (mature applicants) – Adelaide School of Nursing	See notes 16 and 17	4	168	183
TR095	Psychiatric nursing	See note 15	20	385*	183
TR096	Psychiatric nursing (mature applicants)	See note 17	25	144	183
TR097	Intellectual disability nursing	See note 15	17	360*	183
TR098	Intellectual disability nursing (mature applicants)	See note 17	13	144*	183
TR911	Children's and general integrated nursing	See note 15	15	475*	183
TR912	Children's and general integrated nursing (mature applicants)	See note 17	5	171*	183
TR913	Midwifery	See note 15	30	410	181
TR914	Midwifery (mature applicants)	See note 17	10	167*	181

Courses are funded by the Irish Government under the National Development Plan, 2007-2013.

‡ These courses are funded by the Irish government under the National Development Plan 2007-2013 and aided by the European Social Fund (ESF) under the Human Capital Investment Operational Programme 2007-2013.

** Not all applicants at this level were offered places.*

*** Note that there are different minimum entry levels for A-level applicants for some courses, see the minimum entry points document at* ***www.tcd.ie/Admissions/undergraduate***.

HEA
Higher Education Authority
An tÚdarás um Ard-Oideachas

Ireland's EU Structural Funds Programmes 2007 - 2013
Co-funded by the Irish Government and the European Union

An Roinn Oideachais agus Eolaíochta | Department of Education and Science

Notes

1 A mathematics requirement of grade C on the ordinary or grade D on the higher Leaving Certificate paper or grade B at GCSE level.

2 Two higher level grade Cs from the following subjects: physics, chemistry, biology, physics/chemistry, mathematics, geology, geography, applied mathematics, agricultural science. Physics/chemistry may not be presented with physics or chemistry. Agricultural science may not be presented with biology. Applied mathematics may not be presented with mathematics.

3A At least a higher level grade B and a higher level grade C in two of physics, chemistry, biology, physics/chemistry, agricultural science. Physics/chemistry may not be presented with physics or chemistry. Agricultural science may not be presented with biology. If you do not have some qualification in physics, you must present mathematics at grade C on the ordinary Leaving Certificate paper, grade D on the higher Leaving Certificate paper or grade B at GCSE level.

3B This is a restricted entry course, therefore, applications must be submitted to the CAO by 1 February of the proposed year of entry. Applicants must achieve a minimum of 480 points and meet the matriculation and specific course requirements in the same sitting* of the Leaving Certificate examination. In addition, all applicants will be required to sit the admissions test (HPAT – Ireland) which will take place on 26 February 2011. Applicants must register for the test at **www.hpat-ireland.acer.edu.au** by 20 January 2011. Test results are valid for two years. Further details on the selection criteria are available at **www.tcd.ie/courses** or from the Admissions Office: +353 1 896 4444. Applicants should note that application for Medicine must be made online at **www.cao.ie**.

** A-level applicants must satisfy matriculation and specific course requirements within three consecutive years, e.g. GCSE (2009), AS (2010), A-levels (2011).*

4 A mathematics requirement of grade D on the ordinary or higher Leaving Certificate paper or grade C at GCSE level. A grade C at higher level in one of English, French, German, Irish, Italian, Russian, Spanish and a grade C at higher level in one of mathematics, applied mathematics, physics, chemistry, biology, physics/chemistry, agricultural science. If you are presenting Advanced GCE (A-levels), a grade C at A-level is required in one of English, French, German, Irish, Italian, Russian, Spanish and a grade B at GCSE level in one of physics, chemistry, biology, mathematics or a grade C at A-level in one of physics, chemistry, biology, mathematics and a grade B at GCSE level in one of English, French, German, Irish, Italian, Russian, Spanish.

5 This is a restricted entry course, therefore, applications must be submitted to the CAO by 1 February of the proposed year of entry. You will be called for an entrance test on 19 March 2011 (provisional date). This will include a simple harmony paper, an ear test, a paper on general musical knowledge and background and an essay paper. Some applicants will be called for interview (and in the case of TR009 applicants, further tests) in late April/early May when the final selections will be made.

6 Two higher level grade Cs from the following subjects: physics, chemistry, biology, physics/chemistry, mathematics, agricultural science. Physics/chemistry may not be presented with physics or chemistry. Agricultural science may not be presented with biology.

7 One higher level grade C from the following subjects: physics, chemistry, biology, physics/chemistry, agricultural science.

8 Students entering this programme will study two languages from French, German, Italian, Polish, Russian and Spanish. Italian, Polish, Russian and Spanish are available from beginner level. No student may study more than one language as a beginner. Students accepted onto this programme, subject to the above regulations, will normally have at least a higher level grade C in the Leaving Certificate or equivalent, in two of French, German, Greek, Italian, Latin, Polish, Russian, Spanish (C1 in the case of French and German, and C2 in the case of Spanish if non-beginner). Students who have only one language (other than English or Irish) may also be admitted, subject to the above regulations, if they achieve a higher level grade B in the language in the Leaving Certificate, or equivalent.

9 A higher level grade C in chemistry and a higher level grade C in one of physics, biology, mathematics, geology, geography, applied mathematics and agricultural science.

10 Two higher level grade Cs from the following subjects: biology, chemistry, physics, physics/chemistry, mathematics and applied mathematics. Physics/chemistry may not be presented with chemistry or physics. Mathematics may not be presented with applied mathematics.

11 A higher level grade C in mathematics and a higher level grade C in one of physics, chemistry, physics/chemistry or biology.

12 This is a restricted entry course; therefore, applications must be submitted to the CAO by 1 February of the proposed year of entry. If you indicate Drama studies or Drama and theatre studies as a choice of subject, you will be sent a questionnaire to complete in March. On the basis of the completed questionnaire some applicants will be called to attend a workshop and interview (during April/May) before final selections are made.

13 Two higher level grade Cs from the following subjects: physics, chemistry, biology, physics/chemistry, applied mathematics, mathematics. Leaving certificate applicants must present mathematics at ordinary level grade A2 or at higher level grade C3, while A-level applicants must present mathematics at Grade A at GCSE level or Grade C at A-level. Physics/chemistry may not be presented with chemistry or physics. Mathematics may not be presented with applied mathematics.

14 One higher level grade C from the following subjects: physics, chemistry, biology, physics/chemistry.

15 A grade D on the ordinary or higher paper in mathematics and in one of biology, physics, chemistry, physics/chemistry or agricultural science.

16 This is a restricted entry course, therefore; applications must be submitted to the CAO by 1 February of the proposed year of entry. The Adelaide Hospital Society, which is a voluntary charitable organisation, nominates suitable applicants each year to the Adelaide School of Nursing. In selecting applicants, the Society has regard to its particular obligation to applicants from the Protestant community and also to members of inter-church families. Applicants will be sent an additional application form, to be returned to the Adelaide Hospital Society. On the basis of information provided, applicants may be called to interview before final selections are made.

17 This is a restricted entry course, therefore, applications must be received by the CAO by 1 February of the proposed year of entry. Mature applicants to Midwifery or Nursing are NOT required to submit a mature-student supplementary application form to Trinity College. If you indicate Midwifery or Nursing as a mature student, the Nursing Career Centre will invite you to a written assessment.

18 A higher level grade C in biology and a higher level grade C in one of physics, chemistry, physics/chemistry or agricultural science.

19 A higher level grade C3 or an ordinary level grade A2 in mathematics.

20 A higher level grade C in English and grade D at ordinary or higher level in a language other than English.

21 Applicants who wish to choose Strand A (see p. 63) must attain at least grade HC3 in Leaving Certificate Irish or grade C in A-level Irish. There are no specific course requirements for Strand B.

Course requirements 2011: Ordinary degree and diploma courses

Course Code	Name	Specific subjects required	Available Places in 2010	Minimum points in 2009	Page
TR801	Dental nursing (diploma)	See notes A and C	25	365*	170
TR802	Dental hygiene (diploma)	See note B and C + Restricted entry	8	455	169
TR803	Dental technology (ordinary degree)	See notes A and C + Restricted entry	6	355	174

Notes

A Applicants are required to present six subjects, including English, mathematics and one of physics, chemistry, biology, physics/chemistry or agricultural science.

Of the six subjects presented, two must be of a standard of at least grade C3 on ordinary Leaving Certificate papers. The remaining four subjects must be presented to a standard of at least grade D3 on ordinary Leaving Certificate papers.

B Applicants are required to present six subjects, including English, mathematics and one of physics, chemistry, biology, physics/chemistry or agricultural science.

Of the six subjects presented, two must be of a standard of at least grade C3 on higher Leaving Certificate papers. The remaining four subjects must be presented to a standard of at least grade D3 on ordinary Leaving Certificate papers.

C Applications may also be considered from mature applicants who do not satisfy the academic entry requirements but can demonstrate appropriate experience relevant to the course.

Applications for restricted entry courses must be submitted to the CAO by 1 February of the proposed year of entry.

Scholarships and Awards

Since its foundation in 1592, Trinity College has sought to assist students of limited means. Although financial assistance is not normally given to first-year students, there are exhibitions that you may be entitled to. For students in later years provision is made through the Financial Assistance Committee. You should consult your tutor when you come to Trinity College for more information.

Entrance Exhibitions

Entrance Exhibitions are awarded to Junior Freshmen (first year) new entrants provided that sufficient merit is shown in public examination results. Each exhibition is in the form of a book prize worth €300 over two years. Exhibitioners and their parents/guardians are invited to attend a ceremony during their first term. The schools in which exhibitioners received their post-primary education are informed.

Sizarships

Sizars are Entrance Exhibitioners of limited means who have Commons (evening meal) free of charge. Application to be considered for the award of a sizarship should be made to the Admissions Office on or before 1 October of the year of entry. Application forms may be downloaded from **www.tcd.ie/Admissions/undergraduate/apply/forms**. Sizarships are normally tenable for the first two years of an undergraduate course.

Foundation scholarships

Students in the Senior Freshman (second) year may compete for a foundation scholarship. Up to seventy foundation scholars are elected annually on the basis of performance in the scholarship examination, which is usually held in the week before the start of Hilary term. Foundation scholars are entitled to certain privileges, which include having their Commons (evening meal) free and an entitlement to College rooms free of charge during the academic year. Foundation scholarships are normally held for a term of five years.

Sport scholarships

Every year sports scholarships are awarded to sportsmen and sportswomen of national/international standard who come to study and compete for Trinity College. The scholarships provide the following benefits:

- Financial grant (between €1,000 and €2,500 per year)
- Physiological assessment/fitness testing and follow-up training
- Nutritional workshops

Scholarships are open to all sports and are awarded to first-year students and are tenable for one year, however, they may be renewed (on a yearly basis) for up to three additional years. Application forms may be downloaded from the website listed below. The closing date for applications is Monday 3 October 2011. For further information, please contact the Department of Sport:

Tel: +353 1 896 1502
E-mail: **sport@tcd.ie**
Website: **www.tcd.ie/sport**

School prizes

Prizes are available to students from the following schools: the Abbey School, Tipperary; Portora Royal School, Enniskillen; Mount Temple Comprehensive, Dublin; St. Andrew's College, Booterstown and Alexandra School, Dublin. A booklet setting out all the awards available in Trinity College may be obtained from the Admissions Office, Trinity College, Dublin 2.

Tel: +353 1 896 4444, e-mail: **admissions@tcd.ie**

Reid Entrance Exhibition

In 1888, the sum of £6,200 was received under the will and testament of the late Richard Touhill Reid to found additional sizarships. The awards, which do not exceed five in number, are open only to students of limited means who are not eligible for the higher education grant and who are natives of county Kerry. They are granted to qualified candidates on the basis of their public examination results and are tenable for two years.

Students not eligible are those who:

(a) are above the standing of Junior Freshman (first year)
OR
(b) are graduates of any chartered university
OR
(c) have completed their nineteenth year before 1 May of the year in which they compete.

Exhibitioners have their Commons (evening meal) free, are supplied with a laptop and receive a salary of €6,000 per annum. During the Senior Freshman (second) year, exhibitioners normally compete for Foundation scholarships. Those who fail to obtain such scholarships, but are deemed to have shown sufficient merit, may have their exhibitions extended for two further years.

Application forms may be downloaded from **www.tcd.ie/Admissions/undergraduate/apply/forms** and should be addressed to the Admissions Office to arrive not later than 31 May of the proposed year of entry.

Taylor Exhibition

This exhibition was founded in 1978 by a gift from Mrs. Eileen Taylor to provide an Entrance Exhibition to be awarded each year for a two-year period at the discretion of the Head of Music in consultation with the Department of Music Committee.

Choral scholarships – Trinity College Chapel Choir

Eight choral scholarships valued at €1,300 are available for all voices for the year 2011/12.

The choral scholars form the core and leadership of the Chapel Choir: a mixed-voice choir of about twenty-five singers which performs in a liturgical context. The choir sings at two regular services during each week of lecture term and various special College and University services. However, the choir is not itself a religious organisation: applicants of any faith, denomination or none are welcome. Those considering applying for a choral scholarship should note that some previous choral experience is an advantage and the ability to read music is essential. International students find that membership of the Chapel Choir opens up an element of University life not available to them in their home universities.

Application is made in person at the Chapel Choir desk in Front Square during Freshers' Week; an appointment for an audition before the selection committee is then made. All candidates are informed of the decision of the committee by the end of the first week of teaching term. There is no pre-application process.

Arts, Humanities and Social Sciences

Arts courses at Trinity College – an overview

While the arts subjects cover a very wide range, they have in common the study of the human mind and its historical, cultural and linguistic manifestations.

Some of the arts courses offered in Trinity College have a strong vocational element, for example Music education, Drama studies and Law. Many arts courses do not have a vocational focus but provide an excellent preparation for a wide variety of careers.

All are designed to develop high levels of analytic and communication skills: the ability to understand unfamiliar ideas and to look at familiar ideas in a new light, to work out your own ideas and express them lucidly and convincingly are skills you will acquire through an arts course.

Arts courses are of three kinds:

Single honor courses

In a single honor course one subject is studied almost exclusively for the four years; however many subjects offer students a wide range of module choices, particularly in the third and fourth years.

Joint honor two-subject moderatorship (TSM) programmes

You choose two subjects from a list of possible combinations (see page 90 for possible combinations and page 25 for CAO course codes). In most combinations both subjects are studied equally for the first three years and one subject only is studied in the fourth year. The two subjects are taught as separate disciplines and both are taught to honors degree level. The combined workload from two TSM subjects is similar to that of a single honor course.

Specially designed 'packages' of different subjects

These may be organised around a particular theme, as in History and political science, Philosophy and political science or European studies, or around the development of a particular skill, as in the moderatorship in Computer science, linguistics and a language, Music education or Law and a language.

Arts: what comes after graduation?

A high proportion of vacancies for new graduates are open to students of any discipline and while an arts degree may not lead directly to one profession, arts graduates can be found in everything from accountancy to voluntary organisations (see the individual course entries for further details about career opportunities). The arts graduate may have problems to face in selecting the right avenue, but there is no shortage of choices. Details of first destinations for graduates of all disciplines are available on the Careers Advisory Service website: **www.tcd.ie/Careers/students**

Ancient and medieval history and culture

COURSE CODE:	**TR028**
PLACES 2010:	**15**
POINTS 2009:	**385***
DEGREE AWARDED:	**B.A.**

See also:

TR001: TSM, page 90
TR003: History, page 59
TR012: History and political science, page 61

Course overview

Ancient and medieval history offers you a unique opportunity to investigate the cultural and political genesis of Europe by focusing on the fascinating transition from the ancient to the medieval world (2000 B.C.-1500 A.D.). In this course you will be able to trace this extraordinary process through an intensive study of the art, culture and history of the ancient and medieval worlds, familiarising yourself with key events, issues and mentalities. You will be encouraged to pursue an interdisciplinary approach to your studies, as well as to appraise critically the art of the period and documentary sources in translation.

Is this the right course for you?

If you want to understand how Europe began to become what it is today, then this course will be of interest. Also, if you have a particular curiosity about the way in which cultural, social and political issues have been confronted by societies in the past, then this too is the course for you.

Course content

Over the four years you will develop a broad understanding of the ancient and medieval worlds through an analysis of their art, architecture, archaeology, culture and history. These disciplines will be introduced to you in first-year courses, taught by a mixture of lectures and tutorial discussion groups. As your studies progress, your courses become more thematically specialised, with an increasing emphasis on intensive (but we hope lively) discussion and on independent research.

The Junior Freshman year

In the Junior Freshman (first) year you will take a mixture of courses in Ancient history, Art history and Medieval history, dividing your time equally between the three disciplines. In total, there are approximately twelve hours of timetabled study per week depending on the options chosen.

- **Ancient history** introduces key aspects of Greek and Roman art, archaeology, architecture, history and mythology. Topics covered include the Athenian invention of democracy; Rome's emergence as an imperial power; war, conflict and colonisation; the social context of art and architecture; and the myths and religions of the ancient world. There is also a language option for those who wish to learn Latin
- **An introduction to art history** is the core module taken in your first year. Related modules survey key developments in painting, sculpture and architecture. You will be introduced to topics ranging from the mosaics in the Italian city of Ravenna to the great cathedral of Chartres in France – but not forgetting too The Book of Kells in TCD itself
- **Medieval history** begins with a survey of Europe between 1000 and 1250, covering the key political, social and cultural developments of the period, including the growing importance of kings and kingdoms, and the many conflicts of the medieval world – including the Crusades

The second and third years

In the second year all students are required to take the course Europe, 1250-1500: Religion, death and culture. They also choose at least one Ancient history module and one Art history module from a range of modules offered. The remaining modules may be taken from any of the three disciplines – including possibilities in Irish, British and European medieval history, Latin, architectural history and archaeology.

In their third year all students take the interdisciplinary module on Rome, which is taught by specialists from all three disciplines. The remaining modules must include at least one module from each of the three main subject areas. The selection currently offered includes: The Aegean Bronze Age; Greek archaeology; Roman Britain; Early Christian Ireland; Viking raiders; The Carolingian Empire; Romanesque art and architecture; The Gothic cathedral; Renaissance Florence, c.1348-c.1527; Painting and sculpture in the Italian Renaissance; and Medieval religion, c.1215-1517.

The Senior Sophister Year

In their fourth year all students are required to write a dissertation on a topic of their choice. This gives you a chance both to investigate thoroughly an area that particularly interests you and to develop independent research skills. Of two further courses taken, students are free to specialise in an area that particularly interests them or to maintain a broad base of courses across the disciplines. Offerings currently include Jews in Ancient Egypt; Sport and spectacle in the ancient world; The Archaeology of food; Empire and papacy in the Eleventh century; Edward I, Edward II and the conquest of Britain, 1286-1328; Medieval Dublin; Medieval castles and military fortifications; and Irish art in the Golden Age.

Assessment

A combination of end-of-year examination and continuous assessment (e.g. essays, seminar presentations and team projects and commentaries on texts), and a thesis is written in the final year.

Study abroad

Trinity College maintains a wide range of international links with universities across Europe – from France to Cyprus. Many foreign universities now teach courses in English too and through the Erasmus exchange programme it is possible to spend the Senior Freshman (second) year abroad.

Career opportunities

Graduates in the disciplines studied on the course have entered an exciting variety of fields after leaving university, including accountancy, advertising, archaeology, art restoration, business, civil service, diplomatic corps, heritage and museum work, human resources, journalism, management, publishing and teaching. Several others have progressed to postgraduate study at universities across Ireland, Europe and America.

Further information

www.histories-humanities.tcd.ie/amhc
Tel: +353 1 896 2625

Business, economic and social studies (BESS)

common entry programme leading to 10 degree options

COURSE CODE:	**TR081**
PLACES 2010:	**236**
POINTS 2009:	**475***
DEGREE AWARDED:	**B.A. or Bachelor in Business Studies (B.B.S.)**

Special Entry Requirements:

Leaving Certificate	OC3/HD3	Mathematics
GCSE	Grade B	Mathematics

See also:

TR001: TSM, page 90
TR005: Philosophy, page 76
TR012: History and political science, page 61
TR014: Philosophy and political science, page 77
TR015: Philosophy, political science, economics and sociology, page 78
TR017: Law and business, page 69
TR020: Law and political science, page 71
TR029: Political science and geography, page 81
TR085, TR086, TR087, TR089, TR090: Business studies and a language, page 39
TR082: Business and computing, page 41
TR083: Sociology and social policy, page 87
Political science: page 80

Course overview

BESS is a uniquely flexible programme offering 10 different degree options: Business (B.B.S.) and nine other (single honor and joint honor) possibilities, in the disciplines of Business, Economics, Political science and Sociology (see Degree options, below). It provides students with a broadly-based education, offering a high level of flexibility in two very important ways from the second year onwards: (a) in choosing the specific degree you wish to read and (b) in choosing individual modules.

Is this the right course for you?

The common first year of BESS introduces you to a broad range of disciplines that will help you make sense of the complex world in which we live today. It gives you the freedom to discover and develop interests that you may not be aware you have until you enter university. From the second year onwards, the flexible structure of the BESS programme allows you to pursue these specific interests in greater breadth and depth while still retaining considerable freedom over the selection of individual modules. Graduates of former years invariably tell us that it is this broad flexible approach that allowed them build the knowledge and insights that they rely on progressively as they advance to more senior positions in their careers.

Course content

The common first year

Students take six modules:

- Economics
- Political science
- Organisation and management
- Sociology
- Mathematics and statistics
- Law OR Social Policy OR a language*

* French, German, Spanish, Russian or Polish

Lectures are complemented by smaller tutorial/seminar groups in which you will work throughout the academic year. In this way BESS students are provided with the best of both worlds: lectures deliver authoritative summaries of material which is then analysed in detail in small groups.

Degree options

After the common first year, BESS leads to the following 10 degree options.

Single honor degrees			
Business (B.B.S.)	Economics	Political science	Sociology

Joint honor degrees (combining any two of the above four disciplines)		
Business and Economics	Economics and Political science	Political science and Sociology
Sociology and Business	Business and Political science	Economics and Sociology

Features of the BESS degree structure:

- Access to all 10 degree options is completely open and unrestricted at the end of the common first year.
- Through judicious choice of subjects and associated modules after the common first year, it is possible to keep open up to three of the ten BESS degree options throughout the second year, thus facilitating the postponement of a final choice until the beginning of the third year. Students therefore have an opportunity to adjust their study programmes in accordance with their academic results, interests, aptitudes and emerging career aspirations.
- Consultations with your personal tutor, lecturers and the Careers Advisory Service help to ensure that informed choices are made.

BESS at a glance

	Year 2 (6 modules)	Year 3 (6 modules)	Year 4 (4 modules)
Business	■ Organisational behaviour ■ Marketing management ■ Introduction to accounting ■ Financial analysis ■ Introduction to finance ■ Introduction to operations management	■ Financial and management accounting ■ Applied finance ■ Marketing management ■ Human resource management ■ Organisation theory and change ■ Operations management ■ Globalising civil society	■ International business ■ Exploring organisational experiences ■ Financial reporting and analysis ■ Financial markets and the corporate sector ■ Advances in marketing theory and practice ■ Managing non-profit organisations ■ International finance and risk management ■ Entrepreneurship: a commercial and social perspective
Economics	■ Intermediate economics ■ Economy of Ireland ■ Economics of public policy ■ Mathematics and statistics	■ Economic analysis ■ Money and banking ■ European economy ■ Economics of less developed countries ■ Investment analysis ■ Economics of policy issues ■ Industrial economics ■ Mathematical economics ■ Econometrics	■ Economic theory ■ The World economy ■ Development economics ■ Economics of financial markets ■ Transport economics ■ Quantitative methods ■ International economics ■ Monetary thought and policy ■ Economic and legal aspects of competition policy ■ Economics dissertation
Political science	■ History of political thought ■ International relations ■ Comparative politics	■ Research methods for political scientists ■ Irish politics ■ Government and politics of the United States ■ Democracy and development ■ European Union politics	■ Contemporary political theories ■ Comparative political institutions ■ Political parties ■ Issues in contemporary politics ■ Contemporary international relations ■ African politics ■ Research seminar
Sociology	■ Gender, culture and society ■ European societies ■ Introduction to social research	■ Social theory ■ Globalisation and development ■ Researching society	■ Sociology dissertation ■ Economic sociology of Europe ■ Conflict resolution, governmentality, Ireland ■ Gender and popular culture
Complementary modules (available as electives)	■ Central problems in philosophy ■ Logic ■ Methodology of science ■ Social security policy ■ Health policy ■ Housing policy ■ Crime and Irish society ■ Language option (1 of 5) ■ Law ■ Broad Curriculum options (see p. 12)	■ Comparative welfare states ■ Crime and social policy ■ Company law ■ Commercial law ■ International law ■ Information systems and technology	■ Poverty, inequality and redistribution ■ Strategic information systems

Full module details are available at: **www.tcd.ie/bess/downloads/Booklet.pdf**

Years 2-4

The table 'BESS at a glance' (see above) gives you a sense of the richness and diversity of modules that are available within BESS in the second, third and fourth years, including complementary modules offered by other disciplines.

The total number of modules available to choose from each year is roughly as follows: Year 2: 20 modules, Year 3: 30 modules, Year 4: 40 modules.

This growing portfolio of modules illustrates the range of more specialised modules that are available in the later years. A small number of these modules are considered to be 'core subjects' for particular degree options and are designated as mandatory for that degree.

Choosing modules – single honor degrees:

In the second year, students take approximately half of their module load from their preferred discipline, leaving them free to choose their remaining modules from one or more of the other three disciplines and from the set of complementary modules.

In the third and fourth years, students take the majority of their modules from their chosen discipline but, in keeping with the BESS philosophy of flexibility, there is significant scope to choose those modules which appeal most from the increasing range of specialist subjects that become available.

Choosing modules – joint honor degrees:

Throughout years 2-4, joint honor students take about half of their modules from each of the two disciplines they select. Since module choices may be made from among the full range available in two disciplines, joint honour programmes offer exceptionally high flexibility with regard to programme design and module choice.

Final-year dissertation/case study:

In the final year, students may be required or permitted to write a dissertation or prepare a case study. This allows students to research a particular subject, issue or company in greater depth, at the same time providing an excellent opportunity to position oneself for a career in a specific sector or for postgraduate study.

Assessment

Most BESS modules involve a system of continuous assessment with end-of-term tests, research-based essays, projects and presentations contributing up to 50% of the overall grade for the year. The remainder is based on results of written end-of-year examinations.

Why choose the Trinity College School of Business?

When you decide on a career in business you need to ensure that you have the best preparation to succeed. This includes the quality of your education to enable you to perform to the highest standards. It also includes having a globally recognised qualification that provides you with first class education and a network of global contacts to open the business world to you on your completion. Thus, you need to align yourself with one of the world's best and most widely recognised universities (Trinity College is ranked 43rd in the world[1]) and the top Business School in Ireland[2].

The **Trinity College School of Business** is ranked 1st in Ireland and 15th in Europe[2]. Here at this unique, innovative, dynamic and thought inspiring Business School we take the best students and make them better. We have a host of top international professors and leading business people who engage with the students, challenge them and guide them into top roles in the global business world. Past Trinity College School of Business students are now leaders in the world of business, government, entertainment, technology, innovation and non-profit businesses, both in Ireland and internationally. So by joining the Trinity College School of Business you give yourself a wonderful education in one of the top 50 universities in the world; you give yourself the opportunity to hear some the world's leading experts in business; and you leave with a core knowledge of the real world through in-company projects and an international dimension through our study aboard programme.

1 *Times Higher Education Supplement (THES) 2009 World University Rankings.*

2 *2009 Eduniversal Global Top 100 Business School Rankings*

Languages and study abroad

Many students in BESS have the opportunity to study abroad in their third year. First and second year BESS students have the option to study French, German, Spanish, Russian or Polish. Students who have the prerequisite language proficiency may apply to participate in an Erasmus exchange programme. This will mean spending all or part of the third year abroad at a university in Austria, Belgium, France, Germany, Italy, Russia or Spain.

BESS also offers English-speaking international exchange programmes to prestigious universities in Europe, North America, Australia and in Asia (China, Hong Kong and Japan).

There are a limited number of places available on two degree programmes involving an extended period of study at either the École Européenne des Affaires (EAP) or the École des Haute Etudes Commerciales (HEC). These lead to the double award of the degree of B.A. (Moderatorship) or the Bachelor in Business Studies (B.B.S.) from Trinity College Dublin and a postgraduate qualification from the relevant partner institution.

Career opportunities

BESS is your roadmap to a wide and varying career. About 50% of our graduates proceed to further study in masters and doctoral programmes both in Ireland and abroad. The remaining 50% enter a diverse range of employment opportunities in areas such as:

Accountancy, Banking & corporate finance, International organisations, Journalism, Law, Marketing, Management consulting, Politics, Public service, Teaching, Policy bodies, Voluntary organisations. See **www.tcd.ie/Careers/students/degree** for further details.

The BESS multidisciplinary approach will help you build valuable career skills such as the ability to communicate effectively, work in and lead teams, conduct research and analyse complex problems – all of which will prepare you for rapid advancement within the flexible career structures that are the hallmark of modern employment.

Further information

www.tcd.ie/BESS
Tel: +353 1 896 1840
E-mail: **bess@tcd.ie**

Business studies and a language
(French, German, Russian, Polish or Spanish)

COURSE CODES:

TR085: French (15 places, points 2009: 480)
TR086: German (15 places, points 2009: 420)
TR087: Russian (7 places, points 2009: 410)
TR089: Polish (5 places, points 2009: 385)
TR090: Spanish (10 places, points 2009: 445*)

DEGREE AWARDED: **B.B.S. (Lang.)**

Special Entry Requirements:

Leaving Certificate	OC3/HD3	Mathematics (TR085, TR086, TR087, TR089 & TR090)
	HC1	French (TR085)
	HC1	German (TR086)
	HC3	In a language other than English (TR087 & TR089)
	HC1	Spanish (TR090)
GCSE	Grade B	Mathematics (TR085, TR086, TR087, TR089 & TR090)
Advanced GCE (A-Level)	Grade C	French (TR085)
	Grade C	German (TR086)
	Grade C	In a language other than English (TR087 & TR089)
	Grade C	Spanish (TR090)

See also:

TR017: Law and business, page 69
TR081: BESS, page 35
TR082: Business and computing, page 41

Course overview

The programme offers an exciting way of learning about mainstream business concepts, theories and models in a variety of subject areas as well as getting to grips in an in-depth and comprehensive manner with another country's language, its society, culture and business environment. Over its four years, the third of which is spent studying and working abroad, the course simultaneously broadens and deepens your academic command of business theories and practices and develops your linguistic competence. At the same time, you will be developing a wide range of generic and transferable skills that are increasingly

required in a variety of careers and employment situations (e.g. working in multi-disciplinary/multi-cultural teams, intercultural negotiation and international management, all of which are highly relevant in Ireland's exceptionally open economy).

The distinctiveness of Trinity College's B.B.S. (Lang.) degrees centres on the following: (a) there is integration of the business and language dimensions in all years of the programme, especially during the year abroad and in the final year, when students write a lengthy case study in the foreign language, under joint supervision by business and language professors; (b) language instruction is provided by specially-trained 'language for business and economics' lecturers, most of whom are native speakers; (c) lectures on the economy, business environment, society and culture of the relevant country are provided by experts who are continuously conducting research in their specialist field of study; and (d) students complete a work placement in the target culture in order to apply and develop their business and language skills in a professional setting.

Is this the right course for you?

Students on all five strands of this programme must have well-balanced interests in learning about business and in developing a high level of proficiency in a language. From start to finish, whether as beginners (on the *ab initio* Russian and Polish* streams) or as more advanced learners (in French, German or Spanish), you will be required to demonstrate a high level of motivation and commitment to mastering core business modules (see the table BESS at a glance, page 37) and to all aspects of language learning. Educational experts emphasise the special challenges associated with the study of two disparate disciplines employing different teaching approaches and requiring different learning styles on the part of the student, but they also stress that mastery of these challenges builds skills that are particularly sought after by employers.

* Special provisions can be made for students with prior knowledge of Russian or Polish (heritage speakers, near-native speakers or those who have an entrance qualification in Russian or Polish).

Course content

This programme aims to provide you with the knowledge and skills necessary to communicate internationally and to understand the social, political and cultural contexts of markets, organisations and management across countries. In addition to studying modules in business, economic and social studies, you will study the society, institutions, culture and civilisation associated with your chosen language.

Teaching is specifically geared to the everyday needs, both formal and informal, of business managers. Accordingly, the language components of the programme will have a contemporary socio-economic and business orientation, as distinct from a historical or literature-based perspective. Much of the teaching is provided through the target language, simultaneously building language skills and knowledge relevant to managing across cultures.

The Freshman years (years 1 & 2)

There are approximately 18-20 hours of lectures and tutorials per week depending on which subject options are chosen. This should be matched by a similar level of personal study.

Modules in the first and second years include:

Business studies

- Management and organisation
- Marketing
- Law
- Accountancy and financial analysis
- Finance
- Operations management
- Organisational behaviour
- Economics
- Mathematics and statistics

There is also the option to attend modules in areas such as sociology, politics and economics in the second year.

Language

- General language and language for business (written, oral and aural proficiency)
- Contemporary society, institutions and culture
- Overall economic and business environment of the region/country of your chosen language

The Sophister years

The Junior Sophister (third) year is spent at a university or business school in the country of the language you are studying. Trinity College has exchange agreements with a range of leading universities and business schools throughout Europe. The vast majority of modules and examinations taken during your year abroad will be through the medium of your chosen language. On conclusion of the academic year, experience of the business culture in the country of your chosen language is gained through a work placement of approximately three months' duration.

In the Senior Sophister (fourth) year, studies are divided more or less evenly between business modules and more advanced study of and practice in the language. To integrate the two areas effectively, you will research and write a major case study (approx 10,000 words, written in the foreign language). This will involve the analysis of a business enterprise based in the country of your chosen language and will be linked to the mandatory business module Strategic management: theory and practice.

Assessment

The evaluation of the year abroad is based on the normal assessments and examinations of the host university. The evaluation of the final year in Trinity College consists of a range of continuous assessment exercises (e.g. group projects, essays, term tests), the case study and end-of-year examinations. In the language area, regular written, oral, aural and presentation exercises are required throughout the year.

Career opportunities

On graduation you will have a strong academic knowledge of international business and management, together with a high-level competency in the language you have studied. Recent graduates are employed in Ireland and abroad by leading international companies such as Google, Whirlpool, KPMG, AIB Capital Markets and Goldman Sachs, as well as by consultancy organisations, embassies and public sector bodies. Many are working in marketing or international management roles while others occupy more specialist positions (e.g. as analysts or researchers). Several proceed to undertake further study and research in international business at postgraduate level.

Why choose the Trinity College School of Business?

See p. 38

Further information

Business School:
www.tcd.ie/business/bsl
E-mail: **business@tcd.ie**
Tel: +353 1 896 2707 / 896 1027

Business studies and French:
Dr. Paule Salerno-O'Shea:
E-mail: **psalerno@tcd.ie**
Tel: +353 1 896 1472

or

Dr. Claire Laudet:
E-mail: **claudet@tcd.ie**
Tel: +353 1 896 2313 / 896 1553

Business studies and German:
Dr. Gillian Martin:
E-mail: **gsmartin@tcd.ie**
Tel: +353 1 896 2329 / 896 1373

Business studies and Polish:
Dr. Tomasz Kamusella:
E-mail: **kamuselt@tcd.ie**
Tel: +353 1 896 1291 / 896 1896

Business studies and Russian:
Dr. Dmitri Tsiskarashvili:
E-mail: **dtsiskar@tcd.ie**
Tel: +353 1 896 2416 / 896 1896

Business studies and Spanish:
Dr. Grace Magnier:
E-mail: **grace.magnier@tcd.ie**
Tel: +353 1 896 1376 / 896 1257

Business and computing

COURSE CODE:	**TR082**
PLACES 2010:	**30**
POINTS 2009:	**365**
DEGREE AWARDED:	**B.A. Moderatorship in Business and Computing**

Special Entry Requirements:

Leaving Certificate	HC3/OA2	Mathematics
Advanced GCE (A-level)	Grade C	Mathematics
OR		
GCSE	Grade A	Mathematics

See also:

TR017: Law and business, page 69
TR033: Computer science, page 117
TR034: MSISS, page 120
TR081: BESS, page 35
TR085, TR086, TR087, TR089, TR090: Business studies and a language, page 39

Course overview

This joint degree aims to provide its graduates with the knowledge and skills necessary to work in the technical field of computer science and information systems and the business management skills to understand the fundamentals of markets, organisations and business management. The programme, which is of four years duration, will prepare students for challenging careers in either (or both) computer science or business; as well as position them for postgraduate study and research if that is their desire.

Over the four years the students will engage with information and communication technologies and also a range of business subjects. In order to obtain an adequate grounding in each discipline, students will be required to complete certain mandatory subjects, largely taught in the Freshman (first two) years. The Sophister (third and fourth) years will allow students to choose among various options in business and computer science, although there will continue to be minimum requirements in each discipline. The course organisers will structure the course insofar as practicable, in a manner that allows students to fulfil some of the requirements for professional accreditation, such as those which exist in accountancy and computer engineering. However, it is expected that further training or examinations will be required to achieve full accreditation.

Is this the right course for you?

This course is unique in that it combines computing and business in a contemporary, interesting and relevant manner. As technology and the networked environment are core issues within business and society, this unique blend of a broad

engagement with information and communication technologies and business management will develop a graduate who understands how to engage with, design and also manage technology, aligned with general business management skills across a range of disciplines including marketing, organisational behaviour, human resources and finance. Integrating the two areas should lead to students who can focus on either business or computing but also be able to integrate the two to introduce and manage technology within companies, at the customer interface and within society in general. The government and industry have called for more graduates with technology and business skills and this course will help meet this demand. This joint honours course encourages students to develop, create and innovate within the technology and business areas.

Course content

In the Junior Freshman (first) year, students take a number of mandatory subjects in business and computer science areas.

Students take three mandatory business subjects: Introduction to organisations and management, Introduction to economic policy and Statistical analysis.

Students take three mandatory computer science subjects: Mathematics, Introduction to programming and Programming project. In addition students also take one other subject, which comprises two parts – Business computing systems and Introduction to computing.

In the Senior Freshman (second) year, students take a number of mandatory subjects but are also offered some choice of subjects, taking in total three subjects in both the business and computer science areas.

Students take three mandatory business subjects: Management 1, Management 2 and Management 3 which includes subjects such as Marketing management, Organisational behaviour, Introduction to operations management, Introduction to accounting, Financial analysis and Introduction to finance.

Students also take the following computer science subjects: Programming techniques; Telecommunications and information management and a choice of either Systems programming or Systems analysis and design.

In the Junior Sophister (third) year, students take a combination of subjects, of which 1/3 must be from business, 1/3 from computer science and 1/3 from their own choice. The subject choices are drawn from a list of optional modules as follows:

Business module choices:

Human resource management; Operations management; Financial and management accounting; Marketing management; Applied finance; Organisation theory and change.

Computer science module choices:

Applied probability; Symbolic programming; Software engineering; Computer architecture 3; Information management 2; Concurrent systems 1; Concurrent systems 2; Computers and society 2; Software engineering group project; Artificial intelligence 1; Telecommunications 2; Compiler design 1; E-business and E-commerce 1 and 2.

In the Senior Sophister (fourth) year, students take one business subject and the computer science final-year project. The remaining subjects can be drawn from a list of optional modules as follows:

Business module choices:

Strategic management: theory and practice; International business; Organisation change; Financial reporting and analysis; Advances in marketing theory and practice; Managing non-profit organisations; Employee relations; Entrepreneurship: commercial and social perspectives.

Computer science module choices:

Human factors; Distributed systems; Computer graphics; Computer vision; Compiler design 2; Fuzzy logic; Advanced telecommunications; Advanced computer architecture.

Assessment

Courses are examined by a combination of continuous assessment and formal examination.

Career opportunities

The B.A. in Business and computing opens up a wide range of career opportunities as well as further study options. Likely careers for graduates include, but are not limited to, the following:

- Chief Information Officer/IT architecture
- Business executive or manager
- Consulting (business and/or information systems)
- Software developer/project manager
- Banking/Accounting
- Consumer and business to business products and service organisations
- Entrepreneur in Information and Communications Technology
- Marketing (particularly in relation to the ICT industry)
- Operations management
- Many roles in the public sector

Why choose the Trinity College School of Business?

See p. 38

Further information

Course website: **www.scss.tcd.ie/courses/babc**
School websites: **www.tcd.ie/business or www.scss.tcd.ie**
E-mail: **business-computing@tcd.ie**

Classics

COURSE CODE:	**TR021**
PLACES 2010:	**15**
POINTS 2009:	**445**
DEGREE AWARDED:	**B.A.**

Special Entry Requirements:

Leaving Certificate	HC3	Greek or Latin
Advanced GCE (A-Level)	Grade C	Greek or Latin

See also:

(TSM subjects): Ancient history and archaeology, page 91
Classical civilisation, page 93
Greek, page 103
Latin, page 109

Course overview

The study of Classics is concerned with the language, literature, history and thought of ancient Greece and Rome. Through the reading of literature in the original Greek and Latin and the examination of key aspects of ancient history, you will develop a thorough knowledge of the classical world and a critical approach to textual and material culture. If you have already studied either Greek or Latin at school, you can learn the other language as a beginner. Classics has been taught in Trinity College since its foundation just over 400 years ago, and Trinity College is unique in having Chairs in both Greek and in Latin.

Is this the right course for you?

If you are interested in studying the languages, the poetic imagination, the depths of thought and the historical value of two civilisations that shaped the western world, you will enjoy this course.

Course content

Over the four years you will read texts in a wide variety of genres, including epic poetry, drama, philosophy, history and letter writing. Whether you are continuing your language studies or taking up one of the languages as a beginner, you will engage with ancient texts both as literature and as a gateway into culture and thought. Through the critical study of ancient history, myth and religion, you will acquire a comprehensive and interdisciplinary perspective on classical culture. For all of your language-based courses the groups will be small, stimulating lively discussion, analytic skills, and the development of independent thinking.

The Freshman years

In the Junior Freshman (first) year you will be introduced to the critical study of ancient history, culture and literature. The language-based courses you take depend on whether you have studied both Greek and Latin before or are taking one of the languages as a beginner. In your Senior Freshman (second) year you will continue the study of Greek and Latin language, literature and history. Courses are taught by lectures and small-group seminars. There are twelve to fourteen contact hours per week.

- **Greek and Roman history** – an introductory survey of the Greek and Roman world, from the Greek Archaic age to the early Roman Empire. The course covers topics such as politics and power, Athenian democracy, the conquests of Alexander, the emergence of Rome as a major imperial power, colonisation, war and conflict
- **Mythology and religion** – an introduction to the major myths and religions of the classical world using both literary and material evidence. The course also explores theories of myth and the functions of myth within society

Greek for non-beginners

- **Greek authors** – text-based courses introduce you to the critical reading of Greek literature through a close examination and contextualisation of the oldest and most influential works in western literature: Homer's Iliad and Odyssey, the Histories of Herodotus, the tragedies of Euripides and Sophocles, and the philosophical prose of Plato
- **Greek language** – this course allows you to practice your translation skills and to study the language of authors not covered in the text-based courses

Latin for non-beginners

- **Latin authors** – text-based courses introduce you to the critical reading of Latin literature through a close examination and contextualisation of Roman poetry and prose from the early republican to the imperial period: the comedies of Plautus and Terence, Cicero's famous speech On Behalf of Caelius, Virgil's Aeneid, the love poems of Catullus and Ovid, and the letters of Pliny the Younger
- **Latin language** – this course allows you to practice your translation skills and to study the language of authors not covered in the text-based courses

Greek or Latin for beginners

- **Elementary Greek or Latin** – an intensive introduction to the language. By the end of the year you will be ready to read original texts and your command of the language will be at the same level as those who have studied Greek or Latin before entering university

The Sophister years

In the Sophister (third and fourth) years you will progress to an in-depth study of topics in Greek and Roman literature, history and culture. You will refine your analysis of texts in their literary and cultural context through more specialised skills and methodologies, such as textual criticism, linguistics and literary theories. Greek topics may include Polybius and the Hellenistic Empire, Archaic poetry, Greek Comedy, and Hellenistic poetry. Latin topics may include Augustan poetry, Latin historians, Satire, Desire and the body. In your Junior Sophister (third) year you will continue to study ancient history, while separate language classes provide additional assistance in improving your fluency and accuracy in reading and interpretation. In the Senior Sophister (fourth) year you will write a thesis on a subject of your choice. This is an opportunity to do research which will allow you to develop independent ideas and acquire critical skills, while investigating in great depth an area that particularly interests you.

Assessment

A combination of end-of-year examination and continuous assessment (e.g. essays, unseen translations and other language tests, textual commentaries, seminar presentations) and a thesis in the final year.

Study abroad

Trinity College has strong links with many classics departments abroad, including active participation in the Erasmus exchange programme with universities in France, Switzerland and Cyprus. This allows students the option of spending their Senior Freshman (second) year abroad.

Career opportunities

Trinity College has a long tradition of Classics graduates who have continued onto postgraduate study and successful academic careers both in Europe and America. Recent graduates have also taken up careers in journalism, public relations, translation and teaching, and with employers such as the Sunday Independent, the European Commission and merchant banks.

Further information

www.tcd.ie/Classics
E-mail: **classics@tcd.ie**
Tel: +353 1 896 1208

Clinical speech and language studies

COURSE CODE: **TR007**
PLACES 2010: **34**
POINTS 2009: **515**
DEGREE AWARDED: **B.Sc. (Clin. Lang.)**

Special Entry Requirements:

Leaving Certificate	OD3/HD3	Mathematics
In addition:	HC3	In one of English, French, German, Irish, Italian, Russian or Spanish
	HC3	In one of mathematics, applied mathematics, physics, chemistry, biology, physics/ chemistry or agricultural science
GCSE	Grade C	Mathematics
In addition:		
Either		
GCSE	Grade B	In one of physics, chemistry, biology, mathematics
Advanced GCE (A-Level)	Grade C	In one of English, French, German, Irish, Italian, Russian or Spanish
Or		
GCSE	Grade B	In one of English, French, German, Irish, Italian, Russian or Spanish
Advanced GCE (A-Level)	Grade C	In one of physics, chemistry, biology or mathematics

See Precautions against infectious diseases, page 198.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

What is Clinical speech and language studies?

Speech and language therapists work with people who have communication difficulties, helping them to find ways to maximise their speech, language and communication skills. They also assess, diagnose and treat people with swallowing difficulties. Seeking to reduce the impact of a person's communication and/or swallowing difficulties is a major part of the therapist's role and responsibility.

Communication impairments can occur at any stage in a person's life and they happen for a variety of reasons – often due to developmental conditions in childhood or to an accident or neurological condition in adulthood. Speech and language therapists commonly work with people who have communication disorders associated with delays in early language development and/or development of speech sounds. People with physical impairments (e.g. associated with cerebral palsy), people who have learning difficulties (e.g. associated with intellectual impairment or autism), people with written language problems (e.g. dyslexia) and people with mental health disorders are among the range of clients who may benefit from speech and language therapy, as well as those who stutter or have problems with their voice, or people who have communication difficulties after a stroke. Speech and language therapists may be part of a multidisciplinary team that may include a teacher, psychologist, doctor, occupational therapist, nurse and social worker among others. Therapists may work in hospitals, in community settings such as primary and continuing care clinics, in schools and/or day care centres or may be situated within specialist clinics.

Is this the right course for you?

As a speech and language therapist, you will come into contact with people of all ages and will work in a range of settings, including schools, community clinics, specialist clinics and hospitals. In almost all instances, you will also find yourself dealing with parents and/or families. While an interest in science and language is important, it is critical that you are people-oriented, adaptable and enjoy collaborative problem-solving.

Course overview

This four-year, full-time degree course gives you an in-depth understanding of communication development and disorders and stimulates you to learn about working with those who have communication difficulties so they can manage these difficulties effectively. Clinical practice is a fundamental and integral part of the course. Linguistics and psychology are also major components of the course. You will also gain experience in critical research techniques in areas relevant to your clinical practice. The course is accredited by the Irish Association of Speech and Language Therapists.

There are approximately twenty four teaching hours per week in the Junior Freshman (first) year (including clinical visits).

The component courses are grouped under two headings: Theory and Clinical practice.

Theoretical component

Major subject areas include speech and language pathology, linguistics, psychology, discourse analysis, anatomy, physiology, neurology and audiology.

Teaching methods include lectures, tutorials and case-based learning, as well as group work in small teams to address problems set in the problem-based learning approach.

Clinical component

Clinical work is an integral part of the course, enabling you to apply your knowledge in assessment and therapy, and to assist in the design and development of therapy programmes under supervision, in a range of different settings.

During term time an average of one day per week is reserved for student clinical work. You will also be required to undertake clinical practice outside term time: a three-week block in the Senior Freshman (second) year and a four-week block in the Junior Sophister (third) year. In the Senior Sophister (fourth) year, a six- to eight-week block is organised within term time (the timing for these schedules is under review).

While you will generally attend clinics around Ireland, it may be possible, by special arrangement, to attend clinics in other countries.

PBL

Problem-based or problem-centred learning provides students with structured problems set to meet specified learning objectives. Students engage in independent learning and/or group learning (under supervision) to research how to achieve the learning objectives. Information gathered is shared and presented to the class. Tutor feedback is provided at every stage of the learning process.

The Freshman years – theoretical component:

In the Junior Freshman (first) year you will be introduced to the area of language acquisition and speech. These courses will be the foundation for later years of study.

- **Clinical practice**
- **Pre-clinical skills**
- **Speech and hearing**
- **Linguistics** – introduction to language study, syntax and CHILDES
- **Phonetics** – the study of vocal sounds
- **Psychology**
- **General and neuro-anatomy**
- **Physiology** – the study of the functions of living organisms

In the Senior Freshman (second) year, theoretical courses move to more specific areas and you will study:

- **Disorders of speech, language and communication** – and appropriate frameworks and tools for assessing skills in each of these areas, as well as considering the participation needs of individuals with communication difficulties
- **Clinical and instrumental phonetics**
- **Linguistics**
- **Psychology**

The Sophister years

In the Sophister (third and fourth) years the theoretical component of the course focuses more specifically on intervention approaches with reference to disorders of speech, language and communication.

The clinical component takes on greater significance in the final two years of the course. By the end of the Senior Sophister (fourth) year you will be expected to participate fully in assessment and diagnosis, as well as in therapy planning and implementation. Such work is supervised, with students learning self-evaluation and reflective skills during the process.

Assessment

Your theoretical knowledge is assessed by a combination of continuous assessment and written end-of-year examinations. Certain subjects also require an oral examination.

Practical clinical examinations take place both in Trinity College and in the clinics that you have been attending on placement. Clinical placements are examined on a continuous basis by practice educators who work with you. There are additional assessment procedures where students are observed in practice, and present their clinical work for examination to College mentors.

The Trinity College degree and professional practice

On graduation, your qualification from Trinity College Dublin is recognised as a licence to practice as a Speech and Language Therapist in Ireland. Those holding the degree are eligible to apply for membership of the Irish Association of Speech and Language Therapists (IASLT) **www.iaslt.com**. Graduates who wish to work in the UK should contact the Health Professionals Council, **www.hpc-uk.org**. Graduates of the course who wish to work in another European country will have to apply for government approval in that country. If you are considering applying for professional recognition to work as a Speech-Language Pathologist in the US or Canada, you should contact the American Speech-Language-Hearing Association at: **www.asha.org** or the Canadian Association of Speech-Language Pathologists and Audiologists at **www.caslpa.ca/english**

Career opportunities

For more detailed information on your career prospects, visit the professional associations' websites at **www.iaslt.com** and **www.rcslt.org**

Further information

www.tcd.ie/slscs/csls
Tel: +353 1 896 1496

Deaf studies

COURSE CODE: **TR016**
PLACES 2010: **20**
POINTS 2009: **n/a**
AWARD: **B.A.**

ENTRY REQUIREMENTS:

Leaving Certificate	HC3	English
	OD3/HD3	In a language other than English
Advanced GCE (A-Level)	Grade C	English literature (A or B) or English language (A or B)
GCSE	Grade C	In a language other than English

Entry to Year 3 of Bachelor in Deaf studies

Graduates of the Centre's Diplomas in Deaf studies, Irish Sign Language (ISL) teaching and ISL/English interpreting may apply for entry to year 3 of the Bachelor in Deaf studies if they hold a II.2 or above.

GARDA VETTING:

Students will be required to undergo Garda vetting.

See p. 23 for further details.

The Government's Free Fees Initiative DOES cover this course. EU students registered for Deaf studies may be eligible for inclusion in the scheme.

What is Deaf studies?

Deaf studies is a discipline that encompasses an understanding of the Deaf community from social, educational, policy and historical perspectives. Graduates will develop fluency in Irish Sign Language (ISL) and may choose to specialise as Irish Sign Language interpreters, Irish Sign Language teachers or as generalists in Deaf studies. ISL interpreters facilitate communication in a range of community and conference settings including legal, medical, educational, social services, and employment related settings. ISL teachers deliver language learning in a range of contexts, working with deaf children and their families at home, and with adults who are learning ISL as a second language. There is currently a significant shortage of professional ISL/English interpreters and ISL teachers in Ireland. Those specialising in Deaf studies will develop skills in developing accessible multimedia for deaf and hard-of-hearing people, opening up opportunities in subtitling and public information service delivery. There are also options for developing valuable research skills as part of this course.

Is this the right course for you?

Working in the area of Deaf studies you will come into contact with people of all ages and will be required to work in a range of settings, which may include educational settings, community clinics, hospitals, legal contexts and a wide range of community

settings. You will be working between Deaf and hearing communities and bridging communication and cultural gaps. In many instances, you will also find yourself dealing with families of Deaf and hard-of-hearing people. It is important, therefore, that you are adaptable and people-oriented. You will also need to be capable of working independently and as part of a team. You should have an interest in learning about language, culture and society and be open to using technology in your learning.

Course overview

Deaf studies is a four-year full-time honors degree course. No prior knowledge of ISL is required. The course provides a comprehensive introduction to the Deaf community and ISL for those wishing to work in or with the Deaf community. The degree involves an integrated programme of study which is designed to equip students with a broad spectrum of knowledge, skills and competencies related to the Deaf community, its history and culture, and for those following specific paths, the profession of ISL/English interpreting or ISL teaching.

Course content

This four-year full-time degree course gives you an in-depth understanding of the Irish Deaf community and of the experience of Deaf people internationally, historically and in contemporary society. ISL is studied across the four years of the programme, while in years one and two, themes such as deaf education, the representation of deaf people in the media, the legal and political standing of signed languages and access to critical public health services are explored. Understanding of the structure of ISL, the sociolinguistic context and the path to acquisition of a signed language for deaf children are also explored in years one and two. For ISL/English interpreting students, translation theory and the practical skills of interpreting, guided by ethical practice are emphasised in years three and four. For students taking the ISL teaching route, aspects of the psychology of education are introduced along with guidance on planning and implementing a curriculum and assessing student performance. For those taking the Deaf studies route, there are options relating to the development of accessible multimedia for Deaf and hard-of-hearing people or carrying out a research project, which culminates in a dissertation. For all students years three and four include practice placements with organisations working with/for the Deaf community in Ireland or (through Erasmus links) across the European Union. In the Junior Freshman (first) year, there are approximately 17 hours of direct teaching.

The component courses are grouped under three headings: Language, Theory and Practice.

Language component

Across the four years of the degree, you will be introduced to ISL and language skills will be developed to a high degree. Our language teaching is mapped to the Common European Framework of Reference for Languages (Council of Europe), so you will be able to map your progress against your knowledge of other languages. Students have approximately nine hours of class contact with ISL lecturers each week over the four years.

Theoretical component

Theoretical courses will introduce you to aspects of language acquisition, linguistics, sociolinguistics, social policy, equality studies and social studies. Each theoretical course involves two hours of lecture time per week plus an expectation of self study. Theoretical courses include:

- An Introduction to sign linguistics
- Sociolinguistics and signed languages
- Perspectives on deafness
- Equality studies
- Interactional discourse analysis
- Language acquisition and deafness
- Language processing
- Deaf education
- Working with the Deaf community
- Deaf people and the media
- Ethics
- Translation and interpreting: Philosophy and practice
- Methods of assessment
- Curriculum planning
- Teaching methods
- Developing multimedia for the Deaf community

Students can also select one course from the Broad Curriculum in both years one and two (see p. 12).

Practice component

Practical components are introduced in the Sophistor (third and fourth) years and will include placements with organisations. These will include a six-week block placement in the Junior Sophistor (third) year and an eight week block in the Senior Sophistor (fourth) year. While you will usually attend placement in an Irish organisation, it is possible, by special arrangement, to arrange a placement abroad. In previous years, students have undertaken placements with a wide range of Irish organisations including the Irish Deaf Society, DeafHear, Kerry Deaf Resource Centre, SLIS, Bridge Interpreting and the Conroy School of ISL.

The Freshman years – language component:

The cornerstone of working with the Deaf community is fluency in ISL. ISL is introduced at *ab initio* level.

Courses taken in the Freshman (first two) years are ISL1, ISL2, ISL3 and ISL4. Nine hours of contact time per week with ISL lecturers in an immersion setting facilitates rapid development of ISL skill.

The Freshman years – theoretical component:

In the Freshman years you will be introduced to the area of Deaf studies and linguistics. These courses will be the foundation for later years of study. These are:

- **Introduction to sign linguistics** – introduces aspects of the grammar of signed languages including phonology, phonetics, morphology, syntax, semantics, and pragmatics
- **Sociolinguistics and signed languages** – introduces the ways in which the social context impacts on language use in signed languages, including reference to gender, generation, regional variation and the impact of educational policy and the media on sign language use. Also looks at issues of language recognition and language planning.
- **Perspectives on deafness** – focusing on experiences of being a deaf/deafened person and how society (contemporary and historically) has responded to deaf people. This course has a strong international dimension and looks at the issues of community, culture, Deafhood and what it means to be deaf in Europe today).
- **Language acquisition and deafness** – including issues of "home signing" and the impact of late acquisition of languages – spoken and/or signed – for deaf children
- **Language processing**
- **Interactive discourse analysis**
- **Deaf education**
- **Working with the Deaf community** – including issues of mental health and mental illness in the Deaf community or **Translation and interpreting: Philosophy and practice** (for those aiming to pursue the interpreting strand)
- **Ethics 1**

Students can step out of the programme on successful completion of year 2 with a Diploma in Deaf studies or may continue on to degree level.

The Sophistor years

In years 3 and 4, you will opt to follow one of three strands: (i) Interpreting, (ii) ISL teaching or (iii) Deaf studies.

While the ISL components are shared across all courses, in the Sophistor years, you will take specific theoretical and practice-based courses to support professional skill development in your specific area of interest. In order to opt for the interpreting or ISL route, you will need to have achieved a II.2 in the Senior Freshman (second) year.

The Sophistor years – Language component

In years 3 and 4, you will complete four more ISL courses: ISL5, ISL6, ISL7 and ISL8, bringing you to a level of fluency where you will be able to understand an academic lecture delivered in ISL, make formal presentations in ISL and interact with confidence in the language.

The Sophistor years – Theoretical component

In the Sophistor years, you will undertake some common theoretical courses (such as Ethics 2), but generally, theoretical components in years 3 and 4 are closely aligned to professional practice in each of the three strands, as outlined below:

(i) Interpreting

- Consecutive interpreting
- Liaison interpreting
- Simultaneous interpreting 1
- Simultaneous interpreting 2

(ii) ISL teaching

- Curriculum planning
- Teaching methods
- Theories of education
- Methods of assessment
- Teaching ISL for the national curriculum
- Teaching ISL as L1 (a first language)
- Teaching ISL as L2 (a second language)

(iii) Deaf studies

- Deaf people and the media
- Creating multimedia for the Deaf community 1
- Creating multimedia for the Deaf community 2 or Research methods
- Equality studies, Colonialism and the Deaf community or Dissertation

The Sophistor years – Practical component

In years 3 and 4, you will undertake placements in Ireland or abroad to support your professional skill development. The objectives of placements include the development of core competencies that have been identified for professional interpreters or ISL teachers, the active engagement with the Deaf community in authentic settings, and engagement with professionals in the field who can offer guidance on your path to professional practice.

Assessment

Award of the degree is based on continuous assessment, a practice placement, and final examinations. A student whose placement performance is considered unsatisfactory may be allowed further placement experience.

Career opportunities

Graduates frequently work in Deaf organisations (e.g. as a resource officer) or combined with another skill set, such as teaching, child care, social work, media, etc., work as an ISL teacher, or as an ISL interpreter. There is also scope for continuing to further study in areas such as linguistics, communications, anthropology, multiculturalism, gender studies, law, etc. Graduates have also gone on to work in the Civil Service and other public service bodies.

Did you know?

Irish Sign Language is the second indigenous language of Ireland and is the working language at the Centre for Deaf Studies. ISL is one of the many signed languages recognised by the European Institutions and has been formally recognised in Northern Ireland. Trinity College is the only university on the island of Ireland offering a Deaf studies programme. The first professional training for ISL/English interpreters and ISL teachers was established here in 1992 (in collaboration with Bristol University). The Centre for Deaf Studies was established in 2001 and Deaf studies was introduced as a programme in 2002.

Further information

www.tcd.ie/slscs/cds
Tel: + 353 830 12 52
Fax: +353 830 12 11
E-mail: **cdsinfo@tcd.ie**

Centre for Deaf Studies, School of Linguistic, Speech and Communication Sciences, 4th Floor, Arts Building, Trinity College Dublin.

Drama and theatre studies & Drama studies

COURSE CODES:	**TR025**	**TR001 (TSM)**
PLACES 2010:	**16**	**24**
POINTS 2009:	**500***	**485*-560**
DEGREE AWARDED:	**B.A.**	
TSM points:	**See note on page 24**	

These are restricted entry courses.

Applications MUST be submitted by 1 February of the proposed year of entry. Applicants will receive a questionnaire in March to be completed and returned. On the basis of the completed questionnaire, some applicants will be called to attend a workshop and interview (during April and May), before final selections are made.

TR025 – Drama and theatre studies is a single honor course where Drama and theatre studies is read almost exclusively for four years.

TR001 – Drama studies (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Drama studies see page 90.

Drama and theatre studies (single honor) – TR025

Students in this course devote their full time to the history, theory, and practice of theatre and performance studies. It is particularly appropriate for those who already have experience in community, school or youth theatre, and it includes considerable work in practical theatre activities. For single honor students there are approximately 14 hours per week of classes plus rehearsals.

Drama studies (TSM joint honors) – TR001

The TSM course explores theatre and drama mainly from a theoretical and historical perspective. It combines library-based courses with training in critical and analytical skills. While it follows a similar format to its single honor equivalent – drama and theatre studies (TR025) – the practical content is more limited in the first two years. For TSM students there are approximately 7 hours per week of classes plus rehearsals.

Is this the right course for you?

These courses provide students with a broad foundation in all aspects of theatre and performance. They allow students to specialise in one or more practical areas of theatre and are designed to prepare students for careers and further training in theatre and related fields. The strong developmental nature of drama and theatre studies means that, in addition to a high level of analytical ability, you will need to possess resourcefulness, self-motivation and good time-management skills. By its nature, practical theatre work calls for full-time commitment to rehearsal and production at certain times of the year. You will also need to have the ability to work as a member of a team to succeed on this course.

Course overview

Both these courses aim to enable you to explore the relationship between the theory and the practice of theatre, to discover how and why theatre works. They do this by uniting elements of literary, cultural, historical and sociological studies with a practical understanding of the various performing arts.

The Freshman years

The Junior and Senior Freshman (first and second) years will provide you with the skills of the theatre historian, analyst and practitioner. During these years, the course provides an introduction to drama, theatre and performance. Teaching is by lecture, seminar and practical workshop and is arranged in a series of three-week intensive modules over each of the two semesters. Courses cover defined historical periods, genres and movements, such as ancient Greek theatre, Shakespeare, Melodrama, Ritual and performance, Gender and performance, Modern/postmodern theatre. Single honor students, in addition to all of the courses above take courses in practical areas of theatre (Introduction to performing, Introduction to theatre making: Directing and devising, and Technical theatre). These practical courses run throughout all of the Freshman years. These are practical courses with contextual (historical and theoretical) study.

In the Junior Freshman (first) year these courses are supplemented for all students by classes in study and writing skills and multimedia technology. Senior Freshmen (second-year students, both Single Honor and TSM) supplement their practical experience of theatre in a full year-end production in the Samuel Beckett Theatre.

The Sophister years

In the Junior and Senior Sophister (third and fourth) years, the curriculum combines library-based courses in theatre and performance history with more practical workshop-based courses. There is a compulsory course entitled “Contemporary Irish Theatre in Context” for all students. The remainder of the curriculum is composed by each individual student from a range of optional courses. TSM and Single honor students are treated equally in the Junior Sophister (third) year, with TSM students taking half the number of courses required of Single honor students. In the Senior Sophister (fourth) year, there is no difference in curriculum between TSM and Single honor students.

The range of courses allows you to specialise in either historical and theoretical fields or in practical aspects of theatre. The range of options is vast and includes courses in the theatre history of Ireland, Europe, Asia, and the USA, stage, costume and lighting design, devising, directing, theatre management, film theory and history, performance studies, acting, and performance and technology. In your final year, in addition to course options, you will undertake an individual project guided by a member of staff and research and write a dissertation.

Assessment

Assessment is by a combination of essays, journals, practical assignments, class presentations, written and oral examination and, in your final year, a dissertation. In the Freshman (first two) years, practical work makes up approximately 33% of the total workload, depending on the time of year. In the Sophister (final two) years, students following the single honor Drama and theatre studies (TR025) course may opt to make up to 50% of their workload in practical courses.

Study abroad

You may apply to spend the Junior Sophister (third) year at a European university as part of the Erasmus exchange programme. Drama has exchange agreements with the University of California, the University of Helsinki, the Université

de Paris-Nanterre (Paris X), the Freie Universität Berlin, the National Kapodistrian University of Athens, the University of Glasgow, Goldsmith's College (University of London) and Royal Holloway College (University of London).

Did you know?

- Since its establishment in 1592, Trinity College has educated some of the greatest dramatists in world theatre, from Congreve and Goldsmith to Synge and Beckett.
- Drama at Trinity College is housed in the purpose-built Samuel Beckett Centre, which opened in 1992. Within the centre is the Samuel Beckett Theatre, a 208 seat black box performance space, the Players Theatre (the studio theatre of Trinity College's student drama society), a dance studio/rehearsal space, seminar rooms and offices.
- Contemporary playwrights, directors, actors and designers often visit Trinity College to discuss their work and give workshops or courses. In recent years, visitors have included Augusto Boal, Michael Bogdanov, Gabriel Byrne, Sue-Ellen Case, Max Stafford-Clark, Garry Hynes, Pamela Howard, Patrick Mason, Harold Pinter, Fiona Shaw, Jim Sheridan, Gunilla Palmstierna-Weiss, Yong Li Lan, and Phillip Zarrilli.

Career opportunities

Most graduates of both the single honor and the TSM course find employment in theatre or related professions. Many opt to take further training or apprenticeships in specialist areas of theatre, film, or television (such as directing, acting, design, writing, management, community drama and teaching). A number of recent graduates have formed their own theatre companies, have won awards, or have active careers in theatre, film, or television. Others have chosen research careers beginning with further study at postgraduate level.

Further information

www.tcd.ie/Drama
Tel: +353 1 896 2266

Graduate profile

Dominic West

Dominic plays lead detective Jimmy McNulty in the critically acclaimed HBO series The Wire. He graduated from Trinity College with a B.A. in Drama studies and English in 1992, having played lead roles in Drama department productions. Like many other Drama students at Trinity College, Dominic went on to train professionally as an actor after graduation. As well as many film and television roles he has also performed at the Royal National Theatre and several West End theatres in London.

Irish (Early Irish and Modern Irish)

COURSE CODES:	TR022	TR001 (TSM-EI)	TR001 (TSM-MI)
PLACES 2010:	15	10	30
POINTS 2009:	335	420-495*	430-560
DEGREE AWARDED:	B.A.		

TSM points: See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	Irish
Advanced GCE (A-Level)	Grade C	Irish

Students may study:

EITHER Early and Modern Irish (TR022)

OR

Early Irish (EI) in combination with one other subject (TR001/TSM)

OR

Modern Irish (MI) in combination with one other subject (TR001/TSM)

TR022 – Early and Modern Irish is a single honor course.

In TR001 (TSM) Early Irish or Modern Irish can be studied with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Early Irish and with Modern Irish see page 90.

See also:

TR013: Computer science, linguistics and Irish, page 118

TR027: Irish studies, page 63

Early Irish component

Early Irish can be studied either in combination with one other subject as part of a two-subject moderatorship (TSM) programme or in the single honor Early and Modern Irish programme. When studied in combination, both subjects are studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

Is this the right course for you?

If you are interested in acquiring a reading knowledge of Medieval Irish, in which the great saga literature of our manuscripts was written, this is the course for you. You will enjoy small class sizes and a friendly atmosphere, work with scholars publishing in the field and avail of the option to study Medieval and Modern Welsh in Wales in your third year.

Course content

The Early Irish course, which is taught through the medium of English, covers the history of the Irish language from its first appearance on the Ogam inscriptions at the dawn of the Christian era in the fifth century, to the highly polished language of the sagas and law texts preserved in the medieval manuscript collections held in the libraries of TCD, the Royal Irish Academy and the National Library, all within a five-minute walk of the Arts building. The Celtic and Indo-European origins of Irish will be investigated. You will come to know the great characters of Early Irish literature, including the tragic Deirdre, the doomed Conaire, the irresistible but irritable Cú Chulainn, the hopelessly infatuated Muirchertach and many more. The Pagan and/or Christian character of the literature will be investigated as will topics such as kingship, the heroic biography and the sovereignty goddess.

The Freshman years

In the first two years you will study the basics of Old Irish. At this stage most literature is read in translation but you will be introduced to the original texts gradually and you will see how the language emerged and developed through the early Christian period.

The Sophister years

In the Sophister (third and fourth) years the horizons are expanded; your study of the history of the language will take you back to its Celtic origins and forward to the dawn of Modern Irish. At this stage you will be reading prose and poetry as well as law and history in the original language, and a special course in palaeography will teach you how to read the manuscripts themselves. Junior Sophister (third year) students may opt to spend a term in Aberystwyth learning Medieval and Modern Welsh.

Assessment

Assessment is by exercises and essays submitted during the year, as well as end-of-year examinations. In the final year you must also research and write a dissertation.

Career opportunities

Some students of Early Irish pursue independent research in the subject with a view to teaching at third-level. Most follow a career in teaching or journalism, especially Irish-language related media. Library archiving, the public service, marketing, business, interpreting and translation all figure in the profiles of past students.

An Nua-Ghaeilge

Is féidir Nua-Ghaeilge a dhéanamh i dteannta le hábhar eile sa Mhodhnóireacht Dhá Ábhar (TR001) nó i dteannta le Luath-Ghaeilge sa Mhodhnóireacht aon-onóra (EMI TR022). Sa dá chóras seo déantar staidéar ar an dá ábhar ar feadh trí bliana agus roghnaítear ceann amháin den dá ábhar don cheathrú bliain. Bronntar céim onóra sa dá ábhar.

An é seo an cúrsa duitse?

Má bhaineann tú taitneamh as Gaeilge a labhairt, a scríobh is a léamh, agus más mian leat barr feabhais a chur ar do chumas sna réimsí sin, beidh an cúrsa seo oiriúnach duit. Is í an Ghaeilge teanga oibre Roinn na Gaeilge. Tá an-cháil ar an Roinn seo as a bheith cairdiúil. Bíonn líon na mac léinn beag go leor le nach mbíonn sé deacair ag na mic léinn aithne a chur ar a chéile. Tá Cumann Gaelach na mac léinn an-ghníomhach ar fad; tá scéim chónaithe lánGhaelach a bhfuil an-tóir uirthi sa Choláiste. San iomlán, is geall le mionGhaelacht i lár na príomhchathrach sinn.

Ábhar an chúrsa

Is trí mheán na Gaeilge a mhúintear gach gné de chúrsa na Nua-Ghaeilge. Ar thréimhse iomlán na Nua-Ghaeilge a dhíríonn an cúrsa: ó Ghaeilge Chlasaiceach na Nua-Ghaeilge Moiche sa 13ú haois go dtí an Caighdeán Oifigiúil sa 21ú haois. Is ar an teanga féin, idir labhartha agus scríofa, a leagtar an bhéim i ngach aon bhliain. Mar sin, cuid thábhachtach den chúrsa is ea an staidéar foirimiúil a dhéantar ar cheartúsáid na Gaeilge. Chomh maith leis sin, pléann na léachtaí le stair shóisialta na teanga, leis an mbéaloideas, le filíocht na scol, leis an bhfiannaíocht agus leis an nualitríocht. Ní mór do gach aon mhac léinn dhá mhí a chaitheamh sa Ghaeltacht in Éirinn mar chuid den chúrsa. Sainghné speisialta de chúrsa na Nua-Ghaeilge i gColáiste na Tríonóide ná gur anseo amháin a bhíonn seans ag mic léinn trí bliana a chaitheamh le Gaeilge na hAlban. Beidh seans agat, más mian leat, tréimhse a chaitheamh i nGaeltacht na hAlban.

An chéad bhliain agus an dara bliain

Sa chéad bhliain agus sa dara bliain, díríonn an cúrsa ar na hábhair seo a leanas: scileanna teanga, idir labhartha agus scríofa, an cheapadóireacht, an t-aistriúchán, stair shóisialta na Gaeilge, an Ghaeilge Chlasaiceach, an nualitríocht, Gaeilge na hAlban.

An tríú bliain agus an ceathrú bliain

Sa tríú bliain agus sa cheathrú bliain, díríonn an cúrsa ar na hábhair seo a leanas: ardscileanna teanga, idir labhartha agus scríofa, an cheapadóireacht agus an t-aistriúchán ag leibhéal níos airde, agus Gaeilge na hAlban. Déantar staidéar freisin ar an bpailéagrafaíocht (léamh lámhscríbhinní). Ina theannta sin, déanann mic léinn rogha cúrsaí sa Nua-Ghaeilge Mhoch, sa litríocht bhéil, i nualitríocht na Gaeilge agus / nó nualitríocht Ghaeilge na hAlban.

Measúnú

Bíonn ar gach mac léinn cleachtaí scríofa a dhéanamh gach seachtain mar chuid den mheasúnú leanúnach; bíonn aistí le scríobh go tráthrialta, agus béaltriail agus scrúduithe scríofa ag deireadh na bliana. Sa cheathrú bliain, bíonn taighde le déanamh agus tráchtas le scríobh.

Postanna

Déanann mic léinn áirithe taighde sa Nua-Ghaeilge chun post teagaisc ag an tríú leibhéal a bhaint amach. Téann tromlach na mac léinn le múinteoireacht agus le hiriseoireacht (sna meáin Ghaeilge ach go háirithe), cuid díobh le hateangaireacht agus le haistriú. Tá iarmhic léinn le Nua-Ghaeilge tar éis dul le gairmeacha éagsúla cosúil leis an leabharlannaíocht, an tseirbhís phoiblí, margaíocht agus gnó freisin.

Did you know?

- Trinity College is home to the twelfth-century Book of Leinster, one of the most important manuscripts of Irish literature and learning to have survived from the medieval period.

Further information

www.tcd.ie/Irish
Tel: +353 1 896 1450

Education

COURSE CODES: **CE001**
Church Of Ireland College Of Education
CM001/002
Coláiste Mhuire, Marino

DEGREE AWARDED: **B.Ed.**

CE001 is a restricted entry course. Applications must be submitted by 1 February of the proposed year of entry.

In addition to satisfying the matriculation requirements of the university (see p. 21) candidates must also satisfy the academic requirements of the Department of Education and Science for entrance to the course. Details of special entry requirements are available from each of the colleges of education (see below for contact details).

GARDA VETTING:
Students will be required to undergo Garda vetting. See p. 23 for further details.

See also:
TR009: Music education, p. 75.

What is the Bachelor in Education?

The degree of Bachelor in Education (B.Ed.) is a professional degree which is intended to provide for the academic and professional requirements of primary school teachers.
The Bachelor in Education degree is provided through the University's association with the Church of Ireland College of Education, Rathmines, and Coláiste Mhuire, Marino Institute of Education. Details of the course structure is available directly from the two associated colleges (see below for contact details). An ordinary degree of B.Ed. can be awarded at the end of three years, while qualified students continue for a fourth year and the award of an honors degree. Graduates of these courses are recognised by the Department of Education and Science as trained teachers in accordance with Rule 157 of the Rules of National Schools.

Course content

The degree is an integrated course of study designed to equip student teachers with the range of knowledge and skills related to the profession of primary school teaching and its curriculum.

Courses include: the Irish and English languages, language development and mathematics, with complementary work in areas such as arts education, religious studies, physical education, social, personal and health education (SPHE), information communication technology (ICT), social, environmental and scientific education (SESE), inclusive education and early childhood education, child psychology; language study; history of education; sociology of education; educational psychology; inclusive education; curriculum and assessment; philosophy of education.

School experience is central to the B.Ed. degree programme and there is a significant period of school-based practice designed to give students an opportunity to develop their practical skills of observation and teaching.

Further information

Church of Ireland College of Education
96 Upper Rathmines Road, Dublin 6.
www.cice.ie
Tel: + 353 1 497 0033

Coláiste Mhuire Marino
Griffith Avenue, Dublin 9.
www.mie.ie
Tel: + 353 1 805 7700

English literature and English studies

COURSE CODES:	**TR023**	**TR001 (TSM)**
PLACES 2010:	**40**	**85**
POINTS 2009:	**475***	**525*-560***
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	English
Advanced GCE (A-Level)	Grade C	English literature (A or B) or English language (A or B)

TR023 – English studies is a single honor course where English is read almost exclusively for four years.

TR001 – English literature (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with English literature see page 90.

English studies (Single honor) – TR023

The study of English is concerned with the history and practices of writing in English and encompasses literary works spanning English, Anglo-Irish, American and emerging post-colonial cultures. It aims to develop a thorough knowledge of the history of these literatures while also enabling you to develop a sophisticated critical consciousness and an awareness of critical and cultural theory. Compared to English literature (TSM) students, English studies students study literature in terms of developing genres (Poetry, the Novel, Theatre, the Essay) and they also cover a longer historical range, including literature from before 1400.

English literature (TSM joint honors) – TR001

English literature covers a broad range of literatures written in the English language, from Chaucer to the present day. The aim of the course is to help you acquire a thorough knowledge of the history of differing literatures while also enabling you to develop a sophisticated critical consciousness and an awareness of critical and cultural theory.

While TSM students cover all the principal areas of literatures in English, the course is less extensive than that of the single honor programme, with less emphasis on the development of genres, and a concentration on the modern period (post 1400).

Is this the right course for you?

If you want to study the whole range of developments in English and related literatures, from their earliest beginnings through to contemporary studies in the language you would enjoy either English literature or English studies.

English at Trinity College

The School of English is strongly committed to small-group teaching. In the first two years teaching is by a combination of lectures and related tutorials. For TSM students, lectures will typically have a maximum of around 120 students, while single honors only lectures will typically have a maximum of around 40. All Freshman (first and second year) lecture modules are supported by small-group teaching dedicated to that module only, and the numbers for tutorials are around 8-10 students. In the Sophister (third and fourth) years, most of your English modules are chosen by you from a wide range of available options, most are taught through seminar discussion. There is a maximum of around 20 students in each seminar.

Our English courses have been designed to develop independence of critical thought and the articulation of informed discussion, both oral and written. Much of your work will be undertaken independently, and you will have at your disposal the resources of a world-famous library.

The School of English also coordinates many non-syllabus activities, such as lecture series, conferences and symposia, guest lecturers (such as Anne Enright, winner of the 2007 Man Booker Prize, and Professor Michael Longley, The Ireland Chair of Poetry) and visiting writers. Richard Ford, the Pulitzer Prize winning author is a member of the English staff. The School actively supports several journals of creative writing by undergraduates. In this way we ensure that your time studying English at Trinity College is exciting and intense.

Course content

The English courses are designed so that the first two years consist of almost entirely compulsory modules, taught mainly through a combination of lectures and tutorials. Students take a variety of modules, based on period, genre, theme and nationality, and Theories of Literature is one of the major modules in the first year. After the first two years, students are free to construct their own course in the advanced work that will lead to their degree.

Our commitment to small-group teaching means that you will benefit from close personal staff supervision, so that your writing and discussion skills will develop. The model of assessment means that from short first-year essays of around 1,500 words, you will by your final year be prepared to tackle major independent research projects of up to 12,000 words. Individual independent study and research are encouraged, and quite a high proportion of your time will be taken up preparing work in the library and writing essays.

The Freshman years

Over the Junior and Senior Freshman (first two) years a range of modules provides you with an introduction to a variety of critical theories, practices and approaches to literature. You will primarily concentrate on selected prescribed texts.

Examples of Freshman modules include:

- Theories of literature
- Irish writing
- Enlightenment
- Romanticism
- Genre: The novel
- Medieval and Renaissance romance
- Shakespeare: Text, stage, screen
- Introduction to postcolonial literature
- Victorianism
- Introduction to Modernism

The Sophister years

In the Junior and Senior Sophister (third and fourth) years, you will choose most of your modules from a wide range of specialist options. By fourth year, modules are taught at an advanced level by seminar only.

Examples of Sophister modules may include:

- Literature of the American South
- Ulysses in contexts
- African and Caribbean literature
- Irish writer and society
- Myths and fairies
- Post-war British fiction
- 20th century women novelists
- Shakespeare and sexuality
- Modernism
- American letters
- Contemporary Irish literature

Assessment

Assessment is by a combination of submitted essays and end-of-year examinations. In the Freshman (first and second) years the weighting is 50% submitted work, 50% exams; in the Sophister (third and fourth) years it is closer to 25% submitted work, 75% exams.

Study abroad

The School of English has strong international links with many English departments abroad, including active participation in the Erasmus exchange programme with universities in Austria, France, Italy, Spain, Switzerland and the UK. We also have an agreement with Dartmouth College in the US, and there are scholarship opportunities which allow students to spend a year at prominent US universities, notably Berkeley, Boston College, and Georgetown.

In addition to the opportunity to study abroad, our exchange links, which attract many international students, ensure that the student body in English is vibrant and cosmopolitan.

Career opportunities

The skills of English graduates are much in demand from employers, especially in journalism, broadcasting, marketing, retail and business management, publishing and teaching, and graduates from English often gain professional qualifications in disciplines as diverse as law, accountancy, public relations and clinical speech.

The four-year degree provides an outstanding platform for postgraduate study in English, and usually about 30% of our graduates go on to read for a higher degree in English (Master's degree, Ph.D. degree). Many well-known creative writers are Trinity College English graduates, including Eavan Boland, Deirdre Madden, Michael Longley, Derek Mahon, Brendan Kennelly and Eiléan Ní Chuilleanáin.

Further information

www.tcd.ie/English
Tel: +353 1 896 1111

Head of School:
Darryl Jones,
Tel: +353 1 896 1878
E-mail: **drjones@tcd.ie**

European studies

COURSE CODE: **TR024**
PLACES 2010: **45**
POINTS 2009: **510***
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	HC	In two of French, German, Greek, Italian, Latin, Polish, Russian, Spanish
	HC1	If presenting French or German
	HC2	If presenting Spanish and taking Spanish as a non-beginner
	HC3	If presenting any other language
	Or	
	HB3	In one language other than English or Irish
Advanced GCE (A-Level)	Grade C	In two languages other than English or Irish (as listed above)
	Or	
	Grade B	in one language other than English or Irish

Students study two languages from French, German, Italian, Polish, Russian and Spanish.

Italian, Polish, Russian and Spanish are available from beginner level. No student may study more than one language as a beginner. See note 8 on page 28.

See also:

TR001: TSM, page 90

What is European studies?

At Trinity College European studies is a broad-ranging, multidisciplinary programme which encompasses the history, culture, languages and politics of European nations. It studies the European past in order to understand the present, and examines contemporary Europe in all its complexity on a continent-wide basis.

Is this the right course for you?

If you are a good linguist and have an interest in history, politics and the workings of contemporary society you will enjoy this course. European studies is explicitly designed for students with a broad intellectual appetite.

Course overview

You will study two out of six European languages: French, German, Italian, Polish, Russian or Spanish (Italian, Polish, Spanish and Russian can be studied from beginner level). Both languages are studied equally in the first two years, after which one becomes your major, and the other your minor language. Language learning is embedded in the study of the society and culture of the countries in which the language is spoken and language study is designed to meet the needs of students specialising in the social and political sciences. Literature is studied in the final year.

As well as languages you will study the European past and present through three disciplines – history, history of ideas and social sciences (politics, economics and sociology). The history of ideas teaches the evolution of European thought and culture from the Renaissance to the present and is the compulsory core component in the first, second and fourth years.

Course content

In first year all components are compulsory. From the second year onwards the history of ideas, or cultural history, is compulsory and you will be able to choose other modules from the disciplines that interest you most, and so tailor the degree to your specific strengths and interests.

The Freshman years

Junior Freshman (first) year There are approximately 22 hours of classes per week.	**Senior Freshman (second) year** There are approximately 22 hours of classes per week.
Languages 1 & 2: Grammar and structures of the languages, written and spoken expression and comprehension	**Languages 1 & 2:** Grammar and structures of the languages, written and spoken expression and comprehension
Introduction to the history of ideas Introduction to the evolution of European thought and culture in the 20th century, and to the techniques of analysing texts in their historical context. This module examines the intellectual and cultural climate in Europe before and after the two World Wars. In particular you will examine how intellectual and cultural trends reacted or contributed to the threat of war and how they dealt with catastrophes in their aftermath. Topics covered include: ■ The Fin-de-Siècle mood around 1900 ■ The urban culture of the European metropolis ■ The pre-war crisis of values (Nietzsche) ■ Social Darwinism ■ Socialist ideologies ■ The upsurge of right-wing thought after the First World War ■ The role of new media ■ Culture and politics in the inter war years ■ The idea of Europe after 1945	**Culture and politics in Europe 1700-1870** Studies the emergence and development of modern society and culture since the Enlightenment. The core of the course concerns itself with political culture by analysing the political ideologies created from, and in opposition to, the French Revolution. You will be introduced to the central texts and figures who defined the meaning of modernity and to the social and cultural changes that carried forward the project of a modern society.

The Freshman years

Junior Freshman (first) year	Senior Freshman (second) year
'Europe, c. 1500-1700: Power and belief' Examines the political, social and cultural history of sixteenth and seventeenth-century Europe. By the end of this module, students will have been introduced to a variety of primary sources and some of the different methods and approaches that can be used in their analysis. This module addresses key themes of the period including intellectual changes during the Renaissance and Reformation, the emergence of rival churches across most of the Continent, the impact of the printing revolution, the increasing power of territorial states, the expansion of states into new colonial spaces, and military and political rivalry between states.	**Select one of:** ■ **History of Continental Europe since 1870** Social, economic and political history are given equal emphasis in this course, which concentrates on Germany, France and Russia, as well as looking at Italy and Spain. ■ **Comparative politics** This module is an introduction to the study of comparative politics. We will be studying both developing and developed countries, democratic and authoritarian regimes as well as countries that are in the midst of political and economic transitions. Among other things, we will learn about (i) why countries like Israel have a multitude of parties, while the United States has only two, (ii) what determines why some countries are capable of making the transition to democracy (e.g. Chile), while in other countries authoritarian regimes prevail and autocrats manage to hold onto power for a long time (e.g. Zimbabwe), and (iii) why some countries have seen tremendous economic growth (e.g. Ireland), while others have struggled to spur economic development (e.g. most African countries). We will begin the course by discussing the micro foundations of political decision-making. Specifically, we will study the role of preferences and beliefs, which are essential for understanding political cleavages, conflict and culture. Next, we will move to the study of collective decision-making and group politics, covering a variety of topics ranging from political parties and interest groups to social movements (e.g. the American civil rights movement in the 1960s and the East European revolution in 1989). We will then shift to the study of political institutions as a key source for differences in individual as well as collective decision-making. The effects of political institutions will be studied at the micro level by looking at political decision-making (e.g. voting behaviour in plurality systems like the United States versus proportional systems like Italy) and at the macro level by looking at political and economic development. ■ **International relations** This module is an introduction to the positive, descriptive study of international relations. Why do states make war? What are the conditions for the growth of cross-border trade and finance? What is the impact of international organisations on relations between states? This module considers these questions by looking at differing theoretical approaches to international relations and a selection of topics in historical and contemporary politics, including the United Nations, the World Trade Organisation, the European Union, and international environmental and human rights regimes.
Introduction to social science This module offers students an introduction to the significant issues in the three main fields of social science: politics, economics and sociology. The first section of the course introduces key debates in sociology about European social structure. The second section provides an introduction to main issues in political science of significance to students of European politics. The third section builds on the first two sections by paying attention to issues surrounding the economics of the EU.	■ **European societies** This module examines different forms of social inequality in Western Europe, the divisions of class, region, gender, ethnicity and life cycle. It considers the extent to which the European Union involves a European social model of social cohesion – a particularly European way of countering the divisions of a market society. The course uses case studies from France, Germany, Italy, Sweden and the UK. ■ **Intermediate economics*** The macroeconomic module of the courses has three steps. The first two steps study the sources of fluctuations in economic activity and the policy responses that help mitigate such fluctuations. The third step aims to understand why different countries have different long-run growth rates and different levels of prosperity. The microeconomic module of the course studies the theory and applications of microeconomics at an intermediate level. The module covers consumer theory (indifference curves and budget constraints); producer theory (isoquant curves and isocost lines); market structure (perfect competition; monopoly; monopolistic competition and oligopoly); game theory; factor markets (in perfectly competitive and imperfectly competitive settings) and general equilibrium. * Students who wish to take this course must seek permission from the Head of the Department of Economics during the Trinity (third) Term of their Junior Freshman (first) year, before declaring their Senior Freshman (second year) subject choice.

Junior Sophister year

The Junior Sophister (third) year is spent at a university abroad studying through the language you choose as your major language and this is an integral part of the course. Exchanges have been established with history and political science departments in universities in France (Paris, Strasbourg, Grenoble, Bordeaux), Germany (Hamburg, Tübingen, Freiburg), Italy (Pavia, Siena, Florence), Poland (Krakow), Russia (Moscow) and Spain (Seville, Salamanca, Alcalá). The year abroad may entail additional expenses for students but support funding under the European Union's Erasmus scheme partially offsets this additional expense (with the exception of Russia, where the Erasmus scheme does not apply).

Senior Sophister year

In the Senior Sophister (fourth) year, language work focuses predominantly on your major language. Coursework for your minor language concentrates mainly on comprehension and textual analysis. The core course in your final year is a history of ideas course: Modernism and Mass Society – ideas and culture since 1890. Additionally, you will choose one or two options from a wide range of modules from history, political science, sociology, and a number of culture and literature options from the language departments. Students who so wish are encouraged to write a ten thousand word dissertation (replacing one of the options) on a subject of their own choice under the supervision of a member of staff.

Assessment

Written, oral and aural exams are combined with continuous assessment, essays and end-of-year examinations.

Career opportunities

Recent graduates are employed in international organisations both in Ireland and abroad, in the EU, in the civil service and the diplomatic corps, in business, finance and marketing. They are working as solicitors and consultants, as teachers in Ireland and abroad, as translators and interpreters, in journalism and tourism. Many students go on to do postgraduate courses, often with a more applied, specialised focus or specifically relating to Europe.

Further information

www.tcd.ie/European_Studies
Tel: +353 1 896 1808
E-mail: **european.studies@tcd.ie**

History

COURSE CODES:	**TR003**	**TR001 (TSM)**
PLACES 2010:	**38**	**40**
POINTS 2009:	**445**	**495*-560**
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

TR003 (single honor History) – This is a course where History is studied, analysed and written almost exclusively and in increasing depth for four years.

TR001 – History (TSM) – In this course History is combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects.

For subjects that combine with History see page 90.

All History students follow the same courses. However, while TSM and History and political science students cover all the principal areas of history, the workload is less intense than that of the single honor programme – TR003.

See also:

TR001: TSM, page 90
TR009: Music education, page 75
TR012: History and political science, page 61
TR027: Irish studies, page 63
TR028: Ancient and medieval history and culture, page 34

Is this the right course for you?

If you are interested in discovering our past, in developing a critical perspective on previous and current interpretations of history and working toward the development of new perspectives on our past, this course is right for you. History at Trinity College aims to encourage the greatest possible critical independence among those learning the techniques and the methods of historical research and writing.

Course content

The History programme at Trinity College has been constructed on clear pedagogical and intellectual principles. In the first years the courses are designed to provide you with a systematic knowledge of European and Irish history, with options in American and other non-European courses, as well as to introduce you to particular aspects of history along socio-political, cultural and economic lines. In the second part of the programme (in the Sophister years) a very wide degree of choice is made available to students from a broad range of specialist courses offered by those actively engaged in research on these topics. An independently conceived, researched and presented dissertation is a key element of the final year.

The Freshman years

Single honor (TR003) students take half-year options from the areas outlined below, amounting to the whole study requirement for their academic year:

Students in the TSM (joint honor) programme take half-year options from the areas outlined below, amounting to half their study requirement for the academic year:

- Doing history
- Europe, 1000-1250: War and society in the age of the Crusades
- Ireland, 1000-1250: Brian Boru to the English invasion
- Britain, c.1066-1296: Conquest and domination
- Europe, 1000-1250: Conflict of church and state
- Ireland, 1250-1500: Gaelic revival and the English Pale
- Britain, c.1296-1603: Nations and kingship
- Europe, c.1500-1700: Power and belief
- Britain, 1603-1815: The making of a great power
- American history: A survey
- An introduction to south Asian history
- Modern language electives – Students choosing this option must enroll on the Broad Curriculum website: **www.tcd.ie/Broad_Curriculum**

The Senior Freshman (second) year:

You will be introduced to courses in modern Irish, British, European and American history.

You may choose from a wide variety of course options, listed below. Each course runs for half of the academic year. Single honor students select six courses, while Two Subject Moderatorship (TSM) students select three courses.

- Europe, 1870-1930: Grandeur and decline
- Ireland and the union, 1801-1922
- Ireland and the wider world, 1534-1641
- Ireland and the wider world, 1641-1815
- Europe, c.1215-1517: Religion, death and culture
- Culture and politics in Europe, 1700-1815
- Europe since 1914: Cataclysm and rebirth
- Twentieth-century Ireland
- The rise and fall of the British Empire
- Themes in modern American history
- Anglo-Saxons, Vikings and their impact on Britain and Ireland, c.400-1000

Students may substitute one of the following year-long modules for one of their history modules:

- History of political thought
- Introduction to sociology
- The economy of Ireland

For further information about these courses see our website **www.tcd.ie/history** and **www.tcd.ie/Broad_Curriculum**

The Sophister (third and fourth) years

We offer a range of subjects within three different categories:

List I courses – these are primary source-based specialist courses which involve intensive research and writing.

List II courses – these are primarily historiographically-based special subjects which are accompanied by a general course (Thinking history) on the concepts, methods and debates of modern-day historians.

List III courses – these are broader thematic and analytical courses based upon a combination of primary materials and secondary commentaries.

Those studying single honor History choose one from each list in their Junior Sophister (third) year and a further choice from List I and List III in their Senior Sophister (fourth) year. The research dissertation is undertaken in the Senior Sophister year.

Those studying TSM History choose one course from List I and take the course Thinking history in their Junior Sophister (third) year. TSM students normally follow the same pattern as single honor students in the Senior Sophister year.

Taught courses arise from the specialisations of the teaching staff and vary from year to year. Current options in the Sophister years include:

- The archaeology of medieval castles
- Viking raiders to crusader warriors, 800-1200
- Medieval Dublin
- The English in medieval Ireland
- Gaelic society in later Middle Ages
- History and science: An introduction
- Edward I, Edward II and the conquest of Britain, 1286-1328
- Empire: Historians and the Anglo-American community in the eighteenth century
- Europe reformed, 1540-1610
- Slavery in American history
- The Elizabethans and their world, 1550-1610
- History writing in Britain and Ireland, 1820-1920
- From rebellion to restoration: Confederate and Cromwellian Ireland
- Revolutionary Britain, 1678-1715
- Writing the history of the Irish revolution
- Dublin, 1750-1850
- The Troubles, 1968-1998
- Ireland in the age of O'Connell, 1775-1847
- Early Christian Ireland
- A module in nineteenth century Irish History
- Medieval religion
- France and the First World War, 1912-1920
- The fall and rise of France, 1550-1700
- The impact of World War 1 on Ireland and Britain
- Fraternity in Irish history since 1790
- A module in south Asian history (subject to funding)

- Ireland, Scotland and the early modern imagination
- American politics and culture 1939-1989
- Sub-Saharan Africa since 1875
- The politics of national salvation: Ireland 1957-1969
- France since 1880: Society and culture
- Race and ethnicity in American thought since 1880
- Britain and the Second World War: National salvation and the death of empire

All single honor students take a course in Research methods in their third year. In their fourth year all single honor and all Two Subject Moderatorship students who are continuing in History also take a course in dissertation preparation.

Assessment

Assessment is primarily essay- and exam-based. Assessment of the final-year dissertation accounts for approximately thirty per cent of the final-year mark.

Study abroad

The Department of History has Erasmus exchange agreements with universities in France, Germany, Italy and the United Kingdom as well as exchange programmes with American universities.

Career opportunities

Over many decades, graduates in History (single honors and TSM) have begun and pursued successful careers over a wide range of areas, for example: journalism, teaching, public administration, public relations, marketing, advertising, management, cultural, arts and heritage administration, publishing, media work, human resources, etc.

Did you know?

- Trinity College teaches political, military, social, economic, cultural and intellectual history and specialises in the histories of a number of countries – Ireland, Britain, America, France, Germany and offers some African and Indian courses as well. Areas of study range in chronological breadth from the Middle Ages to the contemporary period.

Further information

www.tcd.ie/history
Tel: +353 1 896 1791 / 1020

History and political science

COURSE CODE: **TR012**
PLACES 2010: **24**
POINTS 2009: **500**
DEGREE AWARDED: **B.A.**

You can also study history through one of the following programmes, all leading to the degree of B.A:

TR001: TSM (joint honor programme) History in combination with one other subject. For subjects that combine with History see page 90.

TR003: Single honor course in history, page 59.

You can also study political science through several other programmes, see page 80.

See also:

TR028: Ancient and medieval history and culture, page 34

Course overview

History and political science have a close affinity and the combination of the two in a joint honor programme provides a coherent framework for the development of interdisciplinary interests. In the first three years of the programme, you will take both subjects on an equal basis. In the fourth year, you may choose to concentrate exclusively on either subject or to continue with both. There are approximately 10-12 hours of classes per week in the Freshman (first two) years. See the next page for course details.

Assessment

A combination of essays, assignments and end-of-year examinations make up the assessment process.

Study abroad

Both the Political science and History departments have arrangements allowing students to study abroad in another university for a semester or a full academic year. It is recommended that students who wish to avail of this opportunity do so in their Senior Freshman (second) year. Participating in these opportunities is dependent upon the exchange fulfilling the course requirements of both departments.

History courses	Political science courses
Courses are designed to allow your individual preferences to shape the overall character of your studies, and permit you to specialise in a number of different ways.	The work of the first two years is designed to provide you with a systematic foundation in the subject.
In each of the first two years students take 6 courses – 3 history courses and 3 political science courses. In their first-year students may substitute modern language electives (two modern language courses) for one of these courses, while in their second year students may substitute electives for one of the history modules. (See **www.tcd.ie/Broad_Curriculum**)	
Junior Freshmen (first-year students) select from courses such as: ■ Europe, 1000-1250: War and society in the age of the Crusades ■ Ireland, 1000-1250: Brian Boru to the English invasion ■ Britain, c.1066-1296: Conquest and domination ■ Europe, 1000-1250: Conflict of church and state ■ Ireland, 1250-1500: Gaelic revival and the English Pale ■ Britain, c.1296-1603: Nations and kingship ■ Europe, c.1500-1700: Power and belief ■ Britain 1603-1815: The making of a great power ■ American history: A survey ■ An introduction to south Asian history	Junior Freshmen (first-year students) take: ■ Introduction to political science ■ Introduction to sociology ■ Introduction to economic policy
Senior Freshmen (second-year students) select from courses such as: ■ Europe, 1870-1930: Grandeur and decline ■ Ireland and the union, 1801-1922 ■ Ireland and the wider world, 1534-1641 ■ Ireland and the wider world, 1641-1815 ■ Europe, c.1215-1517: Religion, death and culture ■ Culture and politics in Europe, 1700-1815 ■ Europe since 1914: Cataclysm and rebirth ■ Twentieth-century Ireland ■ The rise and fall of the British Empire ■ Themes in modern American history ■ Anglo-Saxons, Vikings and their impact on Britain and Ireland, c.400-1000	Senior Freshmen (second-year students) take: ■ History of political thought ■ International relations ■ Comparative politics
In the final two years you will take a short lecture module on historiography and choose special modules, which are studied in great detail and with particular attention to original sources. Students taking History alone in fourth year choose two special modules, write a dissertation and take a module on Dissertation preparation. More than 35 modules are available in the Sophister years (three and four) including: ■ The archaeology of medieval castles ■ Gaelic society in later Middle Ages ■ Edward I, Edward II and the conquest of Britain, 1286-1328 ■ Europe reformed, 1540-1610 ■ The Elizabethans and their world, 1550-1610 ■ From rebellion to restoration: Confederate and Cromwellian Ireland ■ Revolutionary Britain, 1678-1715 ■ Ireland in the age of O'Connell, 1775-1847 ■ France and the First World War, 1912-1920 ■ The impact of World War 1 on Ireland and Britain ■ Race and ethnicity in American thought since 1880 ■ History and science: An introduction ■ The fall and rise of France, 1550-1700 ■ Sub-Saharan Africa since 1875 ■ The Troubles, 1968-1998	In the Sophister (third and fourth) years, you may choose to concentrate on particular aspects of the subject, including: ■ Research methods for political scientists, including research and writing a dissertation ■ Irish politics ■ Comparative political institutions ■ Contemporary political theories ■ Political parties ■ Issues in contemporary politics ■ Democracy and development ■ European Union politics ■ Contemporary international relations ■ African politics ■ Government and politics of the United States

Career opportunities

Recent graduates are pursuing careers in government and the public sector, media, accountancy and business to name a few. Some graduates each year progress to further study in areas as diverse as medicine, film production, graphic design and business as well as areas more closely related to history and political science.

Further information

www.tcd.ie/Political_Science/undergraduate
Tel: +353 1 896 1651
www.tcd.ie/history
Tel: +353 1 896 1020

Irish studies: An interdisciplinary course in Irish civilisation

COURSE CODE:	**TR027**
PLACES 2010:	**20**
POINTS 2009:	**340**
DEGREE AWARDED:	**B.A.**

Special Entry Requirements:
See notes 1 and 2 in the Course overview, below.

See also:
TR003/001: History, page 59
TR022/001: Early and modern Irish, page 51
TR023/001: English literature and English studies, page 54

Course overview

This is an exciting interdisciplinary programme, devised by the Irish, English and History departments in collaboration with the departments of Geography, Politics, History of Art and Genetics. It is designed to give you the opportunity to study in depth the literature, history, language and culture of Ireland in an original and integrated way, with an emphasis throughout on the interaction between Ireland and the wider world.

There are two distinct strands in the Irish studies programme:

Strand A – This strand contains a number of Irish language modules. **Note 1:** Applicants who wish to choose this strand must attain at least a grade HC3 in Leaving Certificate Irish or a grade C in A-level Irish.

Strand B – All of the courses in this strand are taught through the medium of English. **Note 2:** There are no special entry requirements for Strand B.

Students choose a strand after admission to the Irish Studies programme.

Is this the right course for you?

If you have an interest in the history, literature, and culture of Ireland then this is the course for you.

Course content

There will be a mixture of compulsory and optional courses. During the final year, there will be particular emphasis on optional courses, allowing you to specialise in areas where you have developed particular interests. Assessment throughout the four years will be a mixture of continuous assessment and examination. You will also write a dissertation in your final year. Courses are likely to include:

Strand A

The Junior Freshman (first) year

- Imagining Ireland I
- An Ghaeilge (written and oral)
- Nualitríocht
- Theorising Ireland
- Doing history
- Ireland, c.1250-1500: Gaelic revival and the English Pale

Students take between twelve and fourteen hours of classes in the Junior Freshman (first) year.

The Senior Freshman (second) year

- Imagining Ireland II
- An Ghaeilge
- Irish writing in English, 1590-1800
- Ireland and the wider world, 1534-1815
- Theories of literature
- A Broad Curriculum course (see p. 12)
- Students choose a Freshman module from a list of available Irish options

The Junior Sophister (third) year

- Imagining Ireland III
- An Ghaeilge
- Nineteenth-century Irish writing
- Irish writing, 1890-1945
- Ireland and the union, 1801-1922
- Change and expectation: Socio-cultural history of Ireland in the 20th century
- Students choose a Sophister module from a list of available Irish options

The Senior Sophister (fourth) year

- Imagining Ireland IV
- Dissertation
- Students choose Sophister modules from an approved list of Irish, English and History options

Strand B

All of the courses in this strand are taught through the medium of English.

The Junior Freshman (first) year

- Imagining Ireland I
- Irish language and literature A and B
- Theorising Ireland
- Doing history
- Ireland, c.1250-1500: Gaelic revival and the English Pale
- Students choose English literature modules from an approved list

Students take between twelve and fourteen hours of classes in the Junior Freshman (first) year.

The Senior Freshman (second) year

- Imagining Ireland II
- Irish language and literature C and D
- Irish writing in English, 1590-1800
- Ireland and the wider world, 1534-1815
- Theories of literature
- Students choose Freshman modules from an approved list

The Junior Sophister (third) year

- Imagining Ireland III
- Nineteenth-century Irish writing
- Irish writing, 1890 -1945
- Ireland and the union, 1801-1922
- Change and expectation: Socio-cultural history of Ireland in the 20th century
- A Broad Curriculum course (see p. 12)
- Students choose Sophister modules from an approved list

The Senior Sophister (fourth) year

- Imagining Ireland IV
- Dissertation
- Students choose Sophister modules from an approved list of Irish, English and History options

Career opportunities

Graduates in Irish studies can expect to arrive at the normal range of career destinations for arts and humanities graduates; for example, teaching, journalism, cultural, arts and heritage administration, management, civil service, the diplomatic corps, publishing, media work, translation services, advertising, public relations, human resources, etc.

Further information

www.histories-humanities.tcd.ie/irishstudies/index.php
E-mail: **m.osiochru@tcd.ie**
Tel: +353 1 896 2625

Law

COURSE CODE:	**TR004**
PLACES 2010:	**90**
POINTS 2009:	**520***
DEGREE AWARDED:	**LL.B.**

See also:

TR017: Law and business, page 69
TR018/019: Law and French/German, page 68
TR020: Law and political science, page 71

Introduction to the School of Law

Trinity College Dublin's School of Law, founded in 1740, is Ireland's oldest and most internationally renowned law school. Our staff, many of whom are leading experts in their field of study, are committed to maintaining excellence in the teaching of law. We strive to educate people who will be the leaders of the legal profession, the public service and society, and who will demonstrate the highest standards of personal integrity, professional ethics and a deep concern for social justice. The School is home to one of Ireland's leading legal periodicals - the Dublin University Law Journal, and the Trinity College Law Review, published by the student members of the College's Law Society, the latter of which now enjoys international dissemination on Hein Online.

We are a very small School compared with other universities. However, this small-group teaching encourages a close relationship between staff and students. To supplement the College tutoring service, the School of Law has been running a successful mentoring programme each year, pairing new students with existing students, the latter of whom offer guidance and advice. Student welfare is at the heart of the School's activities.

Why study Law at Trinity College?

In addition to our favourable smaller class sizes, Trinity College's Law School offers a diverse range of subjects which affords the student ample opportunity to specialise in a particular area if he/she so wishes. In your Sophister years (third and fourth year), you can choose from a wide-range of intellectually stimulating modules (subjects), many of which were first introduced into Irish universities by Trinity College. Another advantage to choosing Trinity College is of course its historical settings in the centre of the city and close proximity to the Four Courts, Criminal Courts of Justice, and Oireachtas.

Is this course right for you?

If you like to be challenged and intellectually stimulated, and to approach problems in a logical and inquiring fashion then a Law degree may be for you! A general interest in history and political developments will be an advantage, as many legal subjects cannot be fully appreciated without reference to their historical and political context. Good writing skills and a facility for articulate expression are important, legal training requires precise and careful use of language.

Course overview

Law at Trinity College is a four-year degree programme. The first two (Freshman) years are given over to the study of core legal subjects (many of which are required by the legal professional bodies). There is an appropriate balance in the first two years between the academic and practical aspects of law, achieved through the introduction of legal skills and mooting (mock trials) programmes, and also, in part from the fact that many of our academic body have experience of private practice. In your Sophister (third and fourth) years you can focus on particular areas of law chosen from a range of approximately 30 subjects.

Most of the teaching takes place at lecture level. The academic year is divided into two terms (semesters). In the Freshman years, students take three modules per semester and a series of legal skills seminars and workshops. Each module is taught by three hours of lectures per week and four seminars (small-group teaching) per semester. In the Sophister years students take generally between six and eight modules (modules are weighted differently in the final two years, see below).

Modules (Subjects)

Junior Freshman (first year)

- Torts
- Constitutional law I
- The Irish legal system
- Contract law
- Criminal law
- Legislation and regulation
- Legal skills

Senior Freshman (second year)

- Administrative law
- Constitutional law II
- Equity
- Land law
- Private law remedies
- Mooting

The Sophister years (third and fourth year)

Throughout the four years of study, students must take modules worth 60 ECTs (European Credit Transfers) each year. The majority of modules bear 10 ECTs; however in the Sophister years there are also 5 credit modules available. The modules which may be available to study are as follows:

- Advanced European Union law
- Child law
- Commercial law
- Company law
- Comparative law
- Corporate governance
- Criminology
- Economic and legal aspects of competition policy
- Employment law
- English law
- Environmental law
- European human rights
- EU food law
- Evidence
- Family law
- Intellectual property law
- International family law
- International human rights law
- International trade law
- Jurisprudence
- Labour law
- Legal philosophy
- Media law
- Penology
- Public interest law
- Public international law
- Refugee law
- Restitution
- Tax law
- Sport and the law

In the Senior Sophister year, students may opt to write a research dissertation on a topic of their choice in place of a taught module.

Broad Curriculum programme

The School of Law is committed to making available to students the option of taking a module from outside its discipline, under the Broad Curriculum programme. Students may choose to study modules from a variety of disciplines, not just from the Faculty of Arts, Humanities and Social Sciences (see page 12 or **www.tcd.ie/broad_curriculum** for further information).

Study abroad

In the Junior Sophister (third) year of study, there are a limited number of places available on the EU-funded exchange programmes in European universities. In addition to exchange programmes in Europe, the School of Law also has bilateral links with leading universities in North America and Australia.

Career opportunities

A law degree provides the ideal foundation for the aspiring solicitor or barrister. However, law offers wider opportunities than professional practice alone, with many graduates finding employment in public administration, business, journalism, accountancy, banking, insurance, politics, foreign affairs, diplomacy and international financial services. The skills learned through studying law are useful in all walks of life. A law degree teaches students to think logically and analytically. It also equips students with the ability to carry out research and to use language precisely, carefully and objectively.

Law degrees and professional qualifications

No law degree entitles a person to practise law as a solicitor or barrister. If you wish to go on to obtain a professional qualification, the governing bodies for the profession require that you study certain specific modules in your primary law degree. These modules are taught as compulsory modules during the Freshman years and/or as optional Sophister modules.

Students contemplating a career as a barrister will need to continue their studies with the Honorable Society of the King's Inns. To qualify as a barrister, law graduates must complete the one-year degree course with the King's Inns before 'devilling' with a qualified barrister for a year. Further information on becoming a barrister is available from **www.kingsinns.ie**

Prospective solicitors must undertake the professional training programme for solicitors delivered by the Law Society of Ireland (**www.lawsociety.ie**).

Separate requirements apply in Northern Ireland. Prospective barristers should consult the Under Treasurer, The Inns Court of Northern Ireland (**www.barlibrary.com**), while prospective solicitors should consult the Secretary, the Incorporated Law Society of Northern Ireland (**www.lawsoc-ni.org**).

In view of rapid changes relating to the rules of entry into professional study, all students are advised to maintain regular contact with the relevant professional bodies so that they are aware of any new requirements coming on-stream.

Student Profile

Grainne McAnaney

"If I am honest, I chose to study Law at Trinity College on a bit of a whim. Coming from Northern Ireland, most of my school friends were going to college there or in England and I very nearly did the same. I am now in my final year of Law here and I can honestly say I am so glad that I decided to go against the grain and come to Trinity College.

The Law School is relatively small compared with other leading universities and it allows for a friendly close-knit environment between the staff and students. The four-year degree allows students not only to study the core legal subjects but also to delve into more specific areas of the law that they are particularly interested in. Law students are also given the invaluable opportunity of studying abroad for the third year of the degree in other world class universities. Studying in the United States gave me the chance to broaden my perspectives on legal issues and also to set up connections and friendships in another country that will last a lifetime.

The teaching in the Law School here is second to none. Aside from the fact that most of the lecturers have written the book on what they are teaching, they are friendly and always willing to help. The lectures, especially in the third and fourth years, are not just aimed at making you pass an exam, but to have a wide and practical knowledge of the subject and to have an inquisitorial approach to what you are learning.

Trinity College is an internationally recognised university of world class standards and the Law School is a testament to that. If you are looking to have a great four years, learn about the law from outstanding teachers, and make a lot of friends in the process, then Trinity College is the place to be."

Graduate Profile

Garrett Simons, S.C. graduated from the School of Law with a first class honours degree in 1992. Garrett is a Senior Counsel specialising in planning and environmental law, and the author of "Planning and Development Law" (Thomson Round Hall, Dublin).

"My reasons for choosing Trinity College were, first, the excellent reputation of the School, and, secondly, the fact that it offered a four-year honors degree course. A four-year course not only allows for a greater choice of subjects, but also affords an opportunity to study those subjects in depth. Your degree is awarded on the basis of your performance in third and fourth year, which is a much fairer basis of assessment than in most colleges. The Law School is relatively small, and thus has a very friendly atmosphere. My lecturers were excellent, and in many cases were the leaders in their field. I particularly enjoyed the Environmental Law course taught by Professor Yvonne Scannell, and subsequently decided to specialise in planning and environmental law. I have no doubt but that the questioning approach which Yvonne and other lecturers encouraged us to take to legal issues has been of great benefit to me in my practice at the bar."

Further information

www.tcd.ie/Law
Tel: +353 1 896 1125 / 1278
E-mail: **law.school@tcd.ie**

Law and French/German

COURSE CODES:	**TR018 (French)**	**TR019 (German)**
PLACES 2010:	**15**	**15**
POINTS 2009:	**550**	**470**
DEGREE AWARDED:	**LL.B. (Ling. Franc)**	
	LL.B. (Ling. Germ)	

Special Entry Requirements:

Leaving Certificate	HC1	French (TR018)
	HC1	German (TR019)
Advanced GCE (A-Level)	Grade C	French (TR018)
	Grade C	German (TR019)

See also:

TR004: Law, page 65
TR017: Law and business, page 69
TR020: Law and political science, page 71

Overview

Law and French and Law and German are demanding programmes that give you the opportunity to learn about the law, language and culture of one of the principal continental civil law jurisdictions, in addition to receiving a full grounding in Irish and EU law. Far more is involved than simply attaching a language component to a law degree. Students study French or German law, both constitutional and civil, in their first two years. These law subjects are taught and examined through the relevant language. The language component of each programme is integrated so that language skills are developed in the context of studying the general, as well as the specifically legal, culture of the country concerned. Each programme is taught over four years with a compulsory year abroad.

Is this the right course for you?

In addition to a desire to study law, you will need a specific and strong interest in the general culture, legal, political, economic and sociological make-up of either France or Germany. You should also be willing and have the ability to become fluent in the relevant language.

Course content

In the Freshman (first two) years you will study a variety of legal subjects, see below. In each semester, you will have two Irish law modules, with three hours of lectures in each per week. These lectures are complemented by compulsory law seminars (4 per module) and modules in legal skills in the Junior Freshman (first) year and mooting (mock trials) in the Senior Freshman (second) year. Law and language students also study the constitutional and civil law of their chosen jurisdiction. Alongside their law modules, students take integrated modules on language and civilisation, covering aspects of sociology, legal systems and politics. Lectures, tutorials and listening comprehension work are all involved.

Junior Freshman modules

- The Irish legal system
- Contract law
- Constitutional law 1
- Criminal law
- Legal Skills
- French or German language
- French civilisation and legal methods or German area studies
- French constitutional law or German constitutional law

Junior Freshman Law and French students study French constitutional law and French legal methods through French as well as French language and civilisation. These two integrated modules comprise of lectures, tutorials, and listening comprehension work. They cover language, French society and the French legal system.

Junior Freshman Law and German students study, alongside German language and textual analysis, the political institutions and aspects of society and economy in the German speaking countries. The course involves an introduction to German constitutional law and the German legal system, German legal history and legal philosophy.

Senior Freshman modules

- Law of tort
- Land law
- Private law remedies
- Legislation and regulation
- Mooting programme
- French or German language
- French civilisation or German cultural history
- French or German civil law

Senior Freshman Law and French students study French civil law (including property, contract and tort) through French. In their integrated French language and civilisation modules, they focus on French politics and the integration of the themes studied in the first two years.

Senior Freshman Law and German students take modules in German language, including legal translation and an introduction to the specialist language used in legal texts; German cultural history; German civil law and jurisprudence and German criminal law.

The Sophister years

The Junior Sophister (third) year is spent studying legal or related subjects in a French or German university. For students of Law and French this will be at the universities of Paris II Panthéon-Assas, Poitiers, Caen, Bordeaux IV, Toulouse, Strasbourg or Sciences Po, Paris. For students of Law and German this will be at the universities of Würzburg, Hamburg,

Mainz, Humboldt (Berlin), Passau, Munich, Freiburg, Marburg, Tübingen or Erlangen-Nürnberg in Germany. The results obtained studying abroad constitute a substantial part of your final degree grades.

In the Senior Sophister (fourth) year, you select 40 ECTS (credits) worth of modules from approximately twenty six options. See page 66 for details of possible modules. Students who wish to continue their studies with the professional bodies may also take Freshman modules in place of a Sophister module if required by the particular professional body. In addition, you will engage in language and oral work and project/report writing. Students may choose from a number of options to take the place of a law module, including a Broad Curriculum module (see page 12 or **www.tcd.ie/Broad_Curriculum**), a research dissertation or a module offered by the relevant language department.

Senior Sophister Law and French students study French translation, Report writing and Oral French in addition to their law modules. Law and German students take advanced oral and written language modules, including Translation and rhetoric, attend a seminar on German Law, as well as taking their law modules.

Assessment

A combination of assignments and aural, oral and written examinations is used. There is a strong element of continuous assessment in language and French or German law subjects.

Career opportunities

The increasing Europeanisation of legal practice means that graduates of the law and a language degree programme have much to contribute to the legal and other professions in Ireland, as well as enjoying career opportunities in Europe. In addition to careers in the legal profession, Law and French and Law and German graduates also find employment in business, journalism, accountancy, banking, insurance, politics, foreign affairs and diplomacy and public services.

Also, see “Law degrees and professional qualifications” on page 67.

Further information

www.tcd.ie/Law
Tel: +353 1 896 1125 / 1278
E-mail: **law.school@tcd.ie**

Law and business

COURSE CODE:	**TR017**
PLACES 2010:	**25**
POINTS 2009:	**555**
DEGREE AWARDED:	**LL.B. (Law and Business)**

Special Entry Requirements:

Leaving Certificate	OC3/HD3	Mathematics
GCSE	Grade B	Mathematics

See also:
TR004: Law, page 65
TR018/019: Law and French/German, page 68
TR020: Law and political science, page 71

Course overview

This joint degree aims to give students a firm grounding in the disciplines of law and business and to develop a critical understanding of both the legal framework of business activity and the economic and commercial context in which law operates. Students will have the opportunity to focus upon the many areas of overlapping interest between the two disciplines; for example, the structure of companies and other forms of business organisation, competition law and regulation of markets, consumer law, labour law, finance and financial markets, taxation, the protection of intellectual property and international perspectives on law and business.

Is this the right course for you?

Historically, the disciplines of business and law have been closely associated in both the public and private sector. In our global economy, businesses now deal with more complex issues concerning government regulations and international trade policies. Conversely, the law has had to grapple with constantly evolving commercial organisations and business practices. With the growth in the size of legal practices and the expansion of the work of the legal profession into areas of mergers, acquisitions and taxation, the work of legal graduates and business graduates have blended in many aspects. This course is aimed at individuals seeking a career defined by the application of legal principles and management practices. The programme will provide students with a firm grounding in law along with strong management skills, enabling students to choose from a wide range of career opportunities or further study.

Course content

In the Junior Freshman (first) year students take six modules, each equal to 10 ECTS credits. Students take three mandatory law modules: The Irish legal system, Law of contract, and Law of tort. Students take two mandatory business modules: Introduction to organisation and management, and Introduction to economic policy. In addition, students can choose between Mathematics and statistics or a language module (French, German, Russian, Spanish or Polish).

In the Senior Freshman (second) year students take six modules. The three mandatory law modules are: Criminal law, Constitutional law I and Land law. The three mandatory business modules are the core business discipline modules: Management 1 (Organisational behaviour, Marketing management), Management 2 (Introduction to accounting, Financial analysis), and Management 3 (Introduction to finance, Introduction to operations management).

In the Junior Sophister (third) year students take a combination of modules, of which 1/3 must be from the Business School and 1/3 from the Law School. One of the law modules must be European Union law. The remaining business modules may be drawn from a list of optional modules as follows:

Human resource management; Operations management; Financial and management accounting; Marketing management; Applied finance; Organisation behaviour and change.

The remaining Law modules may be drawn from a list of optional modules as follows:

Administrative law, Commercial law, Company law, Comparative law, Conflict of laws (private international law), Constitutional law II, Corporate governance, Criminology, Environmental law, Equity, Evidence, Family law, Economic and legal aspects of competition policy, Employment law, European human rights law, Intellectual property law, International human rights law, International practice in law, Jurisprudence, Labour law, Land law II, Legislation and regulation, Planning law, Private law remedies, Public interest law, Public international law, Refugee law, Research dissertation, Sports law, Tax law, Media law, Broad Curriculum, Child law, Contemporary issues in the philosophy of law, European Union food law, International trade law, Private international family law.

In the Senior Sophister (fourth) year students may choose from a range of module options and may choose to either combine business and law modules in this year, or alternatively, to specialise entirely in either law or business modules. Module options include:

Business:

Strategic management: Theory and practice; International business; Exploring organisational experiences; Financial reporting and analysis; Advances in marketing theory and practices; Managing non-profit organisations; Employee relations; Managing new product development; International finance and risk management; Entrepreneurship: A commercial and social perspective.

Law:

Administrative law, Advanced European Union law, Commercial law, Company law, Comparative law, Conflict of laws (private international law), Constitutional law II, Corporate governance, Criminology, Environmental law, Equity, Evidence, Family law, Economic and legal aspects of competition policy, Employment law, European human rights law, Intellectual property law, International human rights law, International practice in law, Jurisprudence, Labour law, Land law II, Legislation and regulation, Planning law, Private law remedies, Public interest law, Public international law, Refugee law, Research dissertation, Sports law, Tax law, Media law, Broad Curriculum, Child law, Contemporary issues in the philosophy of law, European Union food law, International trade law, Private international family law.

Assessment

Modules are examined by a combination of continuous assessment and formal examination.

Languages and study abroad

First and second-year students have the option to study French, German, Spanish, Russian or Polish. Students who have the prerequisite language proficiency will have the opportunity to study abroad in their third year as part of the Erasmus exchange programme. This will mean spending all or part of the Junior Sophister (third) year abroad at a university in Austria, Belgium, France, Germany, Italy, Russia or Spain. The Business School also offers English-speaking international exchange programmes to prestigious universities in Europe, North America, Australia and in several Asian countries including Japan, China, Taiwan and South Korea.

Career opportunities

The programme will provide students with strong management skills and an in-depth specialisation in law. Graduates will be well prepared for demanding and rewarding careers in both the legal and business professions, particularly in areas where the two disciplines coincide. We expect graduates to accept positions in law, business, taxation, finance and accounting, general management, employment relations and the civil service. In particular, students will have the option of studying all the law subjects required for a qualifying law degree, which will enable them to apply for entrance to the professional legal institutions to qualify as barristers and solicitors.
The post-degree training for barristers and solicitors varies from time to time, and current details can be found on the following websites: **http://lawlibrary.ie** (barristers) and **www.lawsociety.ie** (solicitors).

Also, see “Law degrees and professional qualifications” on page 67.

Why choose the Trinity College School of Business?

See p. 38

Further information

www.tcd.ie/business and **www.tcd.ie/law**

Tel: +353 1 896 1840 or +353 1 896 2367

Law and political science

COURSE CODE:	**TR020**
PLACES 2010:	**20**
POINTS 2009:	**555**
DEGREE AWARDED:	**LL.B.**

See also:

TR004: Law, page 65
TR018/019: Law and French/German, page 68
TR017: Law and business, page 69
TR014: Philosophy and political science, page 77
TR012: History and political science, page 61
TR015: Philosophy, political science, economics and sociology, page 78
TR081: BESS, page 35

Course overview

Law and politics are deeply connected and this course provides the opportunity to learn about both and better understand their relation to each other. As a student on this programme, you will take both subjects for the first three years. In your fourth year you will have the option to concentrate exclusively on either subject, or continue with both. During the four years of studies, students will have the opportunity to study all the core subjects required by the legal professional bodies.

Is this the right course for you?

Yes, if you are interested in pursuing a legal career and want your study of law to be informed by a wider political understanding, or if your intellectual or career interests in politics and public service would be strengthened by a knowledge of the law.

Course content

All students take modules worth 60 ECTS (European Credit Transfer System) per year. In the first two years students take six 10 credit modules (three from each discipline).

In the Junior Sophister (third) year, students take modules totalling 30 credits from each discipline. Students may choose to specialise in either Law or Political science in their Senior Sophister (fourth) year or continue to take a combination of modules from both subjects.

Law modules are generally taught for three hours per week for one semester only and students attend four compulsory law seminars per module. Political science modules are also taught at lecture level with two hours of lectures and one tutorial per week per module.

In the Junior Sophister (third) year, one law module, EU law, is mandatory. If a student chooses to specialise in Political science in the final year of his/her degree then he/she must take Research methods for political scientists. In the final-year students may choose to focus on either Law or Political science or continue to take both subjects equally.

Junior Freshman (first) Year

Law: The Irish legal system and Legal skills, Contract, and Torts law.

Political science: Introduction to political science, Introduction to economic policy, and Introduction to sociology.

Senior Freshman (second) year

Law: Criminal law, Constitutional law I and Land law.

Political Science: History of political thought, Comparative politics, and International relations.

The Sophister years

Junior Sophister (third year) students take 30 ECTS from both Law and Political science from the following modules:

Law: EU law (compulsory) and 20 ECTS from the following modules: Administrative law; Child law; Commercial law; Company law; Comparative law; Conflict of laws; Constitutional law II; Criminology; Economic and legal aspects of competition policy; Employment law; Environmental law; Equity; European Human Rights; EU food law; Evidence; Family law; Intellectual property law; International family law; International Human Rights; International trade law; Jurisprudence; Labour law; Land law (English); Legal philosophy; Media law; Penology; Public interest law; Public international law; Refugee and immigration law; Restitution; Tax law, and Sport and the law.

Political science: Research methods for political scientists (compulsory if students wish to specialise in Political science in the final year), and two modules from: Transition politics; Irish politics; Government and politics of the USA; European public policy.

Senior Sophister (fourth year) students may choose to take either 60 ECTS from Law or Political science or continue to study a combination of Law and Political science modules from the following list:

Law: Administrative law; Advanced EU law; Child law; Commercial law; Company law; Comparative law; Conflict of laws; Constitutional Law II; Criminology; Economic and legal aspects of competition policy; Employment law; Environmental law; Equity; European Human Rights; EU food law; Evidence; Family law; Intellectual property law; International family law; International Human Rights; International trade law; Jurisprudence; Labour law; Land law (English); Legal philosophy; Media law; Penology; Public interest law; Public international law; Refugee and immigration law; Research dissertation; Restitution; Tax law; and Sport and the law.

Full details of all law modules (Freshman and Sophister) are available on **www.tcd.ie/Law/Courses**.

Political science: Research seminar; Contemporary political theories; Comparative political institutions; Political parties; Contemporary political issues; Contemporary international relations; and African politics.

In both subjects small-group teaching is an important aspect of the Sophister years and, should you decide to specialise in either Law or Political science in the final year, you will have the opportunity to research and write up a dissertation on a topic of your choice.

Assessment

Courses are examined by a combination of continuous assessment and formal examination.

Study abroad

A limited number of places are available on EU-funded exchange programmes at universities in Austria, France, Germany, Italy, the Netherlands, Poland and Spain to students in the Junior Sophister (third) year. Students are advised to take optional language courses (see page 12) within the first two years if they wish to avail of this opportunity; alternatively they must satisfy that they have proficiency in the language of the host university that they wish to study in. There are also exchange programmes with a number of universities in North America. Participating in these opportunities is dependent upon the exchange fulfilling the course requirements of both departments.

Career opportunities

Whether students' career goals lie in public leadership, the legal profession, the media, the civil service, academia, public relations, anything in business that requires knowing how government works, positions in international organisations such as the EU or a not-for-profit organisation, law enforcement, private practice, or elsewhere, the degree in Law and political science will be ideally suited as a platform for attaining those goals.

Further information

www.tcd.ie/Law/Courses
Tel: +353 1 896 1125 / 1278; E-mail: **law.school@tcd.ie**
www.tcd.ie/Political_Science/undergraduate
Tel: +353 1 896 1651

Law degrees and professional qualifications

No law degree entitles a person to practise law as a solicitor or barrister. However, throughout the four-year degree programme in Law and political science, students will have the opportunity to study all core modules required by the professional bodies.

Please see page 67 for further information on legal professional qualifications.

Music

COURSE CODES:	**TR002**	**TR001 (TSM)**
PLACES 2010:	**20**	**10**
POINTS 2009:	**420***	**550*-560***
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

These are restricted entry courses.

Applications must be submitted by 1 February of the proposed year of entry. Applicants will be required to attend an entrance examination, provisionally scheduled for 19 March 2011.

Specimen examination papers are available for download from the Music Department website:

www.tcd.ie/Music/undergraduate/music/index.php

Special Entry Requirements:

Formal musical training is not a prerequisite for entry, but candidates should have a good ear and the ability to read and notate music to a rudimentary level. The most important musical qualification is a good ear.

On the basis of the entrance examination results, applicants may be called to attend an interview at the end of April/ beginning of May, before final selections are made. You are not required to perform at interview.

TR002 – Music is a single honor course where music is read almost exclusively for four years.

TR001 – Music (TSM) is a joint honors programme. Music can be combined with one other subject. Both subjects are studied for three years and one subject only is studied in the fourth and final year. An honors degree is awarded in both subjects.

For subjects that combine with Music see page 90.

Single honor and TSM students follow the same courses. While TSM students cover all the principal areas of music studied by single honor students, the workload is less than that of the single honor programme. TSM students have the same range of options as single honor students.

See also:

TR009 – Music education page 75

Course overview

The single honor and two-subject courses provide a thorough grounding in the basic skills of musicianship and academic study (see below for details). From the second year onwards, and especially in the third and fourth years, both courses offer a wide range of options. Students specialise in one of the following areas: composition, music technology, and musicology (the historical and analytical study of music); and in their final year they undertake a major project in that area. However, the course is designed so that students may also take subjects outside their specialisation.

Although instrumental or vocal studies are not part of the formal curriculum, a wide range of musical activities takes place on the campus. Practical courses in aural training and/or keyboard skills are available in each year; and the Music Department supports several performance groups that work under the supervision of experts of international standing (these are in addition to the many performance opportunities offered by student societies).

The majority of subjects are based on the traditions and practice of classical (or art) music, from the medieval period to the present day. However, the department regularly presents lectures in other musical traditions, including jazz, popular music and Irish traditional music. Many students currently in the department come, primarily from one of those non-classical traditions.

One of the strengths of the Music courses in Trinity College is the commitment to small-group teaching. While some subjects, such as History of music, are delivered as lectures to a large group, many subjects are taught in groups of ten students or fewer.

Is this the right course for you?

If you love music and want to understand it – for example, to know how it works, its history and development, how to write music, how to become a more informed performer – this is the course for you. Whether your interests are primarily academic or practical, your experience of this vast and rich subject will be greatly improved in depth and breadth.

As an academic discipline, music fosters independence of thought, creativity, critical and analytical skills, and intellectual awareness. You will also have plenty of opportunity to perform, conduct ensembles, and gain experience of arts administration. Because the course includes a wide range of options, you will be able to emphasise the areas that interest you most.

The facilities in the Music Department include a recital room, practice rooms with pianos, an excellent and up-to-date suite of computer workstations that are used for teaching and study, a small music studio (plus more extensive, shared facilities elsewhere), excellent listening equipment, and a substantial lending collection of CDs and videos.

The staff of the Music Department have a wide range of expertise in composition, music technology and musicology. They are here to help you in your exploration of a subject that they chose because they, like you, love it.

As a student at Trinity College you will have access to the largest research library in Ireland. It is also by far the largest and best-equipped library for music. In addition to its general holdings of books and music, it houses an extensive listening collection of CDs.

Did you know?

- If you are considering studying Music at Trinity College but want to be sure, you are most welcome to attend lectures at the department at any time during teaching terms. You will also be invited to discuss your options with a member of the teaching staff. Contact us by e-mail or phone (see below).

Course content

The Freshman years

The Junior Freshman (first) year is designed to ensure that you are fully competent in basic musical skills and provides an introduction to historical and analytical musicology, compositional techniques and music technology.

Subjects include:

- **Aural training** – using moveable Doh (Solfège or Solfa). The course will improve your basic musical skills in areas such as musical dictation, sight-reading, and score-reading
- **Keyboard skills** – (taught in conjunction with aural training) will enable you to create harmony over a given figured bass, to play four-part harmony, and to transpose up or down a tone or semitone
- **Introduction to harmony** – an introduction to the writing of four-part harmony
- **History of music** – an introduction to the music of Baroque and early Classical periods in a broad cultural context (this forms part of a four-year programme of general music history), plus an introduction to research methodologies, and to presentation and style in writing essays
- **Introduction to music analysis** – includes re-assessment of the elements of a musical text and the ways in which they come together to form increasingly large units
- **Music technology** – includes computer orientation, and introduction to MIDI protocol, audio signals and computer-based notation and sequencing
- **Introduction to counterpoint** – the conventions of music notation and rudiments, leading to the study of Fuxian species counterpoint, which will enable you to acquire a command of basic polyphonic composition

In the Senior Freshman (second) year you will continue with the above subjects from the first year while beginning to explore your specialist area – either composition, musicology, or music technology. Single Honor students will also select a Broad Curriculum course (see page 12 or **www.tcd.ie/Broad_Curriculum**), and TSM students have a wider range of options that includes Broad Curriculum.

The Sophister years

In the Sophister (third and fourth) years study becomes more concentrated on your chosen specialisation. It is always possible to take options from other specialisations.

Students who specialise in composition will receive a thorough grounding in compositional techniques; they present a portfolio of their compositions as their final-year project. If you specialise in music technology you will produce a major project in the final year. Specialisation in musicology involves a range of courses relating to historical and analytical subjects, and culminates in a dissertation in the fourth year.

All students may opt to present a recital for up to approximately 10% of their degree. In each year, Sophister students are also offered an option in either aural training or in the playing of figured bass (using either piano or harpsichord). In recent years, other options have included:

- Film music
- Fugue
- The German Lied in the 19th century
- Music and language
- Byrd and the politics of polyphony
- Sonata structures
- Spectral composition
- Web design
- Handel and the English oratorio
- Elgar, Newman and The Dream of Gerontius

Assessment

Most subjects are assessed by a combination of examination (at the end of the year) and continuous assessment.

Career opportunities

The employment record for Trinity College's graduates in Music is excellent. Recent graduates have established successful careers as composers, as music producers for television, radio, or recording companies, as performers, administrators and teachers, as academics in internationally recognised institutions worldwide, and as conductors. Within the last few years several recent graduates have been commissioned by front-rank organisations such as RTÉ to write new works. Graduates are working in this country and in countries as diverse as the USA, Canada, Germany, Australia, China and England. Music graduates have an outstanding record of obtaining scholarships for further study abroad, from international institutions, as well as from the Arts Council of Ireland. A smaller number have used the analytical and intellectual skills that these courses offer to build successful careers outside music: recent examples include medicine, law, financial investment, and public relations.

Further information

Anyone considering studying Music is welcome to visit the department, in order to sit in on lectures, to speak to members of staff, and to speak to current students. To make an appointment, contact the Music Executive Officer: +353 1 896 1120; **musicsec@tcd.ie** (office hours: 1000-1630, Mondays to Fridays).

Full details of the courses in Music, of the staff and of the curriculum can be accessed via the Music Department's website: **www.tcd.ie/Music**

Tel: +353 1 896 1120

Music education

COURSE CODE: **TR009**
PLACES 2010: **10**
POINTS 2009: **465**
DEGREE AWARDED: **B. Mus. Ed.**

This is a restricted entry course.

Applications MUST be submitted by 1 February of the proposed year of entry. Applicants will be required to attend an entrance examination, provisionally scheduled for 19 March 2011.

On the basis of the examination results, some applicants will be called to attend an interview during April/May before final selections are made. Performance will feature as one element of the interview.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

See also:

TR002: Music, page 73
Education, page 53

Course overview

The Bachelor in Music education degree is designed to provide for the academic and professional requirements of those wishing to become music teachers at secondary-school level (including Northern Ireland). The degree is taught in conjunction with the Dublin Institute of Technology, Conservatory of Music and Drama and the Royal Irish Academy of Music.

This four-year programme will equip you with a high standard of performance in the instrument of your choice, as well as with an associated competence in related music skills, i.e. conducting, keyboard skills and performance in choral, orchestral and chamber music groups. The course also provides for a solid grounding in harmony, counterpoint, composition, orchestration, analysis and the history of music.

Is this the right course for you?

If you enjoy music, already have a reasonable standard of performance, and wish to combine these qualities with a teaching career, then this course will be ideally suited to you.

Course content

A basic feature of the course is personal development in music, evoking the ability to arouse the interest and enthusiasm of pupils. You will be encouraged to engage in ensemble work at a level appropriate to your own ability. Opportunities to perform are provided, offering realistic goals for all, including the exceptionally gifted. Supervised practice in all aspects of classroom teaching is provided, in addition to instrumental/vocal practice.

There are approximately eighteen hours of lectures per week, comprising music and education.

Music courses

- First instrument – individual tuition (Irish traditional instruments may be offered)
- Aural perception and keyboard skills
- Harmony and counterpoint
- History of music
- Irish music
- Practical musicianship (singing and recorder)
- Conducting
- Special repertoire class for first instrument
- Music technology

Education courses

- Practice of music education, including teaching practice
- Psychology of education
- Philosophy of education
- Sociology of education
- Curriculum assessment, evaluation and statistics

Assessment

A combination of continuous assessment, practical and written examinations and teaching practice makes up the assessment.

Study abroad

There are opportunities for students to spend part of their Junior Sophister (third) year studying abroad.

Career opportunities

While most of the students go on to teaching – usually in schools, but also to instrumental teaching, some use the degree as a general arts qualification and go on to work in areas such as arts administration, library work, music therapy and music technology. Many students take postgraduate courses – either in related areas such as in music education, musicology, performance, or in a range of other areas.

Further information

Anyone considering studying Music education is welcome to visit the School of Education, to speak to members of staff, and to speak to current students. To make an appointment, contact the Music Education Co-ordinator at 01-8961145.

www.tcd.ie/Education/courses/bmused.php
www.dit.ie
www.riam.ie

Philosophy

COURSE CODES:	**TR005**	**TR001 (TSM)**
PLACES 2010:	**17**	**43**
POINTS 2009:	**450***	**460*-560***
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

Philosophy may be studied as a single honor course (TR005), within the Two Subject Moderatorship programme (TR001), in the Philosophy and political science programme (TR014) and in the Philosophy, political science, economics and sociology (TR015) programme.

In TR005 Philosophy is studied for four years.

TR001 (TSM) Philosophy cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects. See page 90 for a list of the subjects with which Philosophy may be combined.

In TR015 it is possible to study philosophy for the entire four-year degree programme or for a shorter period.

What is Philosophy?

Philosophy is the discipline concerned with the questions of how one should live (ethics); what sorts of things exist and what are their essential natures (metaphysics); what counts as genuine knowledge (epistemology); what existence is and what it means to be (ontology); and what are the correct principles of reasoning (logic). It is generally agreed that philosophy is a method, rather than a set of claims, propositions, or theories. Its investigations are, unlike those of religion or superstition, wedded to reason, making no unexamined assumptions and no leaps based purely on analogy, revelation, or authority. In Greek, "philosophy" means "love of wisdom." Philosophy is based on rational argument and appeal to facts. The questions addressed by philosophy remain the most general and most basic, the issues that underlie the sciences and stand at the base of a world-view.

Course overview

In all cases the purpose of the Philosophy course is to give you a solid, scholarly grounding in the classical texts which form the history of Western philosophy, and are one of the formative influences on Western culture. Studying the fundamentals of both formal and informal reasoning will enable you to think independently.

Is this the right course for you?

If you are interested in questioning society's basic assumptions and in analysing the moral, political, aesthetic and religious questions lying at the heart of our culture in an articulate manner you will find this a stimulating and challenging course.

Course content

The Freshman years

In the first two years, called Junior Freshman and Senior Freshman, you will study foundation courses in the history of philosophy, as well as engage with certain fundamental philosophical problems such as the debates about free will and determinism, the nature of morality, the nature of language, the existence of God, logic, and the scope and limits of human knowledge.

In the TSM programmes where philosophy is studied with another subject there are approximately five hours of classes per week; with double that for the single honor programme.

The Sophister years

In the final two years, called Junior Sophister and Senior Sophister, you are able to set your own syllabus by selecting courses from a reasonably wide choice including political philosophy, ethics, philosophy of religion, and philosophy of mind, among others. In this way you can specialise in the areas of philosophy you have found most interesting and most suitable to your skills.

Assessment

Assessment is by means of both essays and formal examinations with equal importance given to both. In the Senior Sophister year, you will research and write a dissertation.

Career opportunities

In the recent past graduates of Philosophy have worked in areas as diverse as accountancy, academic teaching, journalism, law, T.V. reporting and research, film making, banking, computing and advertising. Each year some graduates also opt to pursue a research career beginning with postgraduate study in Ireland or abroad.

Did you know?

- George Berkeley (1685-1753), who has a permanent place in any list of the great philosophers, attended Trinity College. In addition, the political philosopher, Edmund Burke (1729-1797), inaugurated the College debating society while still a student at Trinity College.
- Trinity College is the only university in Ireland where philosophy can be taken as a degree course on its own.

Further information

www.tcd.ie/Philosophy/teaching/undergrad.php
Tel: +353 1 896 1529

Philosophy and political science

COURSE CODE:	**TR014**
PLACES 2010:	**10**
POINTS 2009:	**485***
DEGREE AWARDED:	**B.A.**

See also:

TR001: TSM (joint honour programme) Philosophy in combination with one other subject. For subjects that combine with philosophy see page 90

TR005: Philosophy, page 76

TR012: History and political science, page 61

TR015: Philosophy, political science, economics and sociology, page 78

TR020: Law and political science, page 71

TR029: Political science and geography, page 81

TR081: BESS, page 35

Course overview

The study of politics has been associated with philosophy since the time of the ancient Greeks. The many direct and indirect interdisciplinary links make Philosophy and political science an attractive and logical combination, with the study of each subject adding depth to the study of the other. As a student on this programme, you will take both subjects for the first three years. In your fourth year you will have the option to concentrate exclusively on either subject, or continue with both.

Is this the right course for you?

Yes, if you are willing to develop an original and creative way of thinking and are open to learning more about the political and economic development of societies.

Course content

In the first three years you will take approximately five courses which will each require attendance, on average, of two hours of lectures and one tutorial per week. In the Senior Sophister (fourth) year there is a reduction in the number of courses required to allow greater depth of study and more independent work.

The Freshman years

In the first two years, called Junior Freshman and Senior Freshman, you will study foundation courses in Philosophy covering (i) the history of philosophy, certain fundamental philosophical problems such as the debates about free will and determinism, the nature or morality, the nature of language, the existence of God, and the scope and limits of human knowledge; and in Political science covering (ii) introduction to political science, introduction to sociology, introduction to economic policy, history of political thought, international relations and comparative politics.

The Sophister years

In the final two years, called Junior Sophister and Senior Sophister, you are able to set your own syllabus in Philosophy by selecting courses from a reasonably wide choice including political philosophy, ethics, philosophy of religion, philosophy of mind, among others. In political science you can choose from courses covering Irish politics, American politics, contemporary political theories, comparative political institutions, theoretical analysis of political parties, African politics, European public policy, or contemporary international relations. In both subjects small-group teaching is an important aspect of the Sophister years and, should you decide to specialise in either Philosophy or Political science in the final year, you will have the opportunity to research and write up a dissertation on a topic of your choice.

Assessment

Courses are examined by a combination of continuous assessment and formal examination.

Career opportunities

Philosophy and political science is a particularly useful preparation if you want to become involved in public service, public affairs or the media, but the skills you attain can also be applied in many areas of research, management and communication.

Further information

www.tcd.ie/Political_Science/undergraduate/philpolsci.php
Tel: +353 1 896 1529 / 1651

Philosophy, political science, economics and sociology

COURSE CODE: **TR015**
PLACES 2010: **25**
POINTS 2009: **515***
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	OC3/HD3	Mathematics
GCSE	Grade B	Mathematics

See also:

TR001: TSM, page 90
TR005: Philosophy, page 76
TR012: History and political science, page 61
TR014: Philosophy and political science page 77
TR020: Law and political science, page 71
TR029: Political science and geography, page 81
TR081: BESS, page 35
TR083: Sociology and social policy, page 87

Course overview

The aim of this degree is to provide a coherent and integrated introduction to the study of the social sciences and philosophy. It brings together some of the most important approaches to understanding the social and human world, developing skills for a whole range of future careers and activities. The idea behind the programme is that, to understand social and human phenomena, one must approach them from several complementary disciplinary directions and analytical frameworks. By allowing a gradual specialisation over the course of the four-year degree programme, students are assured of obtaining an excellent grounding in one, or at most two, of the disciplines which make up the degree.

In the first three years you take six modules with approximately three teaching hours per week including tutorial classes in each. In the final year there is a reduction in the number of modules taken to recognise the greater commitment to independent work.

Is it the right course for you?

This course will appeal to students who are excited about the challenges of understanding the way societies are organised, governed and create wealth drawing on the methods and insights of philosophical inquiry. If you are puzzled about the ways our world is structured and have a desire to change it, then this may well be the course for you.

Course content

The Freshman years

In the Junior Freshman (first) year you will take all four subjects: economics (introduction to economics, mathematics and statistics), philosophy (central problems in philosophy, history of philosophy), political science (introduction to political science) and sociology (introduction to sociology). In the Senior Freshman (second) year you choose to continue three of the subjects and could, for example, take modules ranging from economic principles, to the history of philosophy to West European politics, to an introduction to social research.

The Sophister years

In the Junior Sophister (third) year you take two of the four subjects and in the Senior Sophister (fourth) year you may take either two subjects or choose to specialise in only one. Students pursuing the equivalent of single honor programmes in their final year will be able to pursue an undergraduate dissertation, and all fourth year modules have elements of project work intended to help develop research skills and the skills of independent enquiry.

PPES at a glance

	Year 2 (6 modules)	Year 3 (6 modules)	Year 4 (4 modules)
Philosophy	■ Logic ■ History of philosophy	■ Philosophy of mind ■ Political philosophy ■ Topics in ancient philosophy ■ Topics in psychological philosophy ■ Existentialism and psychoanalysis ■ Topics in analytic philosophy ■ Moral philosophy ■ Philosophy of religion ■ Logic and philosophy ■ Topics in Continental philosophy ■ Epistemology and metaphysics	■ The limits of thought ■ Finitude and transcendence ■ The philosophy of Edmund Husseri ■ Psychology/philosophy ■ Deliberation and decision-making ■ Freud, Hegel and the unconscious ■ Social justice and heath ■ Relativism ■ Fiction and truth ■ Time, space and place in Plato and Aristotle ■ Philosophy dissertation
Political science	■ History of political thought ■ International relations ■ Comparative politics	■ Research methods ■ Irish politics ■ Government and politics of the USA ■ Democracy and development	■ Research seminar ■ Contemporary political theories ■ Comparative political institutions ■ Political parties ■ Issues in contemporary politics ■ Contemporary international relations ■ African politics
Economics	■ Intermediate economics ■ Mathematics and statistical methods	■ Economic analysis ■ Money and banking ■ The European economy ■ Economics of less developed countries ■ Investment analysis ■ Economics of policy issues ■ Industrial economics ■ Mathematical economics ■ Econometrics	■ Economic theory ■ The world economy ■ Development economics ■ Economics of financial markets ■ Transport economics ■ Economics of human resources ■ Quantitative methods ■ Monetary thought and policy ■ Economic and legal aspects of competition ■ Economics dissertation
Sociology	■ Gender, body and society ■ European societies ■ Introduction to social research	■ Social theory ■ Race, culture and identity ■ Globalisation and development ■ Researching society	■ Economic sociology of Europe ■ New issues in sociology: Governing conflict, ecology ■ Food and material culture ■ Gender and popular culture

The table 'PPES at a glance' (see above) gives you a sense of the richness and diversity of modules that are available within PPES in the second, third and fourth years.

Assessment

Modules are examined by a combination of continuous assessment and formal examination.

Career opportunities

The range of disciplines to which students are exposed in this degree give you the insights and competencies to pursue careers in a variety of areas including public administration, teaching, journalism, media, law and management.

Did you know?

- This degree programme is unique in Ireland in offering a dedicated introduction to the social sciences and philosophy.

Further information

www.social-phil.tcd.ie/PPES
Tel: +353 1 896 1840

Political science

Political science may be studied through six degree programmes:

TR012 History and political science, page 61
TR014 Philosophy and political science, page 77
TR015 Philosophy, political science, economics and sociology, page 78
TR020 Law and political science, page 71
TR029 Political science and geography, page 81
TR081 BESS, page 35

What is Political science?

Political science is the field concerning the theory and practice of politics and the description and analysis of political systems and political behaviour. Politics affects us all in our daily lives. It's easy to think of issues that we all have opinions about. Should government tax the rich to try to achieve greater equality? Should it introduce 'green taxes' in order to protect the environment? Should third-level students have to pay fees? Should abortion be legalised? Should the amount of money the EU spends on the agricultural sector be cut back drastically? How high a priority should third world aid be? All of these questions will be decided through the political process.

The study of politics as an academic subject involves, among other things, thinking about how these decisions get made. If it's not possible to keep everyone happy when some issue has to be decided, whose views prevail and why? If governments do not always make what seems to be the most 'rational' decision on economic policy or some other issue, why not? How much say do ordinary people have in policy-making, and is it feasible to make the decision-making process more open? Can governments do pretty much what they want, or are they so constrained by other actors such as interest groups, the courts, the European Union, the constitution, and the sheer pressure of events, that in practice they have very little freedom of manoeuvre? Questions such as these are at the heart of the study of politics.

And, taking a step back from the debates of contemporary politics, political theorists ponder more fundamental questions, to do with normative issues – the 'should' questions – rather than ones that can be resolved by evidence. These days, pretty much everyone is in favour of justice and democracy – but what do these terms mean? If a society is to be run justly, what would this entail? Such topics have been discussed since the time of the ancient Greeks.

Is this the right course for you?

Politics in the modern world touches everybody in nearly every aspect of their life. If you want to raise your knowledge beyond the level of public affairs, the study of political science will give you the necessary tools.

Course content

See the individual course descriptions for History and political science; Philosophy and political science; Philosophy, political science, economics and sociology; Law and political science; Political science and geography; and BESS.

Assessment

Courses are examined by a combination of assessed essays and formal examination. In the Senior Sophister (fourth) year you will have the opportunity to research and write up a dissertation on a topic of your choice.

Normally, each course has two hours of lectures and one tutorial per week. Fewer lecture hours are required in the Senior Sophister year to allow time for more independent work.

Study abroad

The Department of Political Science is a partner in Erasmus exchanges with universities in France, Poland and Spain. Students have the option to go abroad for all or part of their Junior Sophister (third) year.

Career opportunities

There are careers for which a demonstrated interest in politics is a definite plus and gives you a real head start. Journalism, other kinds of media work, the civil service, public relations, anything in business that requires knowing how government works, work in international organisations such as the EU or a not-for-profit organisation, all come into this category. A demonstrated knowledge of how the world works is obviously an asset for many types of career. An increasing number of graduates go on to do further study by means of postgraduate work. And, with a politics degree, you could even get elected as a TD!

Did you know?

- The Political science department in Trinity College is one of the most highly rated in Europe. This means that students are taught by some of the top researchers in Europe, enthusiasts for their subject who bring to their students not only the accumulated wisdom of the wider political-science community but also the fruits of their own cutting-edge research.

Further information

www.tcd.ie/Political_Science/undergraduate/index.php
Tel: +353 1 896 1651

Political science and geography

COURSE CODE: **TR029**
PLACES 2010: **20**
POINTS 2009: **430**
DEGREE AWARDED: **B.A.**
TSM points: See note on page 24

See also:

TR001: TSM, page 90
TR012: History and political science, page 61
TR014: Philosophy and political science, page 77
TR015: Philosophy, political science, economics and sociology, page 78
TR020: Law and political science, page 71
TR071: Science, page 134
TR081: BESS, page 35

Course overview

In a rapidly changing international economic, political, security and environmental context the tools of political science and geography are becoming increasingly important to analyse global problems and provide policy solutions. This course combines analytical rigour with an understanding of real-world variations and complexities. The two disciplines have been associated through the sub-fields of political geography, which covers geographical differences in voting patterns, for example, and through geo-politics which examines how the great powers influence other parts of the planet. However, in a context of globalisation, interdisciplinary understandings of socio-environmental issues are becoming increasingly key in solving the problems of the future such as political instability in parts of the developing world as a result of climate change.

Is this the right course for you?

Yes, if you are interested in the disciplines of political science and geography and you hope to develop a critical understanding of the relationship between the Earth's natural and human phenomena and its political institutions and systems.

Course content

In the first three years you will take six courses which will each require attendance, on average, of two hours of lectures and one tutorial per week. In the Senior Sophister (fourth) year there is a reduction in the number of courses required to allow greater depth of study and more independent work.

The Freshman years

In the first two years, called Junior Freshman and Senior Freshman, you will study foundation courses covering (i) Introduction to geography I (Physical), II (Human-environment) and III (Human); Changing worlds; Collection and analysis of geographical data, and Geography seminars; (ii) Introduction to political science, Introduction to sociology, Introduction to economic policy, Comparative politics, International relations and the History of political thought.

The Junior Sophister year

In the Junior Sophister (third) year students take each subject equally. On the geography side two courses are mandatory with the other two courses being drawn from a list of options. The mandatory geography courses are Geographic information systems and History and philosophy of geography (see **www.tcd.ie/Geography** for more information). For those students planning to continue geography in the Senior Sophister (fourth) year as their sole subject, Advanced research methods in geography is also compulsory. On the political science side students may take any three options (see **www.tcd.ie/Political_Science/undergraduate/courseoutlines.php** to view the courses currently offered); students intending to take political science alone in the fourth year must take Research methods for political scientists in their third year.

The Senior Sophister year

In the Senior Sophister (fourth) year, students may take both subjects equally or one subject alone. For students taking geography or political science as their sole subject in this year a research thesis or dissertation is compulsory. The geography dissertation will not be required, but may be taken as an option by students continuing to study politics and geography equally in their fourth year. See **www.tcd.ie/Geography/GeographyWebsite/ug_04.php** to view the current courses offered for Senior Sophisters (fourth-year students) in geography and **www.tcd.ie/Political_Science/undergraduate/courseoutlines.php** for those offered in political science.

Study abroad

There are opportunities for students to spend all or part of the third year studying abroad in the United Kingdom, France, the Netherlands, Sweden, Poland or Spain. Participating in these opportunities is dependent upon the exchange fulfilling the course requirements of both departments.

Assessment

Courses are examined by a combination of continuous assessment and formal examination.

Career opportunities

Careers for graduates lie in fields such as public and European affairs, overseas assistance, resource management and risk assessment, the supply of environmental-related advice to governments and industry, the study and practice of environmental policymaking, and teaching and higher education.

Further information

www.tcd.ie/Geography/GeographyWebsite/ug_Geog&Political.php
Tel: +353 1 896 1576
www.tcd.ie/Political_Science/undergraduate/index.php
Tel: +353 1 896 1651

Psychology

COURSE CODES:	**TR006**	**TR001 (TSM)**
PLACES 2010:	**31**	**17**
POINTS 2009:	**545**	**560***
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

TR006 – Psychology is a single honor course where psychology is read almost exclusively for four years.

TR001 (TSM) – Psychology may be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Psychology see page 90.

Single honor and TSM students follow the same courses. However, while TSM students cover all the principal areas of psychology, the workload is less extensive than that of the single honor programme.

What is Psychology?

Psychology is the scientific study of human behaviour and mental processes. Although classified as an arts course, Psychology has many of the features of a science course – practical work, statistical description and analysis of data and courses on the underlying physiology of the human brain, for instance. These are in addition to the more familiar psychological topics such as human development, perception, learning, motivation, cognitive processes, individual differences and social psychology.

There are five thematic areas in psychology: Biological, Cognitive, Developmental, Personality and individual differences, and Social psychology.

Is this the right course for you?

Psychology is a rigorous, fascinating and demanding field of the life sciences. If you are interested in the factors influencing human thinking, feeling and behaviour, as individuals and in groups, you will enjoy this course. The School of Psychology is committed to excellence in education and training at all levels, and aims to offer a knowledge base and a set of skills that not only equip students for the many careers that exist in psychology, but also prepare students intellectually for other careers. Psychology is a branch of science that demands clear, rigorous thinking, numeracy and the ability to define, study and solve problems in complex, changing settings. Psychology educates and trains students to be aware of the factors influencing human thinking, feeling and behaving, as individuals and in groups. Such abilities are highly transferable to many different spheres of life. Psychology is also an applied science that deals with how people act and behave in the real world. It provides support for families in their social life and work, though clinical and counselling interventions.

Course overview

The course is designed to develop a wide knowledge of the concepts, principles, theories and research methods of contemporary psychology; to develop skills of analysis and synthesis, research design, statistical description and evaluation, problem-solving and computer use; to provide practice in the design, execution, reporting and assessment of research and to develop competence in group work, communication and presentation skills and self-assessment. This preparation is designed to cultivate a high level of competence in scholarship and research, enabling the successful graduate to proceed directly to advanced postgraduate work, professional training or a productive career.

During lecture term, single honor students spend approximately 10-12 hours per week (5-6 hours for TSM students) receiving tuition such as lectures, seminars and laboratory practicals.

The Freshman years

The Junior and Senior Freshman (first and second) years of both the single honor and TSM programmes provide a broad foundation on which more advanced course work is built in the Sophister (third and fourth) years. In addition, modules in methodology and statistics enable students to develop their research skills in a systematic fashion. Training in academic skills is also provided which enable you to build the skills required to write essays, to develop an attitude of scepticism and to develop independent, critical thinking.

As a Freshman student, you will take foundation-level modules in a range of areas such as:

- Introduction to psychology
- Social psychology
- Perception
- History of psychology
- Psychological disorder
- Developmental psychology
- Cognition
- Fundamentals of neuroscience and behaviour
- Evolutionary psychology
- Personality and individual differences

You will also be given the opportunity to take module(s) from the Broad Curriculum options (see page 12 or **www.tcd.ie/Broad_Curriculum**).

Research methods, statistics and laboratory practicals

Modules in research methods and statistical analysis and in laboratory practicals are provided in the Freshman years. These will enable you to understand the different research methodologies (qualitative and quantitative) upon which psychology is based and will prepare you for planning, conducting and communicating your own research. Some of the practicals relate specifically to the foundation courses and provide hands-on experience of carrying out research in different areas of psychology. For example, you may be asked to

carry out an observational study task which allows you to apply the theory you have learned in the Developmental psychology module. Other practicals concentrate on statistical description and analysis and key research-related skills, such as literature searching.

The Sophister years

By the Junior Sophister (third) year you will have identified areas within psychology that are of particular interest to you and you will have the opportunity to develop these interests throughout the Sophister years. In addition to a number of core advanced modules, you will choose modules from a series of advanced options. These optional modules will allow you to gain a deeper understanding of the various branches of psychology and the different ways in which research is carried out. The options you select may also help you to make decisions about your future career, if it is to be in psychology. Single honor students and TSM students majoring in Psychology also take additional modules in research methods and statistics.

On completion of the Sophister years, students must have taken at least one module from each of the five specified thematic areas. The following table shows the kind of modules which are offered within each of these areas:

BIOLOGICAL

- Neuropsychiatry, development and ageing
- Behavioural neuroscience
- Memory, synaptic plasticity and the brain
- A cognitive-neuroscience approach to understanding addiction

COGNITIVE

- Rationality and reasoning
- Creativity and imagination
- Cross-modal cognition
- Neuroimaging of cognitive function

SOCIAL

- Culture and health
- The social self: Theory and measurement
- Organisational psychology
- Psychology of criminal behaviour

PERSONALITY AND INDIVIDUAL DIFFERENCES

- Clinical cases
- Advanced individual differences
- Embodiment
- Human sexuality
- Health psychology

DEVELOPMENTAL

- Child development in changing family contexts
- Qualitative research methods
- Language and language disorders
- Applied issues in developmental psychology

As a Junior Sophister (third) year student you will carry out a group research project on an important community-based psychological issue. This will give you experience of working as a team member, of working with a range of research methodologies in psychology, and of presenting psychological research. A series of seminars in the Junior Sophister year in which staff talk directly about their own research gives you a first-hand account of the research process.

In the Senior Sophister (fourth) year a large part of your workload involves carrying out an independent research project under the supervision of a member of staff. Typically, the topic you choose to investigate will coincide with your supervisor's own research work, giving you all the benefits and support of an active and accessible research group. Many students report that this project, while challenging, is one of the most rewarding parts of the course.

Assessment

A combination of end-of-year written examinations and continuous assessment is used. In your final year, you will also submit a report of your research project.

Study abroad

Second and third-year undergraduates are eligible to apply to study for one or more terms (students usually go for a whole academic year) in certain other European psychology schools, with travel, and where appropriate, some subsistence funding provided by the EU Erasmus fund. There are no basic course charges to be paid abroad. Assessment is carried out in the host (i.e. foreign) institution and is accepted by TCD as if students were examined here. This School has bilateral agreements with several European universities where arrangements have been made for students to study.

Career opportunities

Many psychology graduates proceed to a career in professional psychology through professional training or higher education in areas related to psychology. The School of Psychology offers a range of postgraduate programmes including professional doctorates in Clinical psychology and Counselling psychology, Masters courses in Applied psychology, Applied behaviour analysis and Clinical supervision, a postgraduate diploma in Applied behaviour analysis as well as research M.Sc. and Ph.D. degrees. However, the advanced understanding of human behaviour and experience and the wide range of skills developed during the course have allowed students to enter many professions, ranging from management, marketing, advertising and accountancy, to journalism, broadcast media, teaching and recruitment. Seminars about career development will be provided by the School during the course of your degree.

Did you know?

- As well as offering high-quality teaching, the School of Psychology collaborates with a number of other disciplines through the Children's Research Centre, Neuroscience Institute and the Aerospace Psychology Research Group (all based on Trinity College's campus). Students are encouraged to become actively involved in our ongoing research, particularly in the third and fourth years of College.
  See **www.psychology.tcd.ie**

Psychology degree and professional qualifications

The single honor degree and the TSM degree (where the student majors in Psychology) both confer eligibility for graduate membership of the Psychological Society of Ireland. TSM students for whom Psychology is the minor subject (studied for only three years) are not eligible for graduate membership of the society.

Progression into the profession of psychology, however, requires further training at postgraduate level. For example, clinical and counselling psychology typically lasts for 3 years, health psychology for 2 years and occupational psychology for 1 year.

Further information

www.psychology.tcd.ie
Tel: +353 1 896 1886

Social studies (social work)

COURSE CODE: **TR084**
PLACES 2010: **45**
POINTS 2009: **450***
DEGREE AWARDED: **B.S.S.**

Garda Vetting:
Students will be required to undergo Garda vetting.
See page 23 for further details.

Course overview

This four-year programme is the only degree in Ireland that takes students straight from school through to a social work qualification. It also provides places for mature-student applicants, students on the Trinity Access Programme and international students. It aims to recruit a very diverse student body.

This degree offers you the advantage of combining an honors degree in social studies (B.S.S.) with the Irish professional social work qualification, the National Qualification in Social Work (NQSW). It is an intensive programme which aims to help you become a reflective and proactive social worker who will make a significant contribution in the health and social services.

Is this the right course for you?

Social studies is the right course for you if you know you want to work in one of the caring professions, think social work is the one closest to your interests, and believe you have the personal qualities and motivation necessary for this line of work. Potential applicants are advised to find out what social workers do before they apply.

Course content

This course introduces you to a wide range of social science subjects in the Junior Freshman (first) year, and then increases the number of social work subjects in the following three years. Teaching methods are varied and interactive and draw on your personal and practice experience.

The Freshman years

Junior Freshman (first year) subjects include introductions to social work, psychology, social policy, sociology, economic policy and political science. Optional courses in either French or German are also available (see page 13). In first year, there are approximately 12-14 hours in lectures, 3-4 hours in tutorial classes and several hours in the library each week. If you have had no relevant practice experience before starting the degree, we ask you to do 30 hours (2-3 hours per week) volunteer work during first year to build your confidence and help you to apply what you are learning to a real-world situation.

In the Senior Freshman (second) year, core subjects are social work theory and practice, law for social workers, social policy, psychology and social research. The social work courses involve field trips to relevant organisations and services. In addition, you can either continue your language studies or choose one elective course from sociology, politics, or economics.

The Sophister years

Junior and Senior Sophister (third and fourth) year subjects include:

- Family and child care studies
- Social policy
- Sociology
- Mental health
- Equality issues
- Groupwork
- Human rights law
- Social work theory and practice, including counselling skills and practice workshops
- Broad Curriculum courses (see page 12 or **www.tcd.ie/Broad_Curriculum**)

An overview of international social work is also offered in the second and third years.

Assessment

Assessment includes essays, case studies, projects, examinations and placement reports.

Professional practice

In each of the four years you will have a placement in a different social service agency under the supervision of an experienced practitioner. These placements provide you with practice experience and an opportunity to apply and develop the skills and knowledge that you have acquired in College. Placements are arranged in settings such as health service community care teams, hospital social work departments, child and family centres, probation service, and community development projects. They account for approximately 50% of your course time (215 days) over the four years and take place during summer vacations in the Freshman years and mostly in term time in the Sophister years. Overseas placements are possible (but not obligatory) within the course structure for those who are interested in gaining relevant experience in another country (e.g. Britain, North America, South Africa). You are supported in your professional development by an individual social work tutor who meets you regularly and visits you on placement from third year on.

Career opportunities

As a social studies graduate of Trinity College Dublin, you are eligible for immediate employment as a professionally qualified social worker in Ireland and internationally. You also have a good social science degree which allows you to move into policy, media, research assistant or NGO project work. As a social worker, you can continue your professional development through postgraduate courses and can move into management, research or training.

Did you know?

The B.S.S. degree is unique in

- offering direct entry to a social work qualification for school-leavers in the Republic of Ireland
- offering each student four placements in practice-related settings
- offering each student the individual support of both a college tutor and a social work tutor

Further information

www.socialwork-socialpolicy.tcd.ie
E-mail: **social.studies@tcd.ie**
Tel: +353 1 896 2001

Sociology and social policy

COURSE CODE:	**TR083**
PLACES 2010:	**28**
POINTS 2009:	**435***
DEGREE AWARDED:	**B.A.**

See also:
TR001: TSM, page 90

What is Sociology and social policy?

Sociology and social policy combines the study of social theory, social policy and social research. The programme aims to give you a thorough training in the systematic study of society and the social and economic policies utilised in different countries. At the end of your four years you should have developed both a general sociological understanding and specific expertise in various contemporary policy issues.

Is this course right for you?

This course demands both academic and vocational qualities. It is particularly relevant to students intending to pursue a career in research, social policy analysis and evaluation, management and planning within the social services, both voluntary and statutory.

Course content

The subjects studied include general social science disciplines such as economics and politics, and specialist areas such as family policy, welfare policy, criminology and the extent of poverty and inequality. The Freshman (first two) years are more general and foundational in nature, while the Sophister years (three and four) will focus more specifically on sociology and social policy. A strength of the course is that it explores these issues in a genuinely comparative context. Teaching methods include lectures, seminars and group project work.

The Freshman years

In the first and second years you will take introductory modules in economics, politics, social policy and sociology. Optional modules include statistics, law and a language (French, German, Russian, and Polish). The Senior Freshman (second) year places greater emphasis on social policy and sociology modules, as well as the introduction of social research methods. You also have the choice of taking a complementary subject, such as psychology, or you may continue your language study.

In the Freshman years, students take six modules, with typically two lectures and one tutorial per week for each module.

The Sophister years

The choice of subjects available in the Sophister (third and fourth) years typically include:

- Social theory
- Comparative welfare states
- Researching society
- Crime and social policy
- Families and family policy
- Globalisation and development
- Poverty, inequality and redistribution
- Economic sociology of Europe
- Ageing and dementia
- Gender and popular culture
- Conflict resolution, governmentality, Ireland
- Public interest law
- European public policy
- Economics of less developed countries
- Irish politics
- European Union politics
- Government and politics of the United States

Many of these modules deal specifically with Ireland and with European society. In the final year you will research and write a dissertation on a topic of your choice.

Assessment

A combination of continuous assessment, class presentations and written examinations is generally used.

Career opportunities

The range of employment opportunities in the area of social and public policy, planning and implementation is expanding all the time. Sociology and social policy is a particularly relevant degree for those interested in pursuing a career in the formulation of policy in the public service, community development and voluntary/non-profit sectors. Graduates of the programme are also employed as social researchers, policy analysts and journalists.

Postgraduate opportunities

The course provides a solid foundation for specialist postgraduate courses, in the areas of social research, social policy and social work.

Did you know?

- Research centres focussing on Ageing, Children, Intellectual Disability and Drug and Alcohol Policy are situated within the School of Social Work and Social Policy.
- In addition, one or more School members have research interests and expertise in the following areas: Crime and social policy; Poverty and social security; Housing and homelessness; Family policy; Immigration; Lone parents; History of social policy; Social work.

Further information

www.socialwork-socialpolicy.tcd.ie and **www.tcd.ie/Sociology**
Tel: +353 1 896 2001
E-mail: **socpol@tcd.ie**

World religions and theology

COURSE CODES:	**TR008**	**TR001 (TSM)**
PLACES 2010:	**29**	**24**
POINTS 2009:	**340**	**420*-560***
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

TR008 – World religions and theology is a single honor course where World religions and theology is read almost exclusively for four years.

TR001 – World religions and theology (TSM) must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects.

For subjects that combine with World religions and theology see page 90.

Single honor and TSM students follow the same principal subjects. The range of courses undertaken by TSM students, however, is less extensive.

See also:

TR001: Jewish and Islamic civilisations, page 107

Course overview

This arts course offers you the opportunity to study Judaism, Christianity and Islam, and world religions such as Buddhism and Hinduism. We begin with their origins – asking how and why these religions came into being and continue to examine their development up until the modern period, where we examine how these religions have shaped European, Middle Eastern and Western civilisation. The relevance of the course to an ever changing Ireland is self-evident. How many times a week is Islam discussed in the media? How often are events in the Middle East reported? What lessons can the Holocaust teach us about integration and tolerance for a multi-cultural society? How will new generations of Irish Muslims contribute to Irish society? What is the Muslim perspective on integration? Where will the challenges and opportunities lie? The new Leaving Certificate syllabus in Religion seriously attempts to prepare for this future and Trinity College's course also takes up the challenge of a multi-cultural Ireland. Other issues which demand our attention include the ethical challenges of scientific advancements, such as, how can the ethical stances of religions affect the discoveries and opportunities of genetic engineering?

Is this the right course for you?

You will enjoy this course and succeed in gaining an excellent and broad arts degree if you are interested in some of the following topics: Judaism, Islam, Christianity, Buddhism, Hinduism and other world religions, as well as ancient Greek and Roman history, the medieval and modern periods in Europe, North Africa and the Middle East, literature, philosophy, theology, the relationship between science and religion, ethics, political and equality issues. Trinity College's Department of World Religions and Theology offers students in Ireland a unique non-denominational context for studying religions: it is not affiliated to any church or religious body and we do not presume that you have any previous knowledge of the subject.

Course content

In your first year you will study a range of introductory courses:

- Introduction to Jewish civilisation
- Introduction to world religions (Buddhism, Hinduism, African Christianities)
- Introduction to Islamic civilisation
- The world of the Bible
- How Christianity came to Europe
- Introduction to the problems of recovering the historical Jesus
- Introduction to Christian thinking about God, the world and human life

From the second year on, you may choose from a wide range of courses depending on the individual interests you have discovered in your first year. Students may choose courses on subjects such as:

- The early history of Israel and Judaism
- The challenge of world religions
- Issues in modern Islam
- Arguments for and against the existence of God
- Judaism since the Holocaust
- The relation between modern science and religious belief
- Medical ethics, including issues such as human cloning

Students in the second year may substitute a Broad Curriculum course (see page 12 or **www.tcd.ie/Broad_Curriculum**) for one of these half year courses.

In addition you may choose to study Hebrew, Greek or Arabic.

Students have a wide variety of subject choices in the Junior and Senior Sophister (third and fourth) years. These include:

- Jews under empire: from the Babylonians to the Romans
- Early Christianity and its literature (the Gospels)
- Judaism and Islam in the medieval world
- Jewish and Christian identity and interaction in the Roman world
- The Reformation and the Enlightenment in Europe and Ireland
- Jewish identity in the modern world
- Christologies (ways of understanding Jesus)
- Christianity and world religions: the challenge of the claims of Buddhism, Hinduism and other world faiths to Christianity
- Ethics: philosophical and theological
- Religious identities in modern film and literature

Students do not just encounter religious cultures in the lecture theatre and libraries, as central to this course are visits to museums, sacred sites and cultural destinations. For example, students have visited Israel, Berlin and Poland.

Assessment

Students write between six and ten essays over the course of the year. In addition they sit four (or two for TSM students) examinations at the end of the year.

Study abroad

A student exchange programme offers you the opportunity to spend up to a year at the University of Leuven in Belgium, the University of Glasgow in Scotland or Heythrop College, London. Recently scholarships have been made available to enable students to spend a summer in Israel participating in archaeological digs.

Career opportunities

The course in World religions and theology is an arts degree and shares many features of other arts degrees in Trinity College. A knowledge of the cultures, values and histories of different societies in the global community is an asset for many types of careers. Students of World religions and theology graduate with an understanding of the challenges and opportunities which multi-cultural societies present. This understanding is of particular value to those who pursue careers in media, education, public policy making, human resources and health care professions, law and business. Graduates in World religions and theology have skills which are highly valued by potential employers and our graduates pursue the same kinds of careers as other arts graduates. Over recent years these have included careers in publishing, media, business, education, archaeology, tourism, law and psychology. Trinity College's Careers Advisory Service recently surveyed employers about what they looked for in arts graduates and top of the list came: enthusiasm for the position, personal qualities and transferable skills such as good oral communication, written communication, team work and problem solving. Students of religions have ample opportunity to develop all of these skills within a department which is relatively small and very student centred. For further information on careers for graduates in World religions and Theology see **www.tcd.ie/Religions_Theology**.

Further information

www.tcd.ie/Religions_Theology
Tel: +353 1 896 1297

Two-Subject Moderatorship (TSM)

TSM is a joint honors degree that allows students to choose two subjects (from a list of 25) and study both to honors degree level. The two subjects are taught separately and the overall workload is similar to that of a single honors degree.

Each combination of two subjects has a different CAO course code (see p. 25) and different minimum entry points (see www.tcd.ie/Admissions/undergraduate for a full listing of points per combination).

The absence of a letter or number from a grid position in the table below means that the corresponding combination of subjects is not permitted.

A: Both subjects are studied for four years

B: Both subjects are studied for three years and only one subject in the fourth year.

*: May be studied under pattern A or B.

Possible combinations

The grid below shows the possible combinations of subjects for TSM. Usually both subjects are studied for three years and one subject only is studied in the fourth and final year (pattern B). In some cases (denoted by *) students may choose pattern A (both subjects are studied equally for four years) or pattern B.

	Ancient history and archaeology	Classical civilisation	Drama studies	Early Irish	Economics	English literature	Film studies	French	Geography	German	Greek	History	History of art & architecture	Italian	Jewish and Islamic civilisations	Latin	Mathematics	Modern Irish	Music	Philosophy	Psychology	Russian	Sociology	Spanish	World religions and theology
Ancient history and archaeology						B		B			B	B	B	B	B	B						B		B	B
Classical civilisation			B			B		B			B	B	B	B	B	B		B		B		B		B	B
Drama studies		B				B	B	B		B	B		B	B		B		B	B			B	B	B	
Early Irish												B	B		B	B									B
Economics									*	*		B					*			B	B	B	*	B	
English literature	B	B	B				B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Film studies			B			B		B		B				B	B			B	B			B		B	B
French	B	B	B			B	B			B		B	B	B	B	B	B	B	B	B	B	B	B	B	B
Geography					*					*		*					*			*	B		*		
German			B		*	B	B	B	*			B	B	B	*		B	B		B		B	B	B	*
Greek	B	B	B			B						B		B	B					B		B		B	B
History	B	B		B	B	B		B	*	B	B		B	B	B	B		B	B	B		B	B	B	B
History of art & architecture	B	B	B	B		B		B		B		B		B	B	B			B	B			B	B	B
Italian	B	B	B			B	B	B		B	B	B	B			B		B		B	B	B	B	B	
Jewish and Islamic civilisations	B	B		B		B	B	B		*	B	B	B			B		B		B	B	B	B	B	
Latin	B	B	B	B		B		B				B	B	B	B			B		B		B		B	B
Mathematics					*	B		B	*	B									B	*	B				
Modern Irish		B	B			B	B	B		B		B		B	B	B			B	B		B	B	B	B
Music			B			B	B	B				B	B				B	B		B	B				
Philosophy		B			B	B		B	*	B	B	B	B	B	B	B	*	B	B		B	B	*		B
Psychology					B	B		B	B					B	B		B		B	B			B		B
Russian	B	B	B		B	B	B	B		B	B	B		B	B	B		B		B				B	B
Sociology			B		*	B		B	*	B		B	B	B	B			B		*	B			B	B
Spanish	B	B	B		B	B	B	B		B	B	B	B	B	B	B		B				B	B		B
World religions and theology	B	B		B		B	B	B		*	B	B	B			B		B		B	B	B	B	B	

Ancient history and archaeology

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**23**
POINTS 2009:	**410*-530***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Ancient history and archaeology cannot be studied as a single honor course.

It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year.

An honors degree is awarded in both subjects.

For subjects that combine with Ancient history and archaeology see page 90.

See also:

TR003: History, page 59

TR012: History and political science, page 61

TR028: Ancient and medieval history and culture, page 34

Course overview

Ancient history and archaeology are both concerned with understanding social, political and cultural experience in the past. This course offers you the opportunity to range across these two broad disciplines. You will study the Greek and Roman worlds by working with historical and literary documents alongside the material remains of ancient sites and artefacts. You also explore Greek and Roman relationships with neighbouring cultures, such as Egypt and the Near East, within the Mediterranean and beyond. There are opportunities to participate in archaeological fieldwork and in study tours to classical sites. All material is studied in translation and no knowledge of Greek or Latin is required.

Is this the right course for you?

You will enjoy this course if you are interested in studying the history and culture of the Greeks and Romans – their achievements and their profound influence on the modern world – through the complementary study of history and archaeology.

Course content

Over your four years you will develop a broad understanding of the ancient world through its history and archaeology, moving from introductory courses in the first year, to more focused thematic topics in the second and third years, and choosing from a range of specialised options in your final year. The course is taught through a mixture of lectures, practical classes and small-group seminars, which encourage lively discussion and the development of independent thinking.

The Junior Freshman year

In the Junior Freshman (first) year you will take three courses – see below. There are approximately six hours of classes in the Junior Freshman year.

- **Greek and Roman history** – an introductory survey of the Greek and Roman world from the Greek Archaic age to the early Roman Empire. The course covers topics such as politics and power, the Athenian invention of democracy, the rise of Alexander, the emergence of Rome as a major imperial power, colonisation, war and conflict
- **Greek and Roman art and architecture** – an introductory survey of the development and major artistic achievements in architecture, sculpture and painting. The course places art and architecture in its social and political context; it focuses on themes such as the use of narrative and mythology in art, urbanisation, and on the development of architectural forms such as temples, theatres and Roman baths
- **Sources and evidence in history and archaeology** – an introduction to the materials, methodologies and theories employed by historians and archaeologists. This course is specially designed to develop the practical, analytical and critical skills required to assess ancient evidence. The course mixes lectures with smaller seminars which focus on discussion and hands-on work with artefacts

The second and third years

Courses in the second and third years offer the opportunity to focus on specific themes and periods in the history and archaeology of the Mediterranean, develop a deeper awareness of methods and theory, discuss key themes of relevance to both the ancient and modern world, and to work with artefacts. Over the two years you will study topics in: Greek archaeology and history, Aegean Bronze Age archaeology, Roman archaeology and history, and History and archaeology of Roman Britain. There are also options to do practical archaeological work or an approved study tour to the Mediterranean in place of a taught course in these years. All the courses are taught by lectures and small-group seminars.

In the Greek archaeology and history courses you explore major themes such as colonisation, empire, the emergence of literacy, slavery, war and ideology, religion, and social issues such as sexuality, gender and death. These courses range in time from the development of the Greek city-states, such as Athens and Sparta, to the Hellenistic kingdoms founded in the wake of Alexander. The Bronze Age course takes you back in time to the early palatial civilisations of the Minoans and Mycenaeans.

In Roman history you will study imperial history from Augustus to the emperor Constantine, examining the period from a number of perspectives, from the emperors themselves to the lowliest of slaves, and ranging from imperial politics and military strategy, to economics and social concerns such as religion and rebellion. Roman archaeology takes you the length and breadth of the Roman world, exploring cities and urban life, frontiers and the army, trade, transport and technology. In the Roman Britain course you will assess the impact of Roman culture on Britain as a remote Roman province and consider issues such as imperialism, acculturation and identity.

The Senior Sophister year

If you decide to study ancient history and archaeology in the final year you will be able to choose two special subjects from a range on offer. Courses offered recently include Ethnicity in the ancient world; The city of Rome; Athens and Attica; The Jews of Palestine; Ancient Cyprus; Entertainment and spectacle in the Greek and Roman worlds; Goddesses of the ancient Mediterranean; Anthropology and the Greeks.

You will also write a thesis on a subject of your choice. This is an opportunity to do research which will allow you to develop independent ideas and acquire critical skills while investigating in great depth an area that particularly interests you.

Assessment

A combination of end-of-year examination and continuous assessment (e.g. essays, seminar presentations and team projects, artefact studies and short commentaries on texts) is used and a thesis is written in the final year.

Study abroad

Trinity College has strong links with many Classics departments abroad, including active participation in the Erasmus exchange programme with universities in France, Switzerland and Cyprus. This allows students the option of spending their Senior Freshman (second) year abroad.

Career opportunities

Recent graduates have entered many fields including archaeology, heritage and museum work, art restoration, teaching and higher education policy, publishing, heritage and museum work, business, accountancy and social work. Each year some of our graduates also opt to pursue a research career in history or archaeology beginning with postgraduate study in Ireland or abroad.

Did you know?

- Trinity College is the only university in Ireland to offer a course in Ancient history and archaeology.

Graduate Profile

Aoife Condit, postgraduate in Classics, TCD

"The Department of Classics in Trinity College was particularly attractive to me because I have always adored Trinity College's campus and the courses offered by the department seemed to be exactly what I wanted. I have found the course content of the AHA programme to have a good balance between the literary sources and the archaeology, allowing us, as students, to have a fuller understanding of not only the larger history but also the daily life of the ancient world. I found the seminars in second and third year particularly enjoyable for being able to sit and discuss ideas more informally, and while there were some weeks I may not have enjoyed having to do my own research, in hindsight they certainly prepared me for the more thorough research necessary in fourth year for both my courses and my thesis. Fourth year has been without doubt my favourite year; after three years of learning research techniques I have found this year based around seminars instead of lectures and my own personal research for the thesis more fun than I probably ever thought when leaving secondary school. I would give credit for this not only to the opportunity of having this year within our undergraduate degree but also to the professionalism and enthusiasm displayed by the staff for their subjects and passed on to us."

Further information

www.tcd.ie/Classics
E-mail: **classics@tcd.ie**
Tel: +353 1 896 1208

Classical civilisation

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**29**
POINTS 2009:	**455*-530***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Classical civilisation cannot be studied as a single honor course.

It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year.

An honors degree is awarded in both subjects.

For subjects that combine with Classical civilisation see page 90.

See also:

(TSM subjects): Ancient history and archaeology, page 91

Greek, page 103

Latin, page 109

TR021: Classics, page 43

Course overview

The study of Classical civilisation is concerned with the literature and culture of ancient Greece and Rome. Through the examination and contextualisation of literary works and the analysis of the main aspects of ancient history and art, you will develop a thorough knowledge of the classical world and a critical approach to textual and material culture. All texts are studied in translation and no knowledge of Greek or Latin is required.

Is this the right course for you?

If you enjoy literature; if you want to acquire an understanding of the past and its influence; if you would like to engage with the mythology, poetic imagination, depth of thought and historical value of two civilisations that shaped the western world, this is the course for you.

Course content

Over four years you will develop a broad understanding of the classical world, primarily through its literature. You will move from introductory courses in the first year to the study of specific authors, genres and themes in the second and third years. In your final year you will choose from a range of specialised options. All courses are taught by lectures and small-group seminars.

The Junior Freshman year

In the Junior Freshman (first) year you will be introduced to the critical study of ancient history, art, myth and religion, with a view to acquiring a comprehensive and interdisciplinary perspective on classical culture. There are approximately six hours of classes in the Junior Freshman year.

- **Greek and Roman history** – an introductory survey of the Greek and Roman world from the Greek Archaic age to the early Roman Empire. The course covers topics such as politics and power, Athenian democracy, the conquests of Alexander, the emergence of Rome as a major imperial power, colonisation, war and conflict
- **Greek and Roman art and architecture** – an introduction to the development and major artistic achievements in architecture, sculpture and painting. The course places art and architecture in its social and political context; it focuses on themes such as the use of narrative and mythology in art, urbanisation, and the development of architectural forms such as temples, theatres and Roman baths
- **Mythology and religion** – an introduction to the major myths and religions of the classical world using both literary and material evidence. The course also explores theories of myth and the functions of myth within society, and includes seminars designed to develop analytical and critical skills relevant to the study of literature

The second and third years

In each of these two years you will take four or five course which focus on specific authors (e.g. Homer, Virgil, Herodotus), genres (e.g. tragedy, comedy, philosophy) or themes (e.g. gender and sexuality, identity and self-image). In these courses you will analyse ancient texts both as literature and as gateways into culture and thought, discuss key themes of relevance to both the ancient and modern world, and refine your analysis of texts in their literary and cultural context through more specialised skills and methodologies. All the courses are taught by lectures and small-group seminars.

You will learn, for example, how the Greeks and Romans saw themselves and other cultures; how they tried to make sense of the world around them through philosophy and religion; how they thought about politics and ideology, ethnicity and identity, life and death.

The Senior Sophister year

If you decide to study Classical civilisation in the final year you will be able to choose two special subjects from a range on offer. Courses offered recently include Ethnicity in the ancient world; The city of Rome; Athens and Attica; The Jews of Palestine; Ancient Cyprus; Entertainment and spectacle in the Greek and Roman worlds; Goddesses of the ancient Mediterranean; Anthropology and the Greeks.

You will also write a thesis on a subject of your choice. This is an opportunity to do research which will allow you to develop independent ideas and acquire critical skills while investigating in great depth an area that particularly interests you.

Assessment

A combination of end-of-year examination and continuous assessment (e.g. essays, seminar presentations and short commentaries on texts), and a thesis in the final year.

Study abroad

Trinity College has strong links with many Classics departments abroad, including active participation in the Erasmus exchange programme with universities in France, Switzerland and Cyprus. This allows students the option of spending their Senior Freshman (second) year abroad.

Careers

Business, librarianship, museum work, publishing, teaching and theatre are some of the many fields recent graduates have entered. Recent graduates are working for companies as diverse as Smurfit Communications, Blackwell Publishing and the Gare St. Lazare Players. Students who opted to undertake further study have selected courses ranging from law and marketing to teacher training and international peace studies.

Graduate profile

Kate Higgs, trainee solicitor

"Were there really only 300 Spartans at the battle of Thermopylae? Was Alexander actually injured on a sunny day at Hydaspes as depicted by Oliver Stone? Why is the entire premise of Percy Jackson and the Lightening Thief bogus? The foundation courses in Myth and History in the first year of Classical civilisation, and the literary courses in 2nd and 3rd year would give you the answer to all of these questions. But there is far more to be gained from the study of Classical civilisation than just being the pedant in the audience who scoffs at the glaring discrepencies of Hollywood blockbuster scripts. Fourth year in Classical civilisation was the highlight of my college experience. For Irish students coming out of the Leaving Certificate education system, it can take a year or two to fully comprehend the idea of independent thought and research. But by the final year of my degree, I was fully equipped with the necessary skill-set to set about exploring an area of my own choosing (in my case Imperial Roman women who used their feminine wiles to gain power and influence), working and shaping my project into a satisfyingly substantial piece of work. Classes in fourth year in the Department of Classics centre on each lecturer's area of expertise, and are given in a less formal seminar format. This afforded us both the privilege of studying with lecturers who were imparting cutting-edge research and the opportunity to present our own ideas and opinions to our peers. It was challenging and satisfying to think hard about complex issues that are both grounded in ancient concerns and also still pertinent to the way we approach the world around us today. That is the beauty of studying the Classics as the foundation of Western culture: you learn to appreciate just how relevant many ancient theories and ideas are to modern debates."

Further information

www.tcd.ie/Classics
E-mail: **classics@tcd.ie**
Tel: +353 1 896 1208

Economics

COURSE CODES:	**TR001 (TSM)**
PLACES 2010:	**43**
POINTS 2009:	**470*-560***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Special Entry Requirements:

Leaving Certificate	OC3/HD3	Mathematics
GCSE	Grade B	Mathematics

Economics (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. However, students taking Economics in combination with Geography, German, Mathematics or Sociology have the additional option of studying both subjects in the final year. In either case, an honors degree is awarded in both subjects.

See page 90 for a list of subjects that combine with Economics. Sociology, Mathematics and Geography have been the most popular combinations with Economics in TSM.

Alternatively, Economics can be studied through the Business, economic and social studies (BESS: TR081) programme or the Philosophy, political science, economics and sociology (PPES: TR015) programme.

Within BESS, after a common first-year students choose 6 courses in the second year and then proceed to either specialise in economics or to combine economics with one of business studies, political science or sociology. For further details see page 35.

Within Philosophy, political science, economics and sociology, after a common first-year students choose 3 subjects in the second year, 2 subjects in the third year and either one or two subjects in the fourth year. For further details see page 78.

What is Economics?

Many of the problems that dominate our newspaper headlines are economic problems. Why are some countries poor with very low growth rates while a small number of countries enjoy high living standards and high growth rates? What is the role of international trade and finance in explaining these global inequalities? Why are some countries so much more successful at creating employment or reducing unemployment than other countries? Within countries, why do some people earn so much more than others, and what are the best ways to tackle and reduce poverty? Is it possible to pursue economic growth and still protect our natural and physical environments? How should governments try to raise the finance needed to pay for health and education services and income-support programmes? What is the proper role for government in the economy? Would we be better off with higher taxes but also better social services than we presently enjoy?

Any society has to address the problem of how and what to produce for its material survival, and how the goods and services that are produced should be distributed among its population. Economists explore how people and institutions behave and function when producing, exchanging and using goods and services. Economists' main motivation is to find mechanisms that encourage efficiency in the production and use of material goods and resources, while at the same time producing a pattern of income distribution that society finds acceptable.

Economists aim to develop theories of human behaviour and test them against the facts. These theories are summarised in economic models that best explain the events we observe. An important part of the work of an economist is collecting and analysing data about economic phenomena – prices, employment, costs, etc. The art of the economist is to blend together theory, data and statistical techniques to arrive at a new understanding of economic problems or to make policy recommendations that hopefully will improve the welfare and living standards of our society.

Is this the right course for you?

Economics at Trinity College appeals to students with a wide range of interests. If you are interested in current economic affairs, both national and international, in understanding how government action might be used to pursue economic and social goals such as lowering unemployment, reducing poverty or assisting the Third World, you will find the Economics curriculum stimulating. If you enjoy abstract thinking and are considering engineering or physics, for example, you should also consider Economics as a degree option.

Course content

The Freshman years

Economics teaching in the Freshman (first two) years emphasises the understanding of the basic principles of economics and the acquisition of the quantitative skills in mathematics and statistics necessary for more in-depth study. In the Junior Freshman year, students have approximately 7 hours of lectures and 3 hours of tutorials per week in economics. In the Senior Freshman year students also study the main features, performance and associated policy issues of the Irish economy in the late 1990s and early 2000s. Students have approximately 6 hours of lectures and 3 hours of tutorials per week in economics. Students will, of course, have a somewhat similar amount of lectures and tutorials in their other subject.

The Sophister years

The great strength of the Sophister (third and fourth year) programme in economics is its flexibility. There is a wide range of courses on offer and, within the framework of either a single or joint honors degree, you can put together a package that best reflects your interests and future career goals. Those interested in banking, finance or accountancy can choose a finance-orientated set of options; those interested in a career in politics, journalism or the public sector will find a range of

courses that integrate analysis and policy; those intent on a business career or a position in industry can opt for a package emphasising courses in industrial economics and industrial organisation; while those wishing to pursue a research or academic career might wish to choose the more quantitative and analytical courses.

Within the Junior Sophister (third) year students have approximately 6 hours of lectures and 2 hours of tutorials per week in economics. Within the Senior Sophister (fourth) year, students have approximately 4 hours of lectures and 1 hour of tutorials per week in economics. Students will, of course, have a somewhat similar amount of lectures and tutorials in their other subject. Those students specialising exclusively in economics have approximately 8 hours of lectures and 2 hours of tutorials per week in the Senior Sophister year.

Assessment

All courses in the first three years are assessed by a combination of continuous assessment (tests or essays) and the formal end-of-year examination. Fewer courses are required in the Senior Sophister year so as to facilitate time for more independent work. Project work is a very important component of almost all courses within the Senior Sophister year; this project work allows students to achieve a very high level of expertise in a number of specific areas and greatly facilitates students when setting out on their career paths. In addition, students specialising exclusively in economics in the Senior Sophister year may choose to complete a dissertation on a chosen topic.

Study abroad

Students have the opportunity to spend some time in their third year studying in partner institutions in Australia, France, Belgium, Germany and the Netherlands for either an academic year or for half an academic year; the majority of outgoing students go abroad for half an academic year.

Career opportunities

About a third of graduates go on to further study either in Ireland or abroad. Over the years Trinity College's economists have made distinguished careers all over the world in business, finance, journalism, law, politics, the public service, and in leading universities.

Did you know?

- The courses and programmes offered by the Department reflect its excellent record of research and publication, particularly in international macroeconomics, applied economics, economic history, and the history of economic thought.

Further information

www.tcd.ie/Economics
Tel: +353 1 896 1043

Film studies

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**30**
POINTS 2009:	**470*-560**
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Film studies cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Film studies, see page 90.

Overview

Since 2003 Trinity College has pioneered the Republic of Ireland's first specialist undergraduate Film studies course leading to an honors degree. The four years of the course allow students to sample a wide range of film movements and film styles and to become fully immersed in the intellectual currents that flow in and around them. From the very beginning, questions of history, theory and context combine with issues of close analysis and interpretation to provide a course that is both rigorous and rewarding. Through lectures, class discussions and practical courses, students will gain a wide knowledge of film as art, as industry, and as cultural practice.

Is this the right course for you?

If you enjoy watching a wide range of films and if you are interested in acquiring the critical tools to analyse them in relation to questions of style, technology, society, and industry, then this is the course for you. This course will examine film styles and movements from cinema's beginnings in 1895 right up to the present day. While you will learn about practical issues involved in film production, including how to write a script and how to produce short videos, this course is primarily academic and geared toward critical engagement with film.

Course content

Film studies covers the history and critical framework of film production and consumption from the 1890s to the present day. In the Freshman (first two) years, you will be introduced to film theory and criticism and to a very broad range of American, European and world cinemas. In the Sophister (final two) years, students choose from a wide range of Film studies options. Topics may include various national cinemas, transnational cinemas, contemporary Hollywood cinema, genre studies, documentary theory and practice, avant-garde and experimental cinema, film theory and criticism, cinema and censorship, and editing. In addition, Sophister students will complete modules on scriptwriting and digital video production.

The Freshman years

Courses taught during the Junior and Senior Freshman (first two) years may include:

- **Film theory and criticism 1 and 2**

  This course begins by studying the evolution of film as a visual language with its own specific codes and conventions. In the second-year students will build upon the issues raised by Film theory and criticism 1 and further strengthen their engagement with the subject by examining the various approaches to reading, understanding and evaluating films that have developed over the course of film history

- **American cinema from the 1890s to the 1960s**

  This course introduces aspects of American cinema in the first half of the 20th century by considering classical narrative structures, important industrial developments and key generic texts. The second part of this course introduces the student to influential examples of film criticism that American films from this period have generated. Film genres examined may include the Western, the melodrama, the musical, the gangster film and science fiction films of the 1950s

- **European and world cinemas**

  These courses serve as an introduction to a variety of national cinemas from around the world. They will examine the relationship between nations and the cinemas that they produce, or through which their national identities, societies and cultures are projected. In their second year of the degree, students will be given the opportunity for a more detailed consideration of some of the issues raised

- **Cinema and Ireland**

  This course moves from the earliest films made about Ireland, through issues of production, representation, and censorship, up to recent Irish filmmaking

There are six hours of classes and six hours of screenings per week.

The Sophister years

In the final two years of the degree course students can choose from the wide range of optional courses available to them. Topics covered may include aspects of Hollywood cinema, avant-garde and experimental cinema, documentary film, European cinemas, world cinemas, genre studies, gender and film, film theory and criticism, film style and performance, digital filmmaking, editing and other aspects of film practice. In addition, all Junior Sophister (third year) students are introduced to the principles of script-writing and digital video production.

Assessment

Film studies is assessed by coursework and examinations.

Career opportunities

A degree in Film studies offers career opportunities in many areas such as the film industry; television; journalism; digital media; film reviewing and criticism; arts administration; advertising; marketing. Recent graduates of Film studies at TCD have gone on to be involved in the film industry in a number of ways, from directing feature length films to editing, scriptwriting, production and administration. A number of our graduates have gone on to further study in film and associated areas. This degree also offers opportunities in the many general areas open to arts graduates, such as administration, teaching, civil and public service, etc.

Further information

www.tcd.ie/film
Tel: +353 1 896 2617
E-mail: **filmstds@tcd.ie**

French

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**84**
POINTS 2009:	**400*-560***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Special Entry Requirements:

Leaving Certificate	HC1	French
Advanced GCE (A-Level)	Grade C	French

French (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with French see page 90.

Alternatively, French may be selected as one of the two languages studied in the European studies programme or studied as the chosen language of either the Computer science, linguistics and a language, the Business studies and a language or the Law and a language degree programmes.

See also:

TR011: Computer science, linguistics and French, page 118

TR018: Law and French, page 68

TR024: European studies – French with German/Italian/Polish/Russian or Spanish, page 56

TR085: Business studies and French, page 39

Is this the right course for you?

French literature, culture and civilisation have a long and distinguished history. If you are interested in the possibility of exploring this dynamic society and in finding out more about other cultures where French is spoken, in Europe and throughout the world, French at Trinity College will appeal to you.

Course overview

French, read in combination with another subject, is designed to provide you with a thorough grounding in all aspects of French. The result is that you leave university with a high standard of fluency in the language, both written and spoken, and with a wide knowledge of major aspects of French literature, culture and society. The development of reading, analytical, and critical skills, in the form of both oral tasks and written exercises, also forms an integral part of this course.

Course content

Language instruction – including computer-based elements – forms the backbone of the teaching programme and students are expected to progress to a high level of competence in the four basic linguistic skills of listening, speaking, reading and writing. This includes nurturing an ability to cope with different registers and styles of written and spoken French and to reflect critically on the way the language is used and structured. Examples of optional subjects available over the course of the four years include French linguistics, literature, ideas and politics.

The Freshman years

The programme in the Junior Freshman (first) year includes an introduction to many aspects of contemporary France, the French language and literature. First year subject areas include:

- French grammar and grammatical analysis
- Comprehension of the written and spoken language
- Contemporary short stories, novels, theatre, films and a specially prepared anthology of French poetry

You will spend approximately five hours each week working on language and grammar and approximately two hours each week studying literature.

In the Senior Freshman (second) year, you will build on this foundation by following courses in the history of French ideas and ideologies, French literature, French linguistics and in the practice of the French language itself.

The Sophister years

In the Junior and Senior Sophister (third and fourth) years, a wide variety of optional subjects leading on from courses previously undertaken in the Freshman (first and second) years are available. These range from classical and contemporary French literature to politics, society and identity in France and other Francophone countries, to French travel writing. If you elect to study French in your final year you will research and write a dissertation in English or French on a subject of your choice in consultation with a supervisor.

Assessment

Written, oral and aural examinations, in addition to essays and continuous assessment of your coursework, all contribute to assessment. Senior Sophisters (fourth-year students) will also research and write a final-year dissertation.

Study abroad

A minimum stay of two months in a French-speaking country is required over the duration of your course. Many students opt to spend their second or third year at a university in France within the framework of an Erasmus exchange programme. There are exchange agreements between Trinity College and universities in Orléans and Paris.

Career opportunities

Recent graduates in French have gone on to work in areas as diverse as secondary and university teaching, arts administration, translation and interpreting, diplomacy, tourism, publishing, and investment banking. Increasing numbers of graduates go on to take further postgraduate courses in areas such as law, marketing and business. The combination of an arts degree and a more vocational or professional programme of studies has proved to be highly attractive to prospective employers.

Further information

www.tcd.ie/French
Tel: +353 1 896 1553

Geography

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**45**
POINTS 2009:	**380-560***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Geography (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects.

For subjects that combine with Geography see page 90.

Alternatively, Geography can be studied through the general-entry Science programme – TR071. After two years of general science study, students may opt to specialise in Geography for their third and fourth years. For special entry requirements to TR071 – Science see page 134.

Geography may also be studied with Political science, see page 81, or as part of the single honor course Earth sciences (TR077), see page 157.

Why study Geography?

Geography is truly interdisciplinary as it spans a broad spectrum of the social, biological, informational and physical sciences. As the world becomes interconnected geographers are well placed to bring their understanding and skills to bear on social and environmental issues. An important attribute of geographers, and one that is highly regarded in the workplace, is their ability to combine multidisciplinary knowledge with a wide range of transferable skills, including critical thinking, report-writing, numeracy and IT-literacy. These can be applied to careers which directly incorporate a geographic dimension, such as environmental consultancy or urban planning, and to wider areas such as business and public service.

Course content

The Junior Freshman (first year) TSM Geography modules aim to provide a flavour of the breadth of the subject, focusing on materials that are dealt with in greater depth in later years, while challenging students to integrate the different approaches and forms of knowledge that characterise the modern discipline of geography.

In the Junior Freshman year, students take three introductory modules in geography:

- **Physical geography:** provides a basic introduction to the large-scale controls and processes that have influenced the physical landscape of the earth, and that have provided the conditions for the evolution of a variety of life forms, species, habitats and ecological systems including those that led to and subsequently influenced human existence
- **Human – Environment:** introduces key concepts relating to nature, culture and the environment, and interactions between humans and their environment, using case studies from the fields of conservation, environmental degradation and environmental hazards
- **Human:** introduces the subjects of global urbanisation, the socio-spatial structure of the world economy and the processes generating variations and changes in levels of human well-being. It also examines aspects of globalisation including the realities of living in a 'shrinking world' and the emergent 'black holes of globalisation', as well as considering the nature of development

Participation in lectures and seminars is in line with other TSM subjects. Certain practical exercises are completed outside the allocated class time.

The Senior Freshman (second year) geography modules cover issues relating to cultural, economic and historical geography, and to natural and human-modified environmental processes and systems. Research skills are developed further through the collection and analysis of geographical data module which includes a fieldwork component.

The Sophister years

For details of modules in the Junior and Senior Sophister (third and fourth) years, see page 147. Students may also opt to take a number of modules outside Geography in their Sophister years.

Assessment

A combination of continuous assessment and end-of-year examination is used.

Study abroad

There are opportunities for students to spend all or part of the third year studying abroad at Exeter, Bordeaux, Paris, Utrecht or Stockholm universities.

Career opportunities

A wide range of career options is potentially available to Geography graduates. The combination of a broad-based discipline and training in highly relevant transferable skills is valued in today's job market, where adaptability and flexibility are widely regarded as assets. Careers taken up by graduating Geography students in recent years include urban and regional planning, environmental consultancy and research and teaching as well as positions in such areas as financial services (including insurance), foreign affairs, leisure and tourism and overseas development.

Did you know?

- In recent years, Sophister year Geography students have been involved in fieldwork in Iceland, Mallorca and Zambia, and in making digital video documentaries as part of their assessed work.

Further information

www.tcd.ie/Geography
Tel: +353 1 896 1576

German

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**32**
POINTS 2009:	**355-530***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

SPECIAL ENTRY REQUIREMENTS:

Leaving Certificate	HC1	German
Advanced GCE (A-Level)	Grade C	German

German (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects.

For subjects that combine with German see p. 90.

See also:

TR010: Computer science, linguistics and German, p. 118

TR019: Law and German, p. 68

TR024: European studies – German with French/Italian/Polish/Russian or Spanish, p. 56

TR086: Business studies and German, p. 39

Why study German?

German is spoken by some 100 million Europeans. Contemporary Germany is the geographical and cultural link between east and west and the largest economy in an increasingly integrated Europe. Studying German at an in-depth level is, therefore, an excellent preparation for the world of work and is likely to make you highly employable.

Modern Germany is a society in transition, more and more ethnically diverse, and engaged in lively debate about its own past and about its political, social and economic responsibilities in Europe and the world. Germany's history has been rich, dynamic and troubled, and this history shapes the contemporary society and culture in countless ways. Reflection on and critical engagement with these experiences have been central to German writing and thought since the earliest times, and remain very much so today. All these factors make studying German exciting and challenging.

Is this the right course for you?

When studying German within the two-subject moderatorship course you have the opportunity to acquire advanced competence and fluency in German language and to develop reading skills and methods of research, description and analysis in such areas as literature, history, culture and society of the German-speaking countries and the linguistics of German. You will be encouraged to develop specialist interests by choosing from a wide range of optional subjects. All this in a small, friendly, award-winning department with a wide extra-curricular programme including a theatre group, debating, and film evenings.

Course content

The Freshman years

There are approximately 10 hours of classes per week in the Junior Freshman (first) year. The course covers three key areas:

- **Language programme:** this builds on the written, oral and aural skills you acquired at school and develops both fluency and accuracy in expression. Your language learning is supported by a specially developed e-learning programme on the departmental website: try it at **http://www.tcd.ie/Germanic_Studies/jfgermanlanguagewebsite/INDEX.HTM**
- **Area studies** provides an introduction to society, political and cultural issues and current affairs in modern Germany, Austria and Switzerland
- **Literature and textual studies** introduces you to key aspects of modern German literature and to reading and analysing literary and non-literary texts in German

In addition to your on-going language classes, the Senior Freshman (second) year introduces you to German cultural history (exploring topics such as the development of the nation, the role of religion and religious difference, militarism and pacifism, and Nietzsche and Freud as key thinkers of modernity), Germanic linguistics and medieval literature. You can also begin to develop your own special fields of interest within the programme, choosing from a range of seminars with a literary, linguistics, cultural or historical focus.

The Sophister years

In the Junior Sophister (third) year, alongside your language classes, you will follow a module in the social history of German literature and choose from a number of seminars in specialist areas of literature, linguistics, cultural and historical studies.

If you elect to study German in your Senior Sophister (fourth) year the scope for developing these specialist interests is extended through advanced options that link undergraduate study to the research expertise of staff. In the Senior Sophister year, you will also research and write a dissertation on a topic of your own choice. This can be drawn from literature, intercultural communication or some other aspect of the course that you have particularly enjoyed and is an exciting opportunity to develop your interests in depth.

Assessment

At all levels, you will be assessed by a combination of project and essay work and end-of-year written, oral and aural examinations. Senior Sophister students also write a dissertation.

Study abroad

As a TSM German student, you must spend at least two months in a German speaking country, but in practice you are likely to spend longer, typically an academic year. Options include studying at a German university within an Erasmus or similar exchange programme in your second year or between third and fourth year (our links include Cologne, Göttingen and Konstanz, but you can also make individual arrangements), or taking a year out to work in a company or as a language assistant in a school.

Career opportunities

People with languages degrees are found up to senior level in all kinds of rewarding careers. Employers value not only the language skills of German graduates, but also their 'transferable skills': the mix of accuracy and creativity, confidence and sensitivity which marks the advanced linguist, and the maturity, flexibility and broadened understanding that comes from engaging with another culture and from the experience gained abroad. Recent graduates are working for employers such as Google, Deutsche Bank and Enterprise Ireland as well as in telecoms, IT, education, public service, the media, and universities in Ireland, Europe and North America.

Graduate Profile

Susan O'Malley, TSM German and Economics; Associate Manager, Global Advertiser Operations with Google Ireland

"I chose German at Trinity College since I had always been fascinated by German cultural studies and history and wanted to take a broad range of courses which would stretch my thinking; the excellence of the staff was also an important factor in my decision. The critical thinking, research and communication skills which the TSM degree helped me to develop have since proven invaluable in my career. I attended the University of Potsdam during my year abroad and because of my strong interest in media, technology and advertising, I completed an internship with KPMG prior to graduating. After graduating, I joined Google and worked in the company's online advertising solutions. From this, my role moved to focus on industry analysis and business planning for the Dublin operations. I currently work in a strategy, policy and communications role. I've also spent some time working at the company's global headquarters in California."

Did you know?

- Trinity College's Department of Germanic Studies has won three prestigious awards in recent years: The European Award for Languages (2005), the Kuratorium award of German-Irish Chamber of Industry and Commerce (2007) and the Ireland Fund of Germany Prize (2008).
- We offer Peer Tutoring and GradLink programmes that enable you to learn from the experiences of other undergraduates and graduates of the Department.

Further information

www.tcd.ie/Germanic_Studies
Tel: + 353 1 896 1373

Greek

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**8**
POINTS 2009:	**450-530***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	In Greek or in a language other than English
Advanced GCE (A-Level)	Grade C	In Greek or in a language other than English

Greek (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

Greek may be studied from either beginners' or a more advanced level.

For subjects that combine with Greek see page 90.

Greek and Latin may be studied together in the single honor Classics degree – TR021 (see page 43).

Course overview

The study of Greek is concerned with the language, literature and thought of ancient Greece. Through the reading of literature in the original Greek and the examination of key aspects of ancient history, you will develop a thorough knowledge of the classical world and a critical approach to textual and material culture.

Is this the right course for you?

If you are interested in studying the language, the poetic imagination, the depth of thought and the historical value of a civilisation that shaped the Western world, you will enjoy this course.

Course content

Over the four years you will read texts in a wide variety of genres, including epic, tragedy, comedy, philosophy, oratory and historiography. Whether you are continuing your language studies or taking Greek as a beginner, you will engage with ancient texts both as literature and as a gateway into culture and thought. Through the critical study of ancient history, myth and religion, you will acquire a comprehensive and interdisciplinary perspective on classical culture. For all of your language-based courses the groups will be small, stimulating lively discussion, analytic skills, and the development of independent thinking.

The Freshman years

In the Junior Freshman (first) year you will be introduced to the critical study of ancient history, culture and literature. The language-based courses you take depend on whether you have studied Greek before or are taking it up as a beginner; your choice of a topic in ancient history and culture depends on your TSM combination. In your Senior Freshman (second) year you continue the study of Greek language, literature and history. Courses are taught by lectures and small-group seminars. There are six to eight contact hours per week.

- **Greek and Roman history** – an introductory survey of the Greek and/or Roman world, from the Greek Archaic age to the early Roman Empire. The course covers topics such as politics and power, Athenian democracy, the conquests of Alexander, the emergence of Rome as a major imperial power, colonisation, war and conflict
- **Mythology and religion** – an introduction to the major myths and religions of the classical world using both literary and material evidence. The course also explores theories of myth and the functions of myth within society
- **Sources and evidence in history and archaeology** – an introduction to the materials, methodologies and theories employed by historians and archaeologists

Greek for beginners

- **Elementary Greek** – an intensive introduction to the ancient Greek language. By the end of the year you will be ready to read original texts and your command of the language will be at the same level as those who have studied Greek before entering university

Greek for non-beginners

- **Greek authors** – text-based courses introduce you to the critical reading of Greek literature through a close examination and contextualisation of the oldest and most influential works in western literature: Homer's Iliad and Odyssey, the Histories of Herodotus, the tragedies of Euripides and Sophocles and the philosophical prose of Plato
- **Greek language** – this course allows you to practice your translation skills and to study the language of authors not covered in the text-based courses

The Sophister years

In the Sophister (third and fourth) years you will progress to an in-depth study of topics in Greek literature, history and culture. You will refine your analysis of texts in their literary and cultural context through more specialised skills and methodologies, such as textual criticism, linguistics and literary theories. Topics may include Polybius and the Hellenistic Empire, Archaic poetry, Greek comedy, and Hellenistic poetry. In your Junior Sophister (third) year, you will continue to study ancient history, while separate language classes provide additional assistance in improving your fluency and accuracy in reading and interpretation. In the Senior Sophister (fourth) year you will also study a special topic in Classical culture and write a thesis on a subject of your choice. The thesis is an opportunity to do research which will allow you to develop independent ideas and acquire critical skills, while investigating in great depth an area that particularly interests you.

Assessment

A combination of end-of-year examination and continuous assessment (e.g. essays, unseen translations and other language tests, textual commentaries, seminar presentations), and a thesis in the final year.

Study abroad

Trinity College has strong links with many Classics departments abroad, including active participation in the Erasmus exchange programme with universities in France, Switzerland and Cyprus. This allows students the option of spending their Senior Freshman (second) year abroad.

Career opportunities

Recent graduates are working in many fields including art restoration, banking and accountancy, business, civil service, computers, journalism and broadcasting, law, librarianship, publishing, teaching and theatre.

Further information

www.tcd.ie/Classics
E-mail: **classics@tcd.ie**
Tel: +353 1 896 1208

History of art and architecture

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**40**
POINTS 2009:	**400-560**
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

History of art and architecture (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with History of art and architecture see page 90.

See also:

TR003: History, page 59

TR012: History and political science, page 61

TR028: Ancient and medieval history and culture, page 34

Is this the right course for you?

History of art and architecture appeals to a wide range of students, as well as those with special interests in art, archaeology and history. It will provide you with an effective way of developing intellectual rigour and of acquiring the critical and communication skills traditionally associated with an arts degree. You do not need any previous knowledge of art history or any practical skill in art to take this course.

Course content

This course teaches you how to analyse works of art and how to understand their historical significance. It will enable you to develop an awareness of the environment while also providing you with a deeper sensitivity to the culture and ideals of other nations.

You will take a broad range of courses covering the history of painting, sculpture and architecture from ancient Greece to modern times. Topics available include early Irish art, the art of the Italian Renaissance, the great Gothic cathedrals of Europe, the architectural splendours of the Georgian era and the artistic achievements of the twentieth century. There are also courses on non-Western art, such as Japanese painting.

Trinity College offers excellent facilities for the study of history of art and architecture and its own distinguished buildings and collections are integral to the course. The National Gallery and National Museum are located nearby and provide the venues for group and teaching activities. Other institutions such as the Museum of Modern Art and the Chester Beatty Library are also used. As a student, you will be expected to become familiar with various collections and buildings in Dublin.

The Junior Freshman year

In the Junior Freshman (first) year you will take three courses:

- **An introduction to European painting**
  As well as providing a historical survey, covering major periods such as the Italian Renaissance and French Impressionism, this course will introduce you to the methods and techniques of art history. These include the critical analysis of paintings, the importance of iconography, and the different technical methods used by artists from the Book of Kells to the present day
- **An introduction to European architecture**
  This course provides you with the knowledge and skills needed to understand and appreciate architecture. It includes an examination of different building materials and architectural drawings as well as training in the visual analysis of buildings. These topics are part of a historical survey of Western architecture, which ranges from Greek temples to the present day. Special attention is given to important building types such as the medieval monastery or the country house
- **An introduction to the practice of Art history**
  This course provides an introduction to art-historical methodologies and issues, and is based around written and web-based assignments

These courses amount to a weekly total of four lectures, two seminars and a two-hour small-group session.

Years two, three and four

Over the course of the Senior Freshman, Junior and Senior Sophister years, you will have the opportunity to take courses in the following areas:

- Romanesque art and architecture
- The Gothic cathedral in France
- Painting and sculpture in 17th-century Europe
- Painting and sculpture in Renaissance Italy
- Renaissance and baroque architecture in Italy
- Architecture in the 19th and 20th centuries
- 18th century painting in Britain and Ireland
- Art in France 1850-1900
- Themes in Northern painting
- Modernism and post-modernism
- The arts of Japan
- Approaches to art history and criticism

These courses comprise a weekly lecture and a seminar in alternate weeks.

The special subject

If you elect to study History of art and architecture in the Senior Sophister (fourth) year, you will select a subject dealing with art-historical issues at a more specialised level. Where possible, you will be given the opportunity of studying primary sources and particular emphasis is placed on personal observation and interpretation of original works of art, whether painting, sculpture or architecture. Examples of special subject topics include Irish art in the golden age c. 650-950, Irish architecture and ornament 1700-1830, Art and religion in the Hispanic world, painting in Ireland and Britain 1800-1900, and Irish modern and contemporary art.

Study abroad

Senior students have the chance to participate in a study week abroad. Cities visited in the past include Paris, Madrid, Vienna, Rome and Florence. In addition, you may apply to study at a university in France, Germany, Italy or Spain during the Senior Freshman (second) year as part of the Erasmus programme. As you will be required to attend lectures in the language of your host institution, you must possess the necessary linguistic fluency.

Assessment

Assessment is by coursework, end-of-year examinations, and a final-year dissertation.

Career opportunities

In recent years graduates have been employed in universities, galleries, museums, publishing houses, art salesrooms, architectural heritage and journalism in Ireland and abroad, as well as in a broad range of administrative, commercial and media-based employment outside the field of art and architectural history.

Did you know?

- The Douglas Hyde Gallery, one of Ireland's leading contemporary art galleries, is situated in Trinity College. The College itself has a major collection of paintings and sculpture, and a student committee assists the curator in managing this collection.

Further information

www.tcd.ie/History_of_Art
www.douglashydegallery.com
Tel: +353 1 896 1995

Italian

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**30**
POINTS 2009:	**400-560***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	In Italian or in a language other than English
Advanced GCE (A-Level)	Grade C	In Italian or in a language other than English

Italian (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Italian, see page 90.

Alternatively, Italian may be selected as one of the two languages studied in the European studies programme.

Italian can be studied *ab initio* (from beginner level) within both TSM and European studies.

See also:

TR024: European studies – Italian with French/German/Polish/Russian or Spanish, page 56

Course overview

Having played a leading role in European civilisation since the Middle Ages, Italy today is one of the major economies of the world, famous for its style, design and innovation. Many people are fascinated by Italy, its people and culture, and Trinity College's courses give you the opportunity to develop your interest in a systematic way. Our courses also help you meet the challenge of mastering a new language; you can take Italian at Trinity College as a complete beginner. There is close contact between students of Italian and staff; you will receive individual attention and will be encouraged to discuss your progress at all times.

Is this the right course for you?

Italian is an excellent subject choice if you have a natural flair for languages, if you enjoy exploring foreign countries and their cultures, or if you want to follow a career in the multilingual Europe of today.

Course content

The Freshman years

In the Junior Freshman (first) year, you will follow an intensive beginners' course in grammar, translation, conversation, audio and computer-based language learning.

There are about eight classroom hours per week, mostly devoted to language learning including grammar, conversation and other activities, together with assignments to be carried out independently. You will be introduced to modern Italian poetry, drama and fiction in your second and third terms.

In the Senior Freshman (second) year you continue with language courses and the study of core literary texts including Dante's *Inferno*, Machiavelli's *Prince*, Petrarch's love poetry and the plays of Pirandello. In addition you will take two optional modules in areas of particular interest, such as Italian fascism, 18th-century theatre and the language of cultural tourism, or you can choose from a wide range of options in linguistics and in the College's 'Broad Curriculum' programme (see page 12 or **www.tcd.ie/Broad_Curriculum**).

The Sophister years

The Junior and Senior Sophister (third and fourth) years focus on major authors of the medieval, Renaissance and later centuries, and on theory and practice of translation. Options are available in modern Italian literature, history and society. There is a continuing emphasis on strengthening your language proficiency and developing higher-level skills in translation, text editing and writing.

In your final year the programme includes courses on Italian language varieties, the works of Dante and Boccaccio, the history of language and a selection of optional topics for study in depth. In addition, you will research and write a substantial final-year dissertation on an agreed topic.

Assessment

There is a combination of written, oral and aural examinations, in addition to essays and continuous assessment of coursework and assignments.

Study abroad

A minimum two-month stay in Italy will be required at some time over the duration of your course. You may apply to spend the second year at a European university through the Erasmus programme. There are links with the Universities of Bologna, Trieste and Pavia.

Career opportunities

Our graduates have moved into all types of jobs: journalism, translation, theatre, business, law, public administration, import-export, writing, PR, diplomacy, corporate recruitment, finance, football management and teaching. Some have gone to live and work in Italy. Of those who opted for further study, some have selected postgraduate courses in arts, social sciences, and European studies, while others have opted for training in law, marketing, journalism or teaching.

Further information

www.tcd.ie/Italian
Tel: +353 1 896 2062
E-mail: **italian@tcd.ie**

Jewish and Islamic civilisations

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**10**
POINTS 2009:	**405-560***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Jewish and Islamic civilisations cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honors programme. An honors degree is awarded in both subjects.

For subjects that combine with Jewish and Islamic civilisations see page 107.

See also:

TR001/008: World religions and theology, page 88

What is Jewish and Islamic civilisations?

Starting with how the world of the Bible and the Ancient Near East was the birthplace of Judaism, Christianity and Islam, this course charts the historical and philosophical development of Jewish and Muslim religious and cultural traditions. All periods of history are examined through texts as well as archaeological, artistic and architectural evidence. Religious literature is studied alongside philosophical and scientific treatises, poetry, biography, novels, historical writings, decrees and charters, art, and film.

Is this the right course for you?

You will enjoy this course and succeed in gaining an excellent and broad arts degree if you are interested in the origins of the Bible, early Christian communities and the cultural and religious expressions of Judaism and Islam from the ancient world to present times. A range of student activities will be available to you and often these activities help you to develop precisely the kind of skills employers look for.

Students do not just encounter religious cultures in the lecture theatre and libraries, as central to this course are visits to museums, sacred sites and cultural destinations. For example, students have visited Israel, Berlin and Poland.

Trinity College's Department of World Religions and Theology offers students in Ireland a unique non-denominational context for studying religions: it is not affiliated to any church or religious body and we do not presume that you have any previous knowledge of the subject.

Course content

This course offers you the opportunity to study the world that produced the Bible, and Jewish and Islamic culture and history from their origins – asking how and why these religions came into being – to their modern contexts, where we examine how religion has shaped European, Middle Eastern, North African and Western civilisation.

In your first year you will study a range of introductory courses, including:

- Introduction to Jewish civilisation from antiquity to the modern period
- Introduction to Islamic civilisation
- The world of the Bible

From the second year on, you may choose from a range of courses depending on the individual interests you have discovered in your first year. You can choose to combine a range of philosophical and historical courses, as well as cover all periods of history. In addition you may decide to study Greek or Hebrew. In second year you can avail of the opportunity to take a course outside the Department of Religions in Trinity College's Broad Curriculum programme (see page 12 or **www.tcd.ie/Broad_Curriculum**).

Assessment structure

Students write between three and six essays over the course of the year. In addition they sit two examination papers at the end of the year.

Did you know?

- Trinity College is the only university in Ireland that offers a course in Jewish and Islamic civilisations.

Study abroad

A student exchange programme offers you the opportunity to spend up to a year at the University of Leuven in Belgium, the University of Glasgow in Scotland or Heythrop College, London. Recently scholarships have been made available to enable students to spend a summer in Israel participating in archaeological digs.

Career opportunities

The course in Jewish and Islamic civilisations is an arts degree and shares many features of other arts degrees in Trinity College. Graduates have skills which are highly valued by potential employers and they pursue the same kinds of careers as other arts graduates (for further information see **www.tcd.ie/Religions_Theology**). Trinity College's Careers Advisory Service recently surveyed employers about what they looked for in arts graduates and top of the list came: enthusiasm for the position, personal qualities and transferable skills such as good oral communication, written communication, team work and problem solving. Students of Jewish and Islamic civilisations have ample opportunity to develop all of these skills within a department which is relatively small and very student centred. In addition, a knowledge of the cultures, values and histories of different societies in the global community is an asset for many types of careers.

The relevance of this course to an ever changing Ireland is self-evident. How many times a week is Islam discussed in the media? How often are events in the Middle East reported? What lessons can anti-Semitism teach us about integration and tolerance for a multi-cultural society? How will new generations of Irish Muslims contribute to Irish society? How can a knowledge of the origins of Judaism, Christianity and Islam promote a better understanding for today? The new Leaving Certificate syllabus in Religion seriously attempts to prepare for this future and Trinity College's course in Jewish and Islamic civilisations also takes up the challenge.

Further information

www.tcd.ie/Religions_Theology/herzogcentre
Tel: +353 1 896 1297

Latin

COURSE CODE: **TR001 (TSM)**
PLACES 2010: **10**
POINTS 2009: **430-530***
DEGREE AWARDED: **B.A.**
TSM points: See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	In Latin or in a language other than English
Advanced GCE (A-Level)	Grade C	In Latin or in a language other than English

Latin (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Latin see page 90.

Latin may be studied from either beginners' or a more advanced level.

Latin and Greek may be studied together in the single honor degree Classics – TR021 (see page 43).

Course overview

The study of Latin is concerned with the language, literature and thought of ancient Rome. Through the reading of literature in the original Latin and the examination of key aspects of ancient history you will develop a thorough knowledge of the classical world and a critical approach to textual and material culture.

Is this the right course for you?

Trinity College is the only university in Ireland with a Chair in Latin, and it has a long and distinguished tradition in teaching and research in Classics. If you are interested in studying the language, the poetic imagination, and the historical value of a civilisation that shaped the Western world, you will enjoy this course.

Course content

Over the four years you will read texts in a wide variety of genres, including epic, comedy, love poetry and historiography. Whether you are continuing your language studies or taking Latin as a beginner, you will engage with ancient texts both as literature and as a gateway into culture and thought. Through the critical study of ancient history, myth and religion you will acquire a comprehensive and interdisciplinary perspective on classical culture. For all of your language-based courses the groups will be small, stimulating lively discussion, analytic skills, and the development of independent thinking.

The Freshman years

In the Junior Freshman (first) year you will be introduced to the critical study of ancient history, culture and literature. The language-based courses you take depend on whether you have studied Latin before or are taking it up as a beginner; your choice of a topic in ancient history and culture depends on your TSM combination. In your Senior Freshman (second) year, you continue the study of Latin language, literature and history. Courses are taught by lectures and small-group seminars. There are six to eight contact hours per week.

- **Greek and Roman history** – an introductory survey of the Greek and/or Roman world, from the Greek Archaic age to the early Roman Empire. The course covers topics such as politics and power, Athenian democracy, the conquests of Alexander, the emergence of Rome as a major imperial power, colonisation, war and conflict
- **Mythology and religion** – an introduction to the major myths and religions of the classical world using both literary and material evidence. The course also explores theories of myth and the functions of myth within society
- **Sources and evidence in history and archaeology** – an introduction to the materials, methodologies and theories employed by historians and archaeologists

Latin for beginners

- **Elementary Latin** – an intensive introduction to the Latin language. By the end of the year you will be ready to read original texts and your command of the language will be at the same level as those who have studied Latin before entering university

Latin for non-beginners

- **Latin authors –** text-based courses introduce you to the critical reading of Latin literature through a close examination and contextualisation of Roman poetry and prose from the early republican to the imperial period. Texts include the comedies of Plautus and Terence, Cicero's famous speech On Behalf of Caelius, Virgil's Aeneid, the love poems of Catullus and Ovid, and the letters of Pliny the Younger
- **Latin language** – this course allows you to practice your translation skills and to study the language of authors not covered in the text-based courses

The Sophister years

In the Sophister (third and fourth) years you will progress to an in-depth study of topics in Roman literature, history and culture. You will refine your analysis of texts in their literary and cultural context through more specialised skills and methodologies, such as textual criticism, linguistics and literary theories. Topics may include Augustan poetry, Latin historians, Satire, Desire and the body. In your Junior Sophister (third) year you will continue to study ancient history, while separate language classes provide additional assistance in improving your fluency and accuracy in reading and interpretation. In the Senior Sophister (fourth) year you will also study a special topic in Classical culture and write a thesis on a subject of your choice. The thesis is an opportunity to do research which will allow you to develop independent ideas and acquire critical skills while investigating in great depth an area that particularly interests you.

Assessment

A combination of end-of-year examination and continuous assessment (e.g. essays, unseen translations and other language tests, textual commentaries, seminar presentations) is used, and a thesis is written in the final year.

Study abroad

Trinity College has strong links with many Classics departments abroad, including active participation in the Erasmus exchange programme with universities in France, Switzerland and Cyprus. This allows students the option of spending their Senior Freshman (second) year abroad.

Career opportunities

Recent graduates are working in many fields including art restoration, banking and accountancy, business, civil service, computers, journalism and broadcasting, law, librarianship, publishing, teaching and theatre.

Further information

www.tcd.ie/Classics
E-mail: **classics@tcd.ie**
Tel: +353 1 896 1208

Russian

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**36**
POINTS 2009:	**355-530***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	In a language other than English
Advanced GCE (A-Level)	Grade C	In a language other than English

Russian (TSM) cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects.

For subjects that combine with Russian see page 90.

See also:

TR024: European studies – Russian with French/German/Italian/Polish or Spanish, page 56

TR087: Business studies and Russian, page 39

TR089: Business studies and Polish, page 39

Why study Russian?

Russian is the native language of nearly 140 million people and is one of Europe's most important languages. Today Russia is a rapidly changing society, in which the adoption of a market economy and principles of openness have created unprecedented opportunities for work, study and travel for Trinity College students and graduates. Russian writers, musicians and artists have made a considerable contribution to European culture; Russian history has helped shape Europe as we know it today: exploring Russia's past and present helps understand the interaction between Europe's eastern and western traditions.

Is this the right course for you?

You will find the Russian programme exciting and rewarding if you enjoy language study, are interested in unfamiliar cultures, have a sense of adventure and are not afraid of a challenge.

Course content

Most students start Russian from scratch with an intensive first year language course. Special provisions are made for students with prior knowledge of Russian (heritage speakers, near-native speakers or those who have an entrance qualification in Russian).

In addition to language study, you will take courses on aspects of Russian literature, Russian history and Russian culture, society and politics. In later years, you will also have the option to study Slavonic linguistics and the Polish language.

The Freshman years

In the Freshman (first and second) years, classes cover three main areas:

- Russian language: develops fluency in reading, writing, speaking and listening
- Russian literary and cultural studies
- Russian area studies

In the first two years there are approximately ten hours of class time, divided equally between language work and literary, cultural or area studies.

The Sophister years

In addition to advanced language study, the Sophister (third and fourth) years of your course offer a wider range of subject choices, allowing you to choose options that reflect your own particular interests. These include Russian literature, history of Russia and the Soviet Union, Russian and Slavonic linguistics, Russian society and politics, and the Polish language.

If you elect to study Russian in your final year you will also research and write a dissertation on a subject of your own choice.

Assessment

Assessment is by a combination of continuous assessment of your language work, language tests and essays, in addition to written and oral examinations at the end of each year.

Study abroad

You will be encouraged to spend up to a year studying in Russia after second or third year. Trinity College has close connections with universities and institutes in Moscow, St. Petersburg and in a number of provincial towns.

Career opportunities

Career paths followed by recent graduates include: arts and media; business and finance; civil and public service; education; international organisations (UN, EU, NGOs); IT and telecommunications. Each year some graduates also opt to pursue a research career beginning with postgraduate study in Ireland or abroad.

Did you know?

- Trinity College is the only university in Ireland where you have the opportunity to study Russian to degree level.

Further information

www.tcd.ie/Russian
Tel: +353 1 896 1896

Sociology

COURSE CODES: **TR001 (TSM)**
PLACES 2010: **59**
POINTS 2009: **430*-560***
DEGREE AWARDED: **B.A.**

TSM points: See note on page 24

Sociology at Trinity College may be studied through four different degree programmes: TR001 (TSM), TR081 (BESS), TR015 (PPES) and TR083 (Sociology and social policy).

Sociology cannot be studied as a single honor course. It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects. See page 90 for a list of the subjects that can be combined with Sociology.

Within BESS (TR081), after a common first year, students choose 6 courses in the second year and then proceed to either specialise in Sociology or to combine it with one of Economics, Political science or Business. See page 35.

Philosophy, political science, economics and sociology (PPES/TR015) has a similar structure to BESS but with Philosophy replacing Business as a subject. See page 78.

See also:

TR083: Sociology and social policy, page 87

What is Sociology?

Sociology is the study of social life, social change, and the social causes and consequences of human behaviour. Sociologists investigate the structure of groups, organisations, and societies, and how people interact within these contexts. The discipline recognises that class, race, age and gender determine the path of an individual's life in ways that become more clearly visible through the study of sociology. Sociology is committed to the exploration of the social and cultural challenges facing fast changing contemporary societies and equipping students with research methods skills. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programmes.

Course overview

Each of the four degree courses through which sociology may be studied cover a range of subjects including migration, work and employment, innovation, technology and society, development and globalisation, conflict resolution, family, race and ethnicity, education, organisations and management, gender and popular culture.

Is it the right course for you?

If you want to understand the changes taking place in the world today, and you're curious about people and society, then sociology is for you. As an area of university study, it discusses numerous ways of describing and analysing society and investigating social change. Ireland and the world are currently experiencing rapid processes of social change. The old world is changing, but what will the new world be like, and how can we participate in its development? Sociology is foremost among the social sciences in its understanding of social change.

Course content

The Freshman years

The Junior Freshman (first) year comprises foundation courses in Sociology, Political science and Economic policy. In the Senior Freshman (second) year you study issues around development and globalisation, gender and society in different cultures, European societies, and are introduced to sociological research methods.

The Sophister years

Specialisation in sociological topic areas, and more advanced analysis, research and presentation skills are provided in the Sophister (third and fourth) years. In your Junior Sophister (third year), you learn about social theory, and carry out projects involving analysis of both numerical data from surveys, and the verbal data that are the outcomes of recorded interviews and focus groups. The Senior Sophister year offers courses in a variety of substantive topic areas, including gender and popular culture, the economic sociology of Europe and governance of

ethno-political conflicts. You have the opportunity to carry out your own independent research project from start to finish on a topic of your choice (recent projects included: Immigration and the prison system, Unmarried fathers' participation in their children's lives, Bebo and social networking, and Counter-urbanisation in the Irish countryside). Many students find this the most satisfying part of the whole four years. They also find it a great asset when talking to employers and applying for jobs.

Assessment

Courses are examined by a combination of continuous assessment and formal examination. Lectures and tutorials take up 6 to 10 hours a week, depending on the year.

Study abroad

Students may participate in full-year or half-year exchanges with universities in France, Italy, Germany, Sweden, Finland, Turkey and Denmark as well as Australia, Korea and the USA in their third year. Some of these universities offer their courses through English.

Career opportunities

Sociologists work in a wide variety of settings. Sociology graduates find that their broad training and appreciation of how society and people work means they can thrive in careers in the public service, community development, in social research in statutory or voluntary social service organisations, as university lecturers, in the print and broadcast media, or in business. Graduates are working for organisations as diverse as Goodbody Stockbrokers, the ESRI, the Abbey Theatre, the Department of Foreign Affairs, Friends of the Earth and Enterprise Ireland. Careers range from industrial relations to marketing and from teaching to tourism.

Did you know?

- The Department of Sociology is a leading participant in the Trinity Immigration Initiative and the Centre for Post Conflict Justice also specialises in research on science, technology and society, and globalisation, reflecting the integration of Ireland into a globalising world and the need to understand the processes and implications involved.

Further information

www.tcd.ie/Sociology
Tel: +353 1 896 2701

Spanish

COURSE CODE:	**TR001 (TSM)**
PLACES 2010:	**41**
POINTS 2009:	**435*-530***
DEGREE AWARDED:	**B.A.**
TSM points:	See note on page 24

Special Entry Requirements:

Leaving Certificate	HC3	In a language other than English
Advanced GCE (A-Level)	Grade C	In a language other than English

Spanish (TSM) cannot be studied as a single honor course.

It must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one subject only is studied in the fourth year. An honors degree is awarded in both subjects. For subjects that combine with Spanish see page 90.

Alternatively, Spanish may be selected as one of the two languages studied in the European studies programme, see page 56. Spanish can be studied *ab initio* (from beginner level) in both TSM and European Studies.

See also:

TR090: Business studies and Spanish, page 39

Is this the right course for you?

Spain, currently one of Europe's leading industrial nations, was in the sixteenth and seventeenth centuries the foremost Western power, and Spanish is today the native language of over four hundred million people. In terms of the number of countries – more than twenty – in which it is officially spoken, it is second only to English. If you are interested in reading and in the language and culture of Spain and Spanish America, then this is a course you will enjoy.

Course content

Spanish at Trinity College is taught by a variety of methods to equip you with a comprehensive range of skills in the accurate, fluent and sensitive understanding and use of the written and spoken language. If you are a beginner the teaching provided offers a realistic opportunity for you to reach the same standard within a year as those who have studied the language previously.

The development of the skill of textual analysis through close and careful reading, together with the organisation and expression of ideas in written and verbal form, are integral aims of the department.

The Junior Freshman year

The primary focus of the Junior Freshman (first) year is to establish and consolidate your competence in understanding and using the Spanish language. Students studying Spanish *ab initio* (from beginner level) attend nine hours of classes per week, while non-beginners attend seven hours of classes.

The course covers four main areas:

- Introduction to language study
- Language classes (beginners attend seven per week and non-beginners attend six per week). These comprise classes in grammar, text analysis, practice in speaking and listening to Spanish
- Introduction to modern Spain
- Literature: close study of a different range of modern Spanish and Spanish-American literature, based on five texts

Years two and three

You will continue with language tuition taking three classes each week:

- Spanish language
- Syntax and vocabulary of Spanish
- Spoken Spanish

Starting in the Senior Freshman (second) year and extending into the Junior Sophister (third) year you follow courses in Hispanic linguistics and the literature of the Spanish Renaissance, modern Spain and modern Spanish America. A course on the history of early-modern Spain is also given. Each of these courses in the second and third years are semester-long courses. The format is one lecture followed by one tutorial per week. Students are encouraged to give oral presentations on the texts followed.

The Senior Sophister year

If you elect to study Spanish in the Senior Sophister (fourth) year, you will work more independently and with significant freedom of choice. As well as studying Spanish language, theory of translation and medieval Spanish literature, you will choose two other subjects from a range of special subjects. These include contemporary prose fiction, Spanish and Latin American cultural politics, and a course in the literature of exile. You will also research and write a dissertation under the supervision of a member of the department on either a given topic or one that is of special interest to you.

Assessment

Essays submitted throughout the year are combined with written and oral examinations at the end of each year.

Study abroad

Students are encouraged to spend a year in Spain or Spanish America, especially at one of the universities with which we have close associations, such as Granada, León, Salamanca, Seville, or the Colegio de México. At a minimum, you will be required to spend two months in a Spanish-speaking country prior to taking your final exams.

Career opportunities

The main career opportunities are: teaching, journalism and the visual media generally, while some recent graduates have gained EU placements in Brussels.

A substantial proportion of students engage in further study, particularly diploma and masters' courses in interpreting and translation. Ample opportunities exist in several universities, both in the U.K. and in Ireland, with Trinity College's new M.Phil. in Literary translation and comparative literature proving popular. A steady stream of undergraduates have also chosen to pursue M.Litt. and Ph.D. research degrees at Trinity College.

Further information

www.tcd.ie/Hispanic_Studies/pages/undergraduate.php
Tel: +353 1 896 1257

Addiction studies

PLACES 2010: **24**
AWARD: **Diploma**

APPLICATION PROCEDURE:

This is not a CAO course. Students wishing to apply for admission are required to apply directly to the University. Completed applications must be returned in mid-April 2011 for entry to the academic year commencing in September 2011.

Application forms are available from:

Addiction Studies,
School of Social Policy and Social Work Room 3063,
Arts and Social Sciences Building,
Trinity College, Dublin 2
Tel: + 353 1 896 1163, Fax: + 353 1 671 2262
E-mail: **addiction.studies@tcd.ie**

GARDA VETTING:

Students will be required to undergo Garda vetting.

See p. 23 for further details.

The Government's Free Fees Initiative does NOT cover this course. All students registered for Addiction studies are required to pay tuition fees.

Course overview

Addiction studies is a level 7 special purpose award, characteristically taken by people already in service, that is, those working in the alcohol and drugs field with individuals, families or communities experiencing problems as a result of the use of alcohol or illicit drugs; those wishing to work in the field; and those who work in a range of relevant social fields, who wish to augment their knowledge and return to their workplaces with new learning and experience. The diploma leads to enhanced professional competencies and specialised knowledge across a variety of areas.

This one-year course consists of two terms of academic work together with a ten-week fieldwork placement.

Is this the right course for you?

Applications will be considered from those whose work brings them into contact with the problem of addiction – e.g. counsellors, social workers, probation officers, doctors, nurses and teachers for example – or from those who are involved in the administration of services or the formulation of policy in this area.

Course content

The academic aspect of this course includes teaching on a wide variety of subject areas relevant to addiction. There are approximately 20 hours of classes per week during academic term and 35 hours per week during placements.

The Addiction studies programme consists of five modules:

- Theory and practice of addiction counselling
- Addiction policy
- Addiction research
- Contemporary issues – disciplines
- Addiction practice and fieldwork placement

The content of the course is divided into two sections – academic studies and skills training.

Academic studies include teaching from a variety of subject areas relevant to addiction, including psychology, pharmacology, sociology, criminology, psychiatry, social policy, law and social work.

Skills training focuses particularly on the development of students' counselling and intervention skills in group work and individual and family counselling. It is based on classroom exercises using video equipment, on field experience, on placement briefings and debriefings, and on seminars and workshops.

Assessment

The award of the diploma is based on continuous assessment and satisfactory completion of a research project, a fieldwork placement and a placement practice study.

Career opportunities

Addiction counselling; drug and alcohol project work; education and prevention; youth work; community work; project management; policy development.

Further information

www.socialwork-socialpolicy.tcd.ie
Tel: + 353 1 896 1163
Fax: + 353 1 671 2262
E-mail: **addiction.studies@tcd.ie**



Engineering, Mathematics and Science

Computer science

COURSE CODE: **TR033**
PLACES 2010: **80**
POINTS 2009: **350**
DEGREE AWARDED: **B.A. (Moderatorship)**

Special Entry Requirements:

Leaving Certificate	HC3	Mathematics
Advanced GCE (A-Level)	Grade C	Mathematics

See also:

TR010/011/013: Computer science, linguistics and a language, page 118

TR032: Computer engineering, p. 127; Electronic and computer engineering, p. 129

TR034: MSISS, page 120

TR082: Business and computing, page 41

What is Computer science?

Computer science is the study of everything to do with computers and our relationship with them. The field began with the pioneering theoretical discoveries on logic and calculation in the nineteenth century through to the development of early computers in the middle of the last century right up to the present day, when computers have become both powerful and commonplace, so much so that we have them embedded into our bodies in the form of pacemakers and cochlear implants.

Computers have revolutionised almost every aspect of science, business and commerce in the past fifty years, and are rapidly doing the same in healthcare, communications, and entertainment. Computers and the internet are instrumental in the protection of the environment and are central to the world's financial systems. Computer processing and communication power doubles roughly every 18 months, in accordance with 'Moore's Law'. Thus, as their capabilities increase, we continue to find new areas of application for them and computer science gives us the tools to develop these new applications.

Is this the right course for you?

Computer science at Trinity College is a challenging and exciting course with a focus on innovation and cutting-edge technology that demands the very best from our students. As a graduate you will have a thorough knowledge of computer science along with a range of professional skills in teamwork and management. If you can see yourself in a leading team of software developers in computer games, internet software or medical technologies or as a researcher developing innovative technology that will change the way we use computers, then Computer science at Trinity College may be for you.

To get the best from the course you need to be interested in developing clear logical ideas about situations and about how to develop feasible schemes ('algorithms') for computers to deal with these situations. As always, proficiency in mathematics is required and an ability to communicate clearly is very useful.

If you are interested in computers already, to the extent of building them or writing programs for them, so much the better – but bear in mind, no prior knowledge of computer science is assumed, and we will take you far beyond the layperson's understanding of computer science.

Why study Computer science at Trinity College?

The Computer Science Department at Trinity College is the oldest and largest in Ireland, with in excess of 60 research active lecturers and over 200 researchers working in a wide variety of research areas in the field. Since it was established in 1969, Computer science at Trinity College has developed a close association with the computer sector throughout Ireland, in both the private and public sectors. Many of the leaders in computing around the world have at one time been students at Trinity College. The Department has earned a strong international reputation and has partnerships in education and in research around the world. As one of the leading universities in the world, our computer science degrees are recognised throughout the world.

The B.A. (Moderatorship) in Computer science degree programme is accredited by Engineers Ireland and fulfils the educational requirements for professional membership of Engineers Ireland. This accreditation is recognised by a large number of engineering institutions worldwide. Membership of Engineers Ireland with Chartered Engineer status will require the completion of an additional year of study at TCD leading to the award of a Master's level degree.

Course content

This course provides you with a broad and rigorous grounding in computation and computer systems, starting with fundamental topics in mathematics, logic, electrical theory, programming, computer systems, the role of computers in society and culminating in advanced topics such as robot vision, virtual reality graphics, artificial intelligence, hardware system design and other topics from the research areas our lecturers are pursuing. You will also be able to select from various subject options in your final year.

The Freshman years

The first two years – the Junior Freshman and Senior Freshman years – are the foundation of the course. You will study digital hardware, networking concepts, programming languages, low-level programming, information management, mathematics, together with modules on computers in society and a 'Broad Curriculum' module on a subject outside the general area of computer science (see page 12 or **www.tcd.ie/Broad_Curriculum**). Individual and group projects are integrated

into the course. For example, a typical individual project is the building of a complete microcomputer from components.

The Sophister years

In the third year – Junior Sophister year – you will begin to encounter topics at a more advanced level, such as symbolic programming, software engineering, parsing technologies and more. At present, a small amount of specialisation is possible in the second half of this year.

In the final year – Senior Sophister year – with all the basic principles at your command, you will get an opportunity to study a range of more advanced topics. Topics are taught by active researchers, so the selection can vary somewhat from year to year. At present, topics include Computer vision, Advanced computer graphics, Internet applications and more.

At the end of your course, you will also undertake a significant project. This project is an opportunity for you to pull together all you have learnt during the course to develop a new piece of technology, be it a new program, a new piece of hardware, or a new way of looking at things. The project is, in many respects, the culmination of your studies, and it should allow you to deploy and display your skills and virtuosity as you come to the end of the course.

Study abroad

You may apply to spend third year studying at a university in Belgium, France, Germany or the U.K. as part of the Erasmus exchange programme.

Career opportunities

The Computer science course prepares you for work in industry or postgraduate study. Our graduates are employed as system designers, IT and business consultants, system administrators, CIOs and CTOs, security specialists, computer experts in fields such as the engineering and legal professions, marketing and advertising. Some of our graduates are successful entrepreneurs. For example, graduates of this course started Havok, a very well-known developer of physics engine software for games such as Halo 3 and Assassin's Creed. Many of our graduates undertake further studies, including postgraduate diplomas/degrees and research.

Further information

www.scss.tcd.ie/courses/ba
E-mail: **undergraduate@scss.tcd.ie**
Tel: +353 1 896 1765

Computer science, linguistics and a language (CSLL)

COURSE CODES:	**TR010 (German)**	**TR011 (French)**	**TR013 (Irish)**
PLACES 2010:	**10**	**10**	**5**
POINTS 2009:	**435**	**550**	**n/a**
DEGREE AWARDED:	**B.A. (Moderatorship)**		

Special Entry Requirements:

Leaving Certificate	HC3	Mathematics (TR010, TR011 & TR013)
	HC1	German (TR010)
	HC1	French (TR011)
	HB3	Irish (TR013)
Advanced GCE (A-Level)	Grade C	Mathematics (TR010, TR011 & TR013)
	Grade C	German (TR010)
	Grade C	French (TR011)
	Grade B	Irish (TR013)

See also:

TR032: Computer engineering, p. 127; Electronic and computer engineering, p. 129
TR033: Computer science, page 117
TR034: MSISS, page 120
TR082: Business and computing, page 41

What is CSLL?

The CSLL degree course is one of the most interdisciplinary offered by the University, bridging both science and arts, and its different strands foster a wide range of talents, from practical, problem-solving in computer science, to more analytical skills in understanding novel concepts in linguistics, to fluency and cultural awareness in the language component. In computer science, students learn the underlying fundamentals of computer software and computer-related mathematics. Advanced areas of study include software engineering and artificial intelligence. Linguistics is the scientific study of languages in general. This cognitive science explores the internal properties of languages (constraints on syntax, semantics and sound patterns), the process of human language acquisition, and sociological factors that impinge on language use and languages in contact. The chosen language (French, German or Irish) is studied to degree level, with emphasis on aural, oral and written fluency. Computational linguistics is a discipline that unites the three strands of this course. Students choose their year abroad, as well as third and fourth year projects and options to allow them to shape their major focus within one of the three strands of the degree, or within computational linguistics.

Is this the right course for you?

This course offers a unique combination of skills – technical, mathematical, analytical and communicative. In doing so, it provides two of the most sought after skills today: degree-level fluency in a second language and a degree in computing, opening up hosts of future career possibilities. Many of these careers also involve the third degree-level competency of the course – linguistics. Predictive text in telephones, automatic speech recognition in directory enquiries, and internet search engines are just three examples of technologies that derive from computational linguistics; countless others are on the horizon. The course is appealing to students with strengths in analytical reasoning and an affinity for mastering languages, but who do not want to choose between arts and sciences. While the course involves 50% focus on mathematics and computing, 25% on linguistics and 25% on the language, the optional elements allow students considerable flexibility to rebalance their major focus. If you enjoy mathematics, languages and problem solving and are interested in combining topics in creative and insightful ways, then this may be the right course for you.

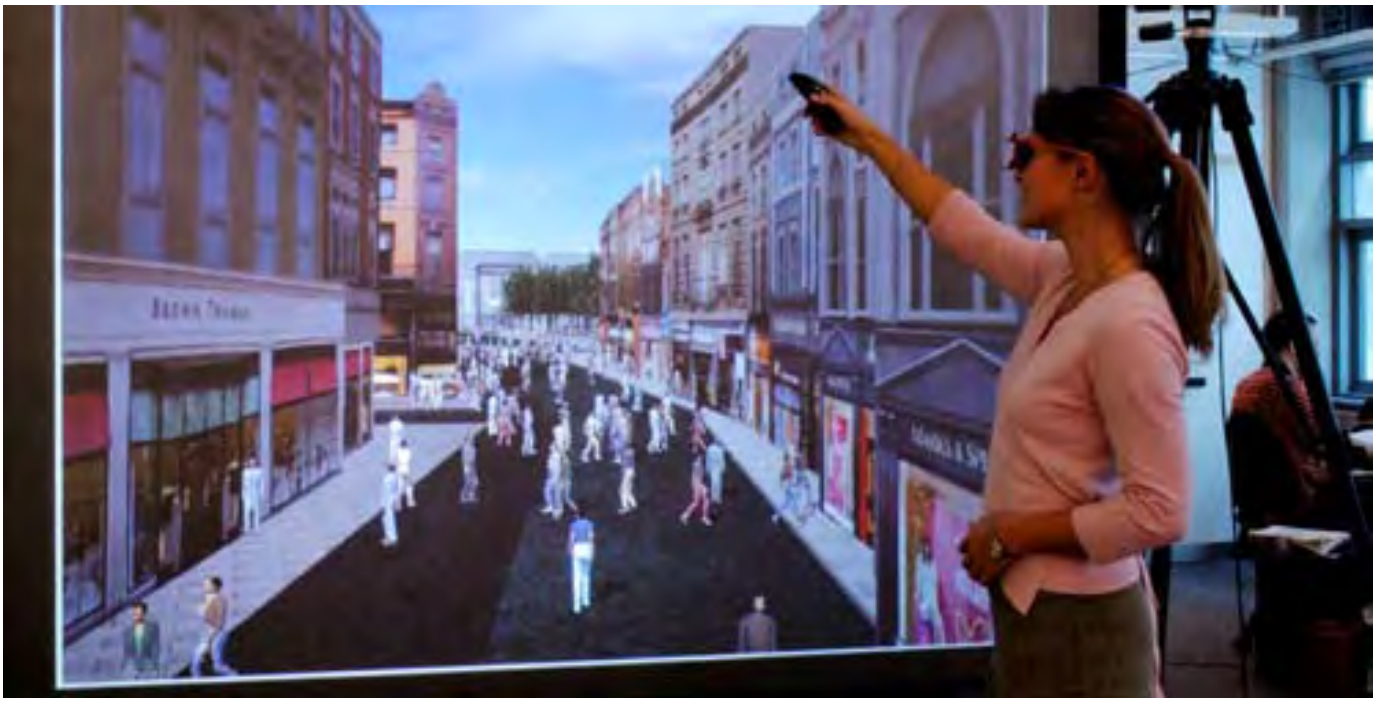
Course content

In the first two years, half of the programme is devoted to computer science and half to the study of linguistics and your chosen language. Computational linguistics is a theme that unifies the three components. A year abroad is an integral part of the programme, further developing language skills and providing first-hand experience of university life in another country. The year abroad provides additional options that enhance the potential for students to define their own specialist areas within the programme. The final year offers students the opportunity to explore in greater depth areas where computers and language meet or in the classical core of the constituent disciplines: computer science, linguistics and a language. Students complete increasingly complex projects in each year of the programme.

All CSLL students also participate in the Dublin Computational Linguistics Research Seminar Series. This weekly seminar is hosted jointly by TCD, UCD, DCU and DIT, rotating annually amongst these partners. Seminars vary from industry talks to breaking academic research. You will notice many CSLL graduates among the world leaders giving these lectures.

Junior and Senior Freshman (first and second year) modules:

	Junior Freshman (1st year)	Senior Freshman (2nd year)
Computer science	Mathematics Introduction to programming	Discrete and continuous mathematics Data structures and programming techniques Natural language processing
Linguistics	Introduction to the study of language (general linguistics) Introduction to phonetics and phonology Introduction to syntax	Syntactic theory Introduction to speech science Formal semantics Instrumental phonetics Computational morphology Statistics for linguistics
Language	Written, oral and aural language fluency Area studies	Written, oral and aural language fluency



The Sophister years

Junior Sophister (third year) students study computer science and linguistics at a university abroad (typically in Belgium, France, Germany or Scotland, depending on the language studied). The subjects you study during this year will depend on the specialist area of the particular university you choose, allowing you build a degree specifically focused on your interests and strengths. In the Senior Sophister (fourth) year you will take advanced modules in interdisciplinary areas such as artificial intelligence, information systems, computer processing of human language, and the analysis and synthesis of the human voice. You will also proceed to advanced study in your chosen language, perfecting both your oral skills and your written skills in résumé, translation and essay writing.

An optional module and a major interdisciplinary project allow you to specialise in areas you particularly enjoy and to shape the degree around your individual strengths. Examples of final-year module options include computer graphics, databases, fuzzy logic, natural language evolution, and human second-language acquisition.

Assessment

Written examinations, course work and projects are all used in assessment. You will also complete a final-year dissertation amounting to a substantial proportion of your overall degree result. The options and project provide great freedom in tailoring the degree to your interests and career plans.

Career opportunities

Graduates have moved on to careers that reflect the range of topics within the degree. Graduates will be qualified to work as language specialists, information technologists or software specialists in any of the IT, banking, translation, publishing or multi-media sectors. A number work as software engineers in international consulting firms. Some have embarked on careers in professional translation; others have moved into primary and secondary-level education. About 65% of graduates work in software engineering (whether in a mainly English speaking country or in a country where the language of the degree focus is the primary language); about 25% pursue research careers beginning with further postgraduate study in Ireland or abroad. Another 10% tend towards a focus in technical translation. Some graduates have taken up employment in government service, e.g. the European Patent Office, the Irish Diplomatic Corps. The possibilities are limitless.

Further information

www.cs.tcd.ie/courses/csll
Tel: +353 1 896 1765

Management science and information systems studies (MSISS)

COURSE CODE:	**TR034**
PLACES 2010:	**45**
POINTS 2009:	**400**
DEGREE AWARDED:	**B.A. (Moderatorship)**

Special Entry Requirements:

Leaving Certificate	HC3	Mathematics
Advanced GCE (A-Level)	Grade C	Mathematics

See also:

TR032: Computer engineering, p. 127; Electronic and computer engineering, p. 129

TR033: Computer science, page 117

TR010/011/013: Computer science, linguistics and a language, page 118

TR081: BESS, page 35

What is MSISS?

MSISS is about using both information and communications technology and quantitative tools such as management science, statistics, probability and mathematics to solve problems and in particular, problems in business and finance. The emphasis in MSISS is on building up analytical skills, flexibility and creative thinking. One of the remarkable features of MSISS is the range of careers that graduates take up.

MSISS is made up of four strands. The first is based around developing skills in quantitative techniques, such as mathematics, statistics, probability, forecasting and management science. The second strand focuses on information technology and systems and ranges from basic end user tools, like spreadsheets, through programming, system design and development and databases, up to state-of-the-art topics/techniques in areas such as data mining and financial modelling. The third strand is business-based and covers important concepts in management, finance and operations management. The fourth strand seeks to develop a range of personal skills including teamwork, making presentations, interviewing, report writing and researching.

Course overview

The four strands in MSISS are organised as three main subject areas supported by the interpersonal skills framework. The three subject areas are:

- Business and management
- Quantitative analysis
- Information systems

Interpersonal skills such as interviewing and making presentations are both taught explicitly and implicitly (i.e. built into the teaching of other subjects). The Sophister (third and fourth) years provide the opportunity to specialise in an area of your choice.

Is this the right course for you?

This course is ideally suited to students who like solving complex problems and are interested in both technology and business.

The range of subjects studied is wide and will challenge your abilities on several fronts, but it leads to graduates who have the ability to think about issues in both technical and business terms. MSISS is quite unique – there is no other undergraduate course in Ireland (or possibly even in the UK either) which offers this mix. As a result, graduates are highly employable in a world where a combination of business, technology and numerical skills are in increasing demand.

Course content

The modules covered by main subject areas are as follows:

Business and management:

- Introduction to management and organisation
- Finance and accounting
- Operations management
- Economics

Quantitative analysis:

- Forecasting
- Management science (operations research)
- Data mining
- Market research
- Mathematics
- Probability
- Statistics

Information systems:

- Information systems and technology
- Programming (C, C++, Visual Basic and Oracle)
- Strategic information systems
- End user computing

Personal skills:

- Making presentations
- Interviewing
- Report writing
- Research methods
- Teamworking
- Consulting

The Freshman years

During the Junior and Senior Freshman (first two) years, you will get a solid introduction to a number of fields. Subjects you will study include:

- Computer programming
- Economics
- Management science
- End user computing
- Mathematics
- Organisation and management
- Statistics
- Finance and accounting

The Sophister years

The Junior and Senior Sophister (third and fourth) years allow you to focus on areas that are of particular interest to you.

In each year there are a number of core courses (five in third year and three in fourth year) and a range of optional subjects from which students select one in each of the final two years.

The choice of optional subjects is exceptionally wide and spans business studies, economics, computer science, statistics, mathematics and engineering. The courses currently offered include financial and management accounting, economics, human resources management, mathematics, marketing management, investment analysis, corporate financial reporting, statistical modelling and production and operations management.

Assessment

You will be assessed by a combination of assignments and end-of-year examination. A report on the final-year project is an important part of the assessment.

Career opportunities

Over recent years, the most popular careers for MSISS graduates have been in financial services, management consultancy and the actuarial and accounting professions, but each year there are students who do something quite different including, in a number of cases, starting their own companies.

Further information

Website: **www.scss.tcd.ie/courses/bamsiss**
E-mail: **undergraduate@scss.tcd.ie**
Tel: +353 1 896 1765

Did you know?

- A key feature of the Senior Sophister (fourth) year is the project. You will tackle a real-life, practical problem in an external organisation. In recent years projects have been undertaken for Merrill Lynch, Procter and Gamble, the Department of Agriculture, Dublin Corporation Credit Union, the Alzheimer Society of Ireland and the Royal Dublin Society to name but a few.
- MSISS is highly regarded by employers and has one of the best graduate employment records of any undergraduate course in Ireland.

Engineering (common entry programme)

COURSE CODE:	**TR032**
PLACES 2010:	**155**
POINTS 2009:	**405**
DEGREE AWARDED:	**B.A.I.**

Special Entry Requirements:

Leaving Certificate	HC3	Mathematics
Advanced GCE (A-Level)	Grade C	Mathematics

See also:

TR038: Engineering with management, page 132

What is Engineering?

Engineering is about being creative. Engineers make things possible by using mathematical and scientific principles together with analytical and design skills. They tackle existing problems by developing new solutions through innovative technologies. They also expand the frontiers of society by developing advanced materials, sustainable energy systems, construction technologies, transport systems and telecommunications infrastructure.

Is this the right course for you?

Engineering is a constantly evolving profession. As an engineer, you will need to be adaptable both to the rapid development of new ideas and technology and to the shifting requirements of industry and society. Ideally you will be a good communicator and will also be capable of working as part of a team. Above all, you must be a problem solver. You must be creative and able to synthesise and analyse information from different sources to arrive at efficient and practical solutions.

Course overview

The B.A.I. (Engineering) degree programme is based on two years of general engineering, providing students with a firm grounding in the principles common to all disciplines, followed by two years of specialisation. Graduates are professionally accredited engineers with both a broad-based understanding of the whole discipline and a detailed knowledge of their chosen specialist area. The aim is that graduates will be able to continuously train themselves, to adapt and move into related or newly emerging areas as their careers develop after graduation.

The Freshman years

All students follow a common programme for the first two years. The Junior Freshman (first) year comprises introductory courses in engineering science, mathematics, computer science, physics, chemistry, mechanics, electricity and magnetism, graphics and computer-aided engineering, and a group design and build project.

In the Senior Freshman (second) year, students take further engineering science modules and complete two more group design and build projects. This allows the student to explore all the possibilities open to you in advance of making your final decision about what specialism to concentrate on.

While every effort is made to allow students to study the course they choose, the B.A.I. Management Committee reserves the right to allocate the available places. In some departments the number of places for students of any one year may be limited. Timetable difficulties may also reduce the number of options available.

What happens next?

At the end of the Senior Freshman (second) year you choose one of the five specialist areas:

- Civil, structural and environmental engineering
- Computer engineering
- Electronic engineering
- Electronic and computer engineering (joint programme)
- Mechanical and manufacturing engineering

Courses in the Sophister (third and fourth) years aim to broaden and deepen your knowledge and understanding of the specialism you have chosen to follow to degree level.

Subjects are studied in much greater detail and students undertake real-life, practical projects. If you choose civil, structural and environmental engineering you could end up testing the pre-cast concrete used to build the Paddington to Heathrow railway; if you choose computer engineering, you might find yourself building a microprocessor system.

A substantial design project will be part of your final-year assessment in each discipline.

5th Year Options

Students graduating after 2012 will require a Masters degree to be directly eligible for Chartered status. Therefore the School offers several options for a 5th year leading to a Masters degree (MAI).

- **Double qualification with INSA de Lyon**
  Suitably qualified students may, at the end of their second year, apply for transfer to the double qualification programme, run jointly with the INSA de Lyon, the largest Engineering School in France. Instruction at INSA de Lyon is through French and students will be required to have a high standard of language competence before participating on the programme. At the end of a five-year double qualification programme TCD students may receive, in addition to the B.A.I., the Diplôme de l'INSA, which confers full professional accreditation in France

- **MAI (Domestic)**
  This entails spending the 4th and 5th year in Trinity College, undertaking additional modules in the specialisation as well as a group project in 4th year and a significant individual project in 5th year
- **MAI (International - Option 1)**
  This is offered in collaboration with the European CLUSTER Programme, a consortium of 12 universities. The student spends their 4th year abroad and returns to complete their 5th year at TCD. The other partner universities are: Technical University of Catalonia, Barcelona; Technische Universität Darmstadt; Technische Universiteit Eindhoven; Institut polytechnique de Grenoble; Instituto Superior Técnico Lisbon; Katholieke Universiteit Leuven/Université Catholique de Louvain; Helsinki University of Technology; Karlsruhe Institute of Technology; Ecole Polytechnique Fédérale de Lausanne; Politecnico di Torino; KTH Royal Institute of Technology Stockholm
- **MAI (International - Option 2)**
  This is offered in collaboration with the UNITECH Programme, a consortium of 9 universities and 15 multinational corporate partners. Students will spend one semester in a partner university followed by a six month internship with one of the corporate partners.

  Partner universities: Chalmers University of Technology, Gothenburg; École Centrale Paris; ETH Zurich; Loughborough University; Politecnico di Milano; RWTH Aachen University; University of Technology Delft; Universitat Politècnica de Catalunya, Barcelona

Engineering at a glance

All students in TR032 follow common first and second years. At the end of the second year you will select one of five alternative degrees as outlined below.

Junior Freshman (first) year	Senior Freshman (second) year	Sophister (third & fourth) years
Lectures – 16 hours per week Tutorials – 5 hours per week Laboratory work – 6 hours per week	Lectures – 16 hours per week Tutorials – 5 hours per week Laboratory work – 4 hours per week	
Engineering mathematics I and II Series and limits, differentiation, integration, ordinary differential equations Vectors, linear algebra, complex numbers, introduction to probability and inference	**Engineering mathematics III and IV** Partial differentiation; Laplace transform; Fourier series and transform; probability theory; vector calculus; linear algebra; optimisation and graph theory	**Engineering mathematics**
Computer science I Introduction to computer systems and software; problem solving, algorithms and programming	**Solids and structures** Mechanics of solids – properties of solids, stress and strain, failure criteria; applications Structures – pin-jointed structures; analysis of beams; design of beams	**Management for engineers**

Junior Freshman (first) year	Senior Freshman (second) year	Sophister (third & fourth) years
Physics – heat, light and sound, laboratory work	**Computer science II** Basic concepts of computer programming; object-oriented programming; classic data structures; representation and algorithms	Select one of the five specialisations below: **Civil, structural and environmental engineering** p. 126 **Mechanical and manufacturing engineering** p. 131 **Electronic engineering** p. 128 **Computer engineering** p. 127 **Electronic and computer engineering (joint programme)** p. 129
Experimental methods This module introduces students to modern experimental techniques for engineering. The students gain experience with a variety of sensors used in engineering systems and examine the role of error and uncertainty in measurements and analysis. Exposure to and experience in using commercial software for data acquisition and analysis. Provides experience in working in a team in all aspects of the laboratory exercises, including set-up, data collection/analysis and report writing	**Thermo-fluids** Fluid mechanics – principles of fluid motion; laminar and turbulent flows; pipe flows; free surface flows Thermodynamics – mechanical work processes of closed systems; mass and energy conservation; heat engines; the second law of thermodynamics	
Mechanics Statics – Newton's laws, forces, moments and couples, equilibrium, analysis of structures, friction, virtual work, hydrostatics Dynamics – kinematics and kinetics of particles and of rigid bodies, simple harmonic motion and vibration	**Electronics** Analogue electronics – discrete analogue electronics; linear integrated circuits; analogue/digital conversions Digital electronics – combinational logic; sequential logic; digital circuits	
Electricity and magnetism Electric circuits – electrical quantities, lumped-circuit elements, analysis of electric circuits, meters and measurements Electrical energy systems – AC power systems, magnetic circuits and transformers, electromechanics, rotating machines Electronic analogue and communication systems – ideal operational amplifier, introduction to communication systems	**Engineering and the environment** To introduce students to the main environmental issues associated with engineering activity and to become aware of public concern about processes which affect the environment To develop the concept of sustainability in engineering practice and the main environmental and ethical issues regarding generation and use of energy	
Graphics and computer-aided engineering An introduction to the basic principles of engineering drawing and graphics, drawing office work, introduction to the use and practical application of computer-aided engineering software tools and packages	**Materials** Electrical – semiconductors; conduction processes; p-n junction; semiconductor fabrication Mechanical – manufacture of materials; microstructure and heat treatment of steel and alloys Civil – concrete technology; reinforced and pre-stressed concrete; timber technology	
Introduction to professional engineering The aim of the course is to introduce the students to the role of the professional engineer and all that it entails. The key point of the course is to emphasise that this role has more than a technical side and that all decisions made and actions taken can have social, economic, ethical, regulatory and political implications. An associated objective is to promote critical thinking and critical analysis skills and most importantly to begin to get students to deal with more open ended questions and develop the ability to work independently	**Engineering design project II** This is a full semester design and build project for a refugee shelter that meets the needs of a well-defined specification for a hostile environment. Students design and build a temporary demountable and adaptable structure, understand recycling strategies and elements of sustainable design. Students work in groups either as the team leader or a team member and work on a multi-disciplinary project, define a design problem and carry out the necessary analysis and calculations, and manage the construction of a shelter	

Junior Freshman (first) year	Senior Freshman (second) year	Sophister (third & fourth) years
Engineering design project I Students design, build and test a Roman mangonel (catapult) according to a Conceive-Design-Implement-Operate (CDIO) compliant methodology. Students apply engineering sciences through learning-by-doing project work to provide a framework to encourage creativity and innovation, to develop team work and communication skills through group-based activity and to foster self-directing learning and critical evaluation.	**Engineering design project III** This module introduces the challenge of electronic systems design. The project is an example of 'hardware and software co-design' and the scale of the task is such that it requires teamwork and a co-ordinated effort. Each group has access to the basic shell of a vehicle that includes the motor assemblies, battery holders and sensors. The design objective is to build a computer controlled autonomous vehicle with motor-driven wheels and position sensors.	
Chemistry General chemistry, physical chemistry, organic chemistry		

There is an optional language course in French or German, with certification, in the Senior Freshman and Junior Sophister (second and third) years. Both courses continue over the two years.

Assessment

Assessment in each of the first two years is by means of written examination, primarily at the end of the last term combined with continuous assessment of coursework during the year. Typically, end-of-year examinations contribute at least 50% towards your grade in each subject. The design projects are assessed entirely by continuous assessment.

Career opportunities

The B.A.I. is a professional degree accredited by Engineers Ireland and is recognised by a large number of engineering institutions outside Ireland. It will be your gateway to a wide and varying career path.

Further information

www.tcd.ie/Engineering/about
Tel: + 353 1 896 1142

Civil, structural and environmental engineering

Students who wish to study civil, structural and environmental engineering apply to the Bachelor in Engineering degree (TR032). The first two years are common to all Engineering students and at the end of the second-year students select Civil, structural and environmental engineering as their specialist area.

See p. 122 for details of the Freshman (first two) years.

What is Civil, structural and environmental engineering?

Civil, structural and environmental engineering is a very diverse and broad discipline. It offers graduates the chance to work in many different areas, including designing transport systems, looking after the environment, designing foundations for homes and buildings and designing many kinds of structures. Therefore, civil engineers are involved in every aspect of our lives. The skills needed to be a good civil engineer are a mathematical mind, a logical approach and good problem-solving abilities. In addition to these skills a civil engineer needs to be imaginative and inquisitive.

Civil engineering

Civil engineers design the services that we use and take for granted every day. Civil engineers ensure that we have clean running water, that traffic continues to move and that we have homes to live in and places to work. Whether it is supplying water to people or industry, building hospitals, factories or churches, or mining for fuel and other substances, a civil engineer has been involved.

Environmental engineering

Environmental engineers design the systems that provide us with water for all purposes and the systems that deal with waste. Environmental engineers also design ways of producing power from renewable resources and ensure that development happens in a sustainable way.

Structural engineering

Structural engineering is a branch of engineering that might involve designing a building, a bridge, a stadium, etc. Structural engineers have to ensure that a building is safe for the area that it is built in and for the purpose for which it is intended. It must also be economical and have a minimum impact on the environment.

Transportation

The planning and monitoring of our various transport systems, from cycling to high-speed railways, all come under the brief of the transport engineer. Not only does traffic have to be controlled; understanding the decisions that travellers make enables the engineer to influence users to make better choices for the environment and for each other.

The civil engineering specialism combines a unique set of skills – analytical and practical, as well as creative and environmental. Some professions, such as foundation and highway engineering or water supply, will require you, as the engineer, to be the sole expert or authority. Others, for example architecture, surveying and computer-aided design, will use your input on those aspects of the job that specifically relate to civil engineering design, construction and environmental impact.

What will you study?

Junior Sophister (third year) subjects include:

- **Structures** – the design and construction of all types of structures
- **Surveying** – the science of taking measurements to determine or establish the relative position of points above, on, or beneath the surface of the earth
- **Geotechnics** – the study of the properties and behaviour of the soil
- **Transportation** –the study of the design and maintenance of sustainable transport systems
- **Materials** – the study of the properties and behaviour of the materials used in civil engineering
- **Hydraulics** – the study of water movement and flow
- **Geology** – the study of the earth and how this affects engineering
- **Highway engineering** – the design of road infrastructure
- **Computer-aided design** – the use of computers to create designs
- **Group design project** – replicates all the key stages in a real civil engineering project

In the Senior Sophister (fourth) year you will take four core civil engineering subjects and four optional subjects.

The core subjects include:

Environmental engineering 1 – water quality characteristics, natural processes, process design concepts, wastewater treatment, air pollution

Hydraulics – flow of water in circular and non-circular conduits, pipe network analysis, pump characteristics

Geotechnical engineering – soil strength and its determination, slope stability, bearing capacity, earth pressures and retaining walls

Structures 1 – reinforced concrete design, structural steel: introduction to plastic theory, limit state design, rigid, semi-rigid and simple design

Final-year options include:

- **Design of the built environment** – fire engineering, new materials, planning
- **Advanced theory and design of structures** – reinforced concrete, pre-stressed concrete, nonlinear analysis of structures and design of tall buildings

- **Engineering geology and hydrogeology** – hydrogeology and groundwater engineering; rock mechanics, including slope and tunnel stability
- **Environmental engineering 2** – contaminant transport, water resources engineering, especially in developing countries
- **Transportation engineering** – transportation engineering, transportation modelling, transportation systems
- **Materials** – origin, decay and preservation of stone, mortar and block; clay and cementitious brick; concrete investigation

A significant amount of teaching takes place in the laboratory, and the course involves a lot of project work. Students undertake site visits to civil engineering works and areas of geological interest nationally and there is also a one-week technical visit to an international location. Recent trips have included visits to Paris and Barcelona.

A group design project forms part of the Junior Sophister (third year) programme. In the past, students have designed a stadium, a cathedral and an opera house.

The Senior Sophister (fourth year) project will contribute approximately 20% to your final-year marks. In recent years, projects have included:

- Intelligent transport systems in Dublin
- Structural dynamics and e-learning
- Vibrations due to traffic in the Port Tunnel
- Landslides in the Dublin/Wicklow region
- Solar energy for rural households

Study abroad

In the Junior Sophister (third) year, students get the chance to study in Europe (France, Germany, Italy or Spain) as part of the Erasmus programme.

Career opportunities

In addition to working in the traditional areas of engineering such as construction, design and transport management, civil engineers are often employed in the banking industry, in law firms and in business areas. The numerical and problem-solving skills and expertise that civil engineers have are broad based and make them very attractive employees to many different industries.

Further information

www.tcd.ie/civileng
Tel: + 353 1 896 1457

Computer engineering

Students who wish to study Computer engineering apply to the Engineering degree (TR032). The first two years are common to all engineering students and at the end of the second-year students select Computer engineering as their specialist area.

See page 122 for details of the Freshman (first two) years.

What is Computer engineering?

Computer engineering is about understanding how computer systems work, and also how they integrate with other systems that surround us. Take for example a modern-day car; a car contains many separate computer systems for controlling such things as the engine timing, the brakes and the air bags. To be able to design and construct such a car, the computer engineer needs a broad theoretical understanding of all these various sub-systems and how they interact. This might involve some mechanical engineering, thermodynamics and fluids as well as the computer systems themselves.

The impact of computer engineering has been more significant and more pervasive than that of many other disciplines. The mobile phone, the Internet and games consoles are all products that were not even imagined 30 years ago, but have now been realised by the ingenuity of computer engineers.

Computer engineers may design computer hardware, write computer programs, integrate the various sub-systems together or do all three. Computer engineers need good management skills and good people skills as they often get quickly promoted to project management positions.

What will you study?

Junior Sophister (third year) courses cover:

- **Microprocessor systems (including building a microprocessor system)** – all aspects of the principles, design, construction and characterisation of the hardware and system software of microprocessor-based computers
- **Computer networks** – protocols and behaviour of computer networks
- **Operating systems and concurrent systems** – programmes that coordinate, manage and control the allocation of computer resources to other programmes; systems of programmes designed to run alongside one another, in the same processor or in multiple connected processors

In the Senior Sophister (fourth) year you will study:

- **Distributed systems and advanced microprocessor systems** – distributed systems models, file servers, naming, recovery from failure, advanced topics and case studies, and the architecture of high-performance computer systems

- **Knowledge and data engineering** – file and database management, information structuring and retrieval, and knowledge management; design and operation of rule-based systems, expert system applications, heuristic search and case-based reasoning
- **Computer graphics** – introduction to computer graphics: modelling, rendering and animation
- **Computer vision** – image processing, 3D vision, object recognition and tracking with reference to applications in healthcare, multimedia and robotics

Practical work is emphasised throughout the Sophister (third and fourth) years and in the final year you will be required to complete a substantial project. Recent projects have included:

- An investigation into Sugarscape
- Automatic visualisation of Java programmes
- CLP-based printing job scheduler
- Character comparison using image processing
- Statistical analysis of non-invasive high speed interconnect data
- Genetic algorithms for programme optimisation
- Virtual educational environments
- Real-time smash simulation
- Bluetooth IP with payment for services

Study abroad

You may choose to spend the Junior Sophister (third) year at a European university as part of the Erasmus programme.

Career opportunities

The demand for software and system designers will continue to grow within the next decade. When you graduate you will find opportunities for employment in software companies, large industrial organisations, research institutions and multinationals in Ireland as well as in Europe, the US and Japan.

Further information

www.tcd.ie/Engineering/about/eng_at_tcd
Tel: +353 1 896 1765

Electronic engineering

Students who wish to study Electronic engineering apply to the Engineering degree (TR032). The first two years are common to all Engineering students and at the end of the second-year students select Electronic engineering as their specialist area.

See page 122 for details of the Freshman (first two) years.

What is Electronic engineering?

Electronic engineering involves the use of electricity to perform a wide range of functions and the application of these functions to improve the quality of our lives.

The role of the electronic engineer is to devise suitable circuits and systems for the acquisition, storage, processing and transmission of low-power electronic signals as information-bearing electrical entities.

In today's Information Age there is an ever-growing use of mobile phones, internet resources, computers, entertainment systems, satellite imaging, optical fibres, and automation. Electronic components and circuits are the cornerstone technology used to monitor or detect, store, process and transmit the information generated by each of these systems. Electronic engineers provide the vital skills and innovation needed to design and develop these remarkable components and systems.

Course overview

In the Junior Sophister (third) year you will study a total of seven electronic engineering subjects and four core engineering subjects. There are approximately 16 hours of lectures, 4 hours of tutorials, 3 hours of laboratory time and 3 hours of project time per week.

A fourth year electronic engineering student typically has a weekly timetable of 14 hours of lectures, 4 hours of tutorials and 2 hours of laboratory work. Additionally, you will have laboratory access for individual work on your project.

The fifth year of the programme will allow students to study toward the M.A.I. Master's degree qualification with more advanced level of treatment of the topics listed below. There may also be the opportunity to undertake a placement in industry or with a research group or to participate in the Unitech or Cluster programmes.

What will you study?

Junior Sophister (third year) courses cover:

- **Core elements of analogue and digital electronics** – the principles of operation of electronic devices and their behaviour when connected to form circuits

- **Microprocessor systems** – all aspects of the principles, design, construction and characterisation of the hardware and system software of microprocessor-based computers
- **Signals and systems** – electronic circuits, mathematical methods and algorithms for describing and processing signals such as audio and video
- **Electromagnetism** – the principles of the physical systems and of the mathematical characterisation of the transmission of electromagnetic radiation
- **Telecommunications** – electronic circuits and networks and the principles of modulation and coding for the transmission of information over guided paths and through free-space

In the Senior Sophister (fourth) year, in addition to a course in engineering management and wireless networks, you will choose a combination of subjects that allows further specialisation: from integrated circuit technology and design through to telecommunications and signal processing. Each final-year student also completes an individual project. Some recent examples of final-year project areas are:

- Communications networking
- Electronic circuit design
- Integrated circuit technology
- Electronic materials
- Video and image processing
- Neural engineering
- Speech, audio and acoustic signal processing

Study abroad

You may choose to spend the Junior Sophister (third) year at a European university as part of the Erasmus exchange programme.

Career opportunities

The careers open to graduates in electronic engineering range from circuit design in electronics companies through network design and management in telecommunications companies to opportunities in business and financial management where the analytic and problem-solving skills of electronic engineers have long been appreciated.

Further information

www.tcd.ie/eleceng
Tel: +353 1 896 1580

Electronic and computer engineering (joint programme)

Students who wish to study Electronic and computer engineering apply to the Engineering degree (TR032).

The first two years are common to all Engineering students and at the end of the second-year students select the joint programme in Electronic and computer engineering as their specialist area.

See page 122 for details of the Freshman (first two) years.

What is Electronic and computer engineering?

Organising both hardware (electronic) and software (computer) components into a useful and productive system is the principal job of the electronic and computer engineer. With a unique combination of both skill-sets, such an engineer is trained to make design decisions that result in the most productive systems.

Course overview

In the Junior Sophister (third) year you will study four core engineering subjects and seven electronic and computer engineering subjects. There are approximately 16 hours of lectures, 4 hours of tutorials, 3 hours of laboratory time and 3 hours of project time per week.

A fourth year electronic and computer engineering student typically has a weekly timetable consisting of 14 hours of lectures, 4 hours of tutorials and 3 hours of laboratory work. Additionally, you will have laboratory access for individual work on your project.

The fifth year of the programme will allow students to study toward the M.A.I. Master's degree qualification with more advanced level of treatment of the topics listed above. There may also be the opportunity to undertake a placement in industry or with a research group or to participate in the Unitech or Cluster programmes.

What will you study?

This degree option blends aspects of both the Electronic engineering (see page 128) and Computer engineering (see page 127) options into one course.

Junior Sophister (third year) courses cover:

- **Core elements of analogue and digital electronics** – the principles of operation of electronic devices and their behaviour when connected to form circuits

- **Microprocessor systems** – all aspects of the principles, design, construction and characterisation of the hardware and system software of microprocessor-based computers
- **Signals and systems** – electronic circuits, mathematical methods and algorithms for describing and processing signals, such as audio and video
- **Computer networks** – protocols and behaviour of computer networks
- **Telecommunications** – electronic circuits and networks and the principles of modulation and coding for the transmission of information over guided paths and through free-space

In the Senior Sophister (fourth) year in addition to a course in engineering management, you will choose a combination of subjects that allows you to balance your specialisation between the electronic and computer engineering subjects.

Each final-year student also completes a project that is assessed by a presentation and an end-of-year dissertation. Some examples of final-year project areas include:

- Communications networking
- Electronic circuit design
- Integrated circuit technology
- Electronic materials
- Electronic and optoelectronic materials
- Sensor-based ad hoc networks
- Microphone array characterisation
- Vector quantisation of images in pyramidal form
- Design and development of a campus-based wireless information access system
- Interactive distributed art installation using networking
- Impulsive audio event detection for video retrieval
- Anonymous, secure, robust and scalable peer-to-peer file sharing system for the internet
- A distributed music rehearsal studio application
- Secure lottery-like services over WAP

Study abroad

You may choose to spend the Junior Sophister (third) year at a European university as part of the Erasmus exchange programme.

Career opportunities

The variety of careers open to graduates of Electronic and computer engineering range from designing embedded processors for a wide range of applications, through network design and management in telecommunications companies, to opportunities in business and financial management where the analytic and problem-solving skills of electronic and computer engineers have long been appreciated.

Further information

Department of Computer Science
www.scss.tcd.ie/undergraduate/ug-course-list.php
Tel: +353 1 896 1765
Department of Electronic and Electrical Engineering
www.tcd.ie/eleceng/undergraduate
Tel: +353 1 896 1580

Mechanical and manufacturing engineering

Students who wish to study mechanical and manufacturing engineering apply to the Bachelor in Engineering degree (TR032). The first two years are common to all Engineering students and at the end of the second-year students select mechanical and manufacturing engineering as their specialist area.

See p. 122 for details of the Freshman (first two) years.

What is Mechanical and manufacturing engineering?

This is often seen as the broadest of all engineering qualifications as the skills required range from mathematics and electronics to metal fatigue and fluid mechanics.

Nearly all machines used in every day life – from the car or washing machine to the most complex aircraft or electricity supply plant to the tiniest surgical instrument – have required the skills of a mechanical engineer. Every industrial plant or manufacturing operation relies on a mechanical engineer for its smooth running and efficiency.

Mechanical engineers are involved in design, testing, inspection and manufacture of mechanical devices and components. As a mechanical engineer you will work as a professional using technology to make the world a better, safer place.

What will you study?

Junior Sophister (third year) courses cover:

- **Thermodynamics** – applications of heat energy in engines and other appliances
- **Solid mechanics** – stresses and deformation experienced by components under service loads
- **Engineering materials** – the behaviour of metals, polymers and ceramics under service loads or during the manufacture of products from these materials
- **Fluid mechanics** – the study of gases and liquids, for example the flow of air over the wings of an aircraft, or the flow of air into a car engine
- **Manufacturing technology and systems** – the various processes involved in making components
- **Mechanics of machines** – the behaviour of components or assemblies when they are in motion
- **Mechatronics** – the study of electro-mechanical systems, for example the electronic control of engines and manufacturing processes
- **Engineering design** – principles underlying the correct design of components

Project work is an important aspect of this specialisation and there is an extensive research facility available to students. In the Junior Sophister (third) year you will work as part of a small team completing a design project to understand how goods are manufactured.

In the Senior Sophister (fourth) year you will undertake a major project in addition to studying advanced courses in areas such as acoustics, biomechanics of tissues, instrumentation and heat transfer. Some examples of final-year projects include:

- Study of jet engine exhaust noise
- Design and build an entry for 'Robot Wars'
- Design and construction of energy storage devices for the developing world
- Pedestrian car impact simulation
- Weighing trucks in motion

Study abroad

The Department has Erasmus links with Katholieke University of Leuven, Belgium; INSA de Lyon (which provides a one-month intensive immersion course in French language if required); INPG Grenoble; Karlsruhe, Germany and KTH, Sweden.

Career opportunities

As well as the potential for a career in mainstream mechanical or manufacturing engineering, graduates have found work in industries as diverse as film production and airlines. There is also a demand for specialist research and development work in industry, research organisations and universities. Opportunities exist for graduates in mechanical and manufacturing engineering to find employment in Ireland and elsewhere in the following areas:

- Engineering consultancy companies engaged in national and international engineering projects
- Large public utilities – Local authorities, transport, power generation etc.
- Companies manufacturing mechanical, electronic, biomedical and pharmaceutical products
- Specialist areas such as design, engineering management, financial services and IT

Further information

www.tcd.ie/Engineering/courses
Tel: + 353 1 896 1383

Engineering with management

COURSE CODE: **TR038**
PLACES 2010: **20**
POINTS 2009: **370**
DEGREE AWARDED: **B.Sc. (Ing.)**

SPECIAL ENTRY REQUIREMENTS:

Leaving Certificate	HC3	Mathematics
Advanced GCE (A-Level)	Grade C	Mathematics

See also:

TR032: Engineering, p. 122

What is Engineering with management?

Engineering with management is an engineering programme that is broad in scope and aims to develop both the technical and business aspects of engineering. Engineers are problem-solvers. They apply their practical and analytical skills to highly complex and varied problems. In almost every human endeavour, an engineer has been involved somewhere. They have created the designs and systems to make everything from:

- gliders to space shuttles
- ball-point pens to laser printers
- matchbox cars to F1 racing cars
- wheelchairs to artificial joints
- yachts to the Airbus A380

However, in today's market, a qualification in engineering must also reflect the global commercial outlook of companies. Engineers are in demand because they are seen as people who can contribute greatly to productivity and competitiveness in the world marketplace.

Engineering with management is concerned with the analysis, design, improvement, installation and management of integrated systems of people, finances, materials and equipment. It draws upon specialised knowledge in the principles and methods of engineering analysis and design together with a number of disciplines such as the management of people, finances, sales, marketing, production, project management and communications.

Is this the right course for you?

Do you like the creative, analytical, problem-solving focus of engineering? Do you like the diversity of engineering? Perhaps, though, you see your professional life more involved with running a company, managing projects, or being a consultant? If any of these describes you, then you should consider this course. The diversity and flexibility of this course will give you endless possibilities in your professional life, both in what you do and how you do it.

Course overview

The course is a fully accredited professional engineering degree that aims to produce graduate engineers capable of working in the competitive environment of world-class manufacturing. To achieve this, the syllabus integrates management subjects with a proven engineering programme.

Approximately 80% of the syllabus comprises engineering subjects such as design, automation, computer simulation/ modelling, and materials. The remaining 20% comprises management subjects such as marketing, finance, quality systems, operations strategy, and human resources management, amongst others.

The syllabus is ambitious and diverse and will appeal to students who wish to broaden a traditional engineering degree with business and management skills.

What will you study?

The course is structured around themes that are developed over the four years. These themes are:

- General engineering
- Business
- Design
- Materials science
- Manufacturing engineering
- Management science

Throughout the course, a strong emphasis is placed on group projects, case studies and teamwork.

Course content

The Freshman years

The Junior Freshman (first) year covers the foundations in mathematics and physical sciences upon which all engineering is built, as well as introductory courses in manufacturing engineering and in management science. Many of these courses are common to the larger B.A.I. Engineering degree (see p. 122). In addition, a course in computer science introduces you to general programming appropriate to engineers. The first year contains a high proportion of project and laboratory work to emphasise the practical nature of the discipline. There are approximately 28 hours of classes and practicals per week in the Freshman years.

In the Senior Freshman (second) year you will take some more courses in mathematics as well as specific engineering courses in design, thermodynamics, fluid mechanics and materials. There are also introductory courses in statistical analysis and accounting.

The Sophister years

The Junior Sophister (third) year represents the highest load in terms of subject diversity. The engineering themes introduced in second year are further developed (e.g., mechanics of solids, materials, design) and this year also includes a range of management science subjects. These are positioned in third year so that they can be taught in the context of the engineering courses. For example the design project is integrated into each of the design, human resource management, and operations management courses.

During the Senior Sophister (final) year you will take two core subjects, a selection of optional engineering and management subjects and also a substantial project. This allows you to concentrate on the areas of the course you have found most interesting. The project is engineering in nature but will also require a significant business and project management input.

Engineering with management at a glance

Students in TR038 pursue an accredited engineering degree. Several of the courses are shared with the larger engineering class, MSISS and business students but the vast majority are unique to TR038.

Junior Freshman (1st yr):	Senior Freshman (2nd yr):	Junior Sophister (3rd yr):	Senior Sophister (4th yr):
A foundation year that will introduce you to many of the basic concepts in Engineering with management.	Development of themes in Engineering and management introduced in the first year.	Integrates the professional degree in engineering with management science.	Final integration of the professional degree in engineering with management science.
Project Work: Individual and group projects on designing new product concepts and experimental methods.	**Project Work:** Design projects introducing standards in drawing and design using computer-aided engineering software tools. Group and independent research projects in materials.	**Project Work:** Individual and group design projects integrating manufacturing, business, and human factors.	**Project Work:** Individual full-year engineering project emphasising the integration of technical and business solutions.
Engineering themes: Mathematics Physics Chemistry Computer science Engineering science Manufacturing technology Engineering design	**Engineering themes:** Mathematics Mechanics of solids Electronics Materials Thermodynamics Fluid mechanics Engineering design	**Engineering themes:** Computer methods Mechanics of machines Solid mechanics Control systems Failure of materials Manufacturing technology Engineering design	**Required courses:** Advanced manufacturing I Supply chain management **Engineering options:** Micro-manufacturing Thermodynamics Automation and control Vibrations and acoustics Fluid mechanics Biomechanics Mechanics of solids Materials
Management theme: Management science	**Management themes:** Accounting and finance Statistical analysis	**Management themes:** Project management Human resource management Communication Forecasting Information systems Operations management	**Management options:** Operations strategy Management science in practice Strategic information systems New product development

There is an optional language course in French or German, with certification, in the Senior Freshman and Junior Sophister (second and third) years. Both courses continue over the two years.

Optional fifth year – Masters in Engineering

This degree programme is based on a 4-year programme comprising both technical engineering subjects and a significant business and management component. Students who achieve a satisfactory academic standard in their 4th year may proceed to a 5th year, which will lead to the award of an M.A.I. (Masters in Engineering) degree.

The fifth year comprises advanced courses and significant project work based in universities or industry. It can be based in Ireland but opportunities will also exist for projects in international research centres and industries. Graduates with an M.A.I. will be professionally accredited engineers with both a broad-based understanding of engineering and management and a detailed knowledge of their chosen specialist areas. The aim is that graduates will be able to continuously train themselves, to adapt and move into related or newly emerging areas as their careers develop after graduation. Those students who choose to graduate after four years with the B.Sc. degree will require additional qualifications to be eligible for professional accreditation with Engineers Ireland.

Assessment

Assessment is by written examination, continuous assessment (laboratory and tutorial assignments) and project work. Some courses, such as design, are assessed completely by continuous assessment.

Career opportunities

Graduates of the programme will have a wide range of skills that will allow them to excel quickly in both the engineering and engineering management fields. Graduates will be suited to jobs in the high-tech sector (e.g. computer, aerospace, pharmaceutical, electronic) as well as traditional manufacturing (e.g. design, fabrication, assembly). They often work as project managers on teams with design and test engineers, managers, financial controllers, marketing and sales people. The qualification is also well suited to those who wish to pursue careers in project management and management consultancy.

Graduates will be able to adapt to a wide range of careers and working environments. Career opportunities are extremely broad, but the following list may give some idea of the range of options available. Past graduates are currently working in IBM, Intel, Project Management Group, JP Morgan, Davies Stockbrokers, Wyse Pharmaceuticals, Denis Woods Forensic Engineers, PWC Accountancy, Accenture, Reckitt Benckiser.

Further information

www.tcd.ie/mecheng/bsc
Tel: + 353 1 896 1383

Science (common entry)

COURSE CODE: **TR071**
PLACES 2010: **340**
POINTS 2009: **440***
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	HD3 or OC3	Mathematics
	HC3	In two of: physics, chemistry, biology, mathematics, physics/chemistry, geology, geography, applied mathematics or agricultural science
GCSE	Grade B	Mathematics
Advanced GCE (A-Level)	Grade C	In two of physics, chemistry, biology, mathematics, geology, geography or applied mathematics

Combinations of subjects not permitted:
Physics/chemistry with physics or chemistry
Agricultural science with biology
Applied mathematics with mathematics

See also:
TR031, 035, 073, 074, 075, 076, 077: pages 156-166

Course overview

Science is a small word and yet it conjures up the whole spectrum and sum of human knowledge about the natural world. So where do you begin?

It is precisely because of the scope and variety of this field of study that science at Trinity College is structured with choice in mind. Courses in the first two years are designed to introduce you to and train you in the fundamental sciences. By the end of the Senior Freshman (second) year you will have moved far beyond the extent of science as it is taught at school and will understand better where your real interests lie. At this point you have the opportunity to focus on one of seventeen specialist areas for your final two years.

Is this the right course for you?

Science at Trinity College leaves plenty of room for flexibility and is ideal if you want to explore the many avenues open to you as a scientist. Even if you already know what you want to specialise in, you will find that employers value the benefits of a broad-based scientific training and background.

Course content

Teaching is by lectures, seminars, tutorials and laboratory classes, so you will become familiar with laboratory practice and the methodology of scientific research from the first year. Smaller seminar classes and group tutorials mean that you will also be able to discuss course work with lecturers and other students in a friendly and informal atmosphere. Tutorials are given at both basic and advanced levels to explain, expand and support the material presented in lectures. Science students typically average 24 class contact hours per week.

TR071 Science at a glance

Junior Freshman (first year)

Students choose subjects from the following to a total of 60 credits. The suggested combinations of subjects are shown in Patterns 1-4, on page 136.

Biology; Chemistry; Geography; Geology; Mathematics; Mathematical methods; Physics; Foundation physics for the life and earth sciences. Students must be aware that their choice of Junior Freshman subjects can affect their choice of moderatorship (3rd and 4th year specialisation), see pages 138-155 for further details.

Mathematics can also be studied as a single honor subject see page 160.

Mathematics (20 credits)

This course teaches mathematics as a full subject and provides a basic mathematical training suitable for all branches of science.

- Calculus
- Partial derivatives
- Linear algebra
- Differential equations
- Computing
- Probability and statistics

Mathematical methods (10 credits)

A short foundation course in mathematics and computing for first-year students not taking mathematics as a full subject. This is a less detailed course that will introduce you to the principles and rules governing scientific investigation. Students who take this course may not take one of the physics degree options in 3rd and 4th years.

Topics include:

- Introduction to computing
- Functions, graphs, derivatives, maxima and minima
- Integration
- Matrices, linear equations
- Differential equations

Biology

Broad-based training in the fundamentals of modern biology.

Topics include:

Biology 1101 (10 credits)

- Introduction to molecular and cellular biology
- Genetics
- Developmental biology
- Microbiology

Biology 1102 (10 credits)

- Plant and animal biology
- Ecology

Biology 1101 is a prerequisite for Biology 1102

Chemistry

The course provides a general introduction to the fundamentals of modern chemistry, and forms the basis for further studies, both in chemistry and in other sciences.

Chemistry 1101 (10 credits)

- General and physical chemistry
- Introduction to the fundamentals of chemistry
- The Periodic Table and stoichiometry
- Atomic structure and principles of bonding
- Electrochemistry, acids and bases
- The solid-state, gas laws, thermodynamics, equilibria and kinetics

Chemistry 1102 (10 credits)

- Introduction to systematic inorganic and organic chemistry
- Aspects of main group and coordination chemistry
- Aliphatic and aromatic functional group chemistry

Chemistry 1101 is a prerequisite for Chemistry 1102

Geography 1021 (10 credits)

- Climate change
- Global atmospheric and oceanic systems
- Global geoecology
- Global geosystems
- Surface processes and landscape development

Geography 1022 (10 credits)

- Conservation
- Environmental degradation
- Environmental hazards

Geology 1101 (10 credits)

Geology topics include:

- Earth in space: Earth as a dynamic physical system
- The living planet: History of life on Earth and interaction of the physical, chemical and biological systems
- A delicate balance: Living with natural hazards and Earth's resources

Physics (20 credits)

Previous knowledge of physics is not required for this course.

Topics include:

- The physics of motion
- The material world
- Hearing and seeing
- Electromagnetic interactions
- Origins of modern physics
- Exploring the universe

Physics – foundation physics for the life and earth sciences (10 credits)

A foundation course of lectures, practical work and tutorials including the following topics: physics of motion, biomechanics, physics of hearing and seeing, electricity and magnetism and bioelectricity, radioactivity, nuclear physics and related medical applications, heat, pressure and fluids and their biological, geological and medical applications. No previous knowledge of physics is required.

Junior Freshman (1st year) Course Outline	
Semester 1	**Semester 2**
Pattern 1	
Maths Physics and two of the following (one from each semester)	
Chemistry 1101 Biology 1101 Geography 1021	Chemistry 1102 Biology 1102 Geology 1101 Geography 1022
Pattern 2	
Maths and four of the following (two from each semester)	
Chemistry 1101 Biology 1101 Geography 1021	Foundation physics Chemistry 1102 Biology 1102 Geology 1101 Geography 1022
Pattern 3	
Maths Methods and five of the following (two from semester 1 and three from semester 2)	
Chemistry 1101 Biology 1101 Geography 1021	Foundation physics Chemistry 1102 Biology 1102 Geology 1101 Geography 1022
Pattern 4	
Three from each semester	
Chemistry 1101 Biology 1101 Geography 1021	Chemistry 1102 Biology 1102 Geology 1101 Geography 1022

Senior Freshman (second year)

Students choose three subjects from the following to a total of 60 credits:

Biology; Mathematics; Chemistry; Geography; Physics; Geology

Students must be aware that their choice of Freshman (1st and 2nd year) subjects can affect their choice of specialisation in the 3rd and 4th year (see pages 138-155 for further details)

Mathematics (20 credits)

- MA22S1: Multivariable calculus for science (5 credits)
- MA22S2: Vector calculus for science (5 credits)
- MA22S3: Fourier analysis for science (5 credits)
- MA22S4: Mechanics (5 credits)
- MA22S6: Numerical data analysis techniques (5 credits)

Biology (20 credits)

Students choose 5 credit modules from the following:

- BY2201: Cell structure and function (5 credits)
- BY2202: Vertebrate form and function (5 credits)
- BY2203: Metabolism (5 credits)
- BY2204: Evolution (5 credits)
- BY2205: Microbiology (5 credits)
- BY2206: Ecosystem biology and global change (5 credits
- BY2207: Behaviour (5 credits)
- BY2208: Genetics (5 credits)
- BY2209: Infection and immunity (5 credits)
- BY2210: Plant an animal bio-resources (5 credits)

Chemistry (20 credits)

CH2201 (10 credits)

This module will cover topics in:

- Molecular obital theory
- Coordination chemistry
- Chemical thermodynamics
- Chemical kenetics
- Introduction to organic chemistry

CH2202 (10 credits)

This module will cover topics in:

- Main group chemistry
- Nuclear and medicinal inorganic chemistry
- Theoretical and quantum chemistry
- Nanoparticles and macro molecules
- Introduction to organic synthesis
- Organic spectroscopy
- Molecular modelling

Geography (20 credits)

GG2021: Changing worlds (10 credits)

This module will cover topics in:

- Human geography
- Physical geography

GG2022: Collection and analysis of geographical data (10 credits)

This module is divided into three components and aims to:

- Introduce students to a variety of methods in geographical study, analysis and research
- Enable students to select appropriate methods to study diverse geographical issues
- Develop students' geographical skills of numeracy data management, manipulation, analysis, display, interpretation and explanation.

Geology (20 credits)

- GL2201: Mineralogy (5 credits)
- GL2202: Palaeontology and stratigraphy: (5 credits)
- GL2203: Petrology (5 credits)
- GL2204: Structural geology, kitchen physics and mapwork (5 credits)

Physics (20 credits)

PY2P10: Classical physics:

This module combines four elements of classical physics:

- Current electricity
- Oscillations
- Physical optics: introduction
- Thermodynamics

PY2P20: Modern physics

This module combines four elements of modern physics:

- Special relativity
- Quantum physics
- Nuclear physics
- Observing the Universe

Junior and Senior Sophister (third and fourth years)

Select one of:

Biochemistry with cell biology p. 138
Biochemistry with immunology p. 139
Biochemistry with structural biology p. 140
Botany p. 141
Chemistry p. 142
Environmental sciences p. 144
Functional biology p. 145
Genetics p. 146
Geography p. 147
Geology p. 148
Microbiology p. 149
Molecular medicine p. 150
Neuroscience p. 151
Physics p. 152
Physics and astrophysics p. 152
Physiology p. 154
Zoology p. 155

If you need more information on the TR071 Science course outline, please do not hesitate to contact the Science Course Office, +353 1 896 1970 or **science@tcd.ie**

Study abroad

You will have the option to study abroad in the Junior Sophister (third) year in most science courses. In the past, for example, students have studied in the USA, Canada, Australia, and in a variety of universities throughout Europe. Optional language classes are available to you in first and second year (see page 13) to facilitate this. Some departments will also actively encourage you to spend your summer months working abroad in a research laboratory.

Further information

www.tcd.ie/Science
E-mail: **science@tcd.ie**
Tel: +353 1 896 1970

Biochemistry with cell biology

Students who wish to study Biochemistry with cell biology apply to the Science degree (TR071) and may select Biochemistry with cell biology as their specialist area for the 3rd and 4th years.

Junior Freshman (first year) prerequisites: Chemistry 1101 and Chemistry 1102. Also, Maths or Maths methods.

Senior Freshman (second year) prerequisite: Biology BY2201, BY2203, BY2205 and BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Biochemistry with cell biology?

The basic building block of life is the cell, while biochemistry is the study of the chemical basis of life. Biochemistry with cell biology focuses on how the basic unit of life functions at molecular and higher levels. The unique perspective of the cell biologist is the spatial and temporal organisation of processes essential for life. This subject area is also an integral part of medicine, as it helps us to understand the mechanics of how disease and disorders occur. It is also an essential component of biotechnology, where processes for the production of foods and fuels, and enzymes or other proteins are developed.

What will you study?

The courses in the Junior Sophister (third) year provide a broad knowledge and understanding of the fundamentals of biochemistry and cell biology – from the behaviour of simple cells to the complex development and organisation of the human being.

Topics include:

- Protein science
- Membrane biology
- Cellular regulation
- Immunology
- Enzyme catalysis
- Eukaryotic gene structure

A research project in the area of either biochemistry or cell biology forms an essential part of the Senior Sophister (fourth) year. Examples of research areas from which topics may be chosen include the cell cycle and cell division, cytoskeleton, developmental biology, cancer, neurobiology, molecular and cellular parasitology, viral evasion mechanisms, cell signalling, metabolism, the immune system and control of cell death.

Study abroad

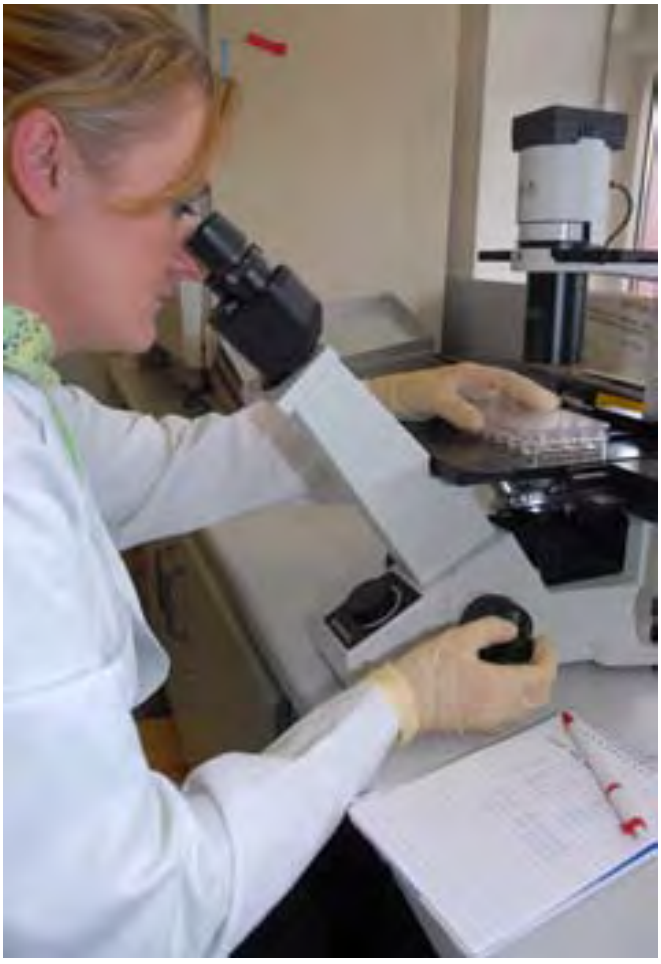
The School participates in an Erasmus scheme which offers the opportunity for students to spend their third year studying in a university in the United Kingdom, France or Germany.

Career opportunities

This course equips you to work in all major aspects of biochemistry, cell biology and molecular biology. You may decide to continue your studies at the postgraduate level and subsequently take up a career in industrial, medical or academic research. Alternatively, you will be qualified to work in hospitals and commercial laboratories dealing with biotechnology, food science, pharmaceuticals or diagnostics. Cell biology is also a highly visual science and graduates benefit from this training in terms of analytical and presentational skills. Consequently, recent graduates have also opted for careers in communications, information systems, teaching and management, and have even crossed over into areas such as accountancy, law and merchant banking, where there is a demand for the skills developed in the biological and chemical sciences.

Further information

www.tcd.ie/Biochemistry
Tel: +353 1 896 1608



Biochemistry with immunology

Students who wish to study Biochemistry with immunology apply to the Science degree (TR071) and may select Biochemistry with immunology as their specialist area for the 3rd and 4th years.

Junior Freshman (first year) prerequisites: Chemistry 1101 and Chemistry 1102. Also, Maths or Maths methods.

Senior Freshman (second year) prerequisite: Biology BY2201, BY2203, BY2205 and BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Biochemistry with immunology?

This is a degree in which students become expert in the complementary disciplines of biochemistry and immunology. Biochemistry is the study of all processes involved in living organisms. It encapsulates how cells replicate, carry out all their specialised functions and then die in an orderly manner. It seeks to define the basis for different diseases and medical disorders. Immunology is one of the fastest and most exciting growth areas of biological science and involves studying the molecules and cells of the body that are involved in recognising and fighting infection and disease. Research in immunology has helped in the development of new vaccines and new therapies for diseases, such as rheumatoid arthritis, multiple sclerosis and Crohn's disease. Trinity College has a worldwide reputation for excellence in immunology research and it is a recognised strategic strength of TCD. As there is also a lot of interest in immunology from the pharmaceutical sector, it is anticipated that there will be a high demand for skilled graduates into the future.

What will you study?

In the Junior Sophister (third) year you will share many of your courses with other students of biochemistry, particularly in the areas of cell and molecular biology.

Immunology topics covered include:

- Core concepts in immunology
- Cells and molecules of the immune system
- Infectious diseases and vaccines
- Autoimmunity, allergies and cancer

Additional topics include:

- Protein science
- Gene regulation
- Membrane biology
- Microbiology and virology

In the Senior Sophister (fourth) year you will carry out a research project within one of the department's active immunology research groups and also cover specialist topics in both biochemistry and immunology.

Study abroad

The School participates in an Erasmus scheme which offers the opportunity for students to spend their third year studying in a university in the United Kingdom, France or Germany.

Career opportunities

On completion of this course you will be qualified to work in all areas of biochemistry and/or immunology. Given the exciting developments in immunology currently, graduates of this course will be ideally suited to continue studying at postgraduate level and subsequently take up a career in industrial, medical or academic research. Some graduates will work in hospital and commercial laboratories. However, previous graduates have also gone on to study medicine or pharmacy, and even crossed into areas such as teaching, information systems, accountancy, and management.

Further information

www.tcd.ie/Biochemistry
Tel: +353 1 896 1608

Biochemistry with structural biology

Students who wish to study Biochemistry with structural biology apply to the Science degree (TR071) and may select Biochemistry with structural biology as their specialist area for the 3rd and 4th years.

Junior Freshman (first year) prerequisites: Chemistry 1101 and Chemistry 1102. Also, Maths or Maths methods.

Senior Freshman (second year) prerequisite: Biology BY2201, BY2203, BY2205 and BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Biochemistry with structural biology?

Cells form the smallest organisational unit of life, while biochemistry is the study of the chemical basis of life. The goal of structural biology is to characterise the 3-dimensional shape and chemistry of molecules (proteins, lipids, DNA and RNA) that perform the various functions that are essential for life. The function of a molecule is related to its shape, and this was demonstrated in dramatic fashion by Watson and Crick when they proposed a model of DNA and the mechanism for genetic inheritance. More recently, in 2006, Roger Kornberg at Stanford University won the Nobel prize for determining how DNA is replicated in living cells by protein machines. Knowledge of the structure of proteins implicated in human disease is also useful for the design of new drugs. All major pharmaceutical companies have significant investment in structural biology to help aid their pipeline of new drugs and therapies for cancer, infectious diseases, and other pathological conditions.

What will you study?

The courses in the Junior Sophister (third) year provide a broad knowledge and understanding of the fundamentals of biochemistry and structural biology – from the behaviour of simple cells to the complex development and organisation of the human being.

Topics include:

- Protein structure
- Molecular immunology
- Medicinal chemistry
- Bioenergetics
- Enzyme catalysis
- Eukaryotic gene structure

A research project in the area of either biochemistry or structural biology forms an essential part of the Senior Sophister (fourth) year. Examples of research areas from which topics may be chosen include the structural biology of cell signalling, rational drug design, cytoskeleton, cancer, neurobiology, molecular and cellular parasitology, viral evasion mechanisms, cell signalling, metabolism, the immune system and control of cell death. The School of Biochemistry and Immunology is a leading institute in Ireland for 3-dimensional protein structure determination, with state-of-the-art equipment in X-ray crystallography and nuclear magnetic resonance (NMR) spectroscopy techniques. Students will be introduced to these techniques through lectures and practicals, and Trinity College also maintains a 'Visualisation Facility', housed in a lecture hall, that provides unparalleled opportunities for exploring the 3-dimensional shape of the molecules of life.

Study abroad

The School participates in the Erasmus scheme, which offers the opportunity for students to spend their third year studying in a university in the United Kingdom, France or Germany.

Career opportunities

This course equips you to work in all major aspects of biochemistry and molecular biology. You may decide to continue your studies at the postgraduate level and subsequently take up a career in industrial, medical or academic research. Alternatively, you will be qualified to work in the pharmaceutical industry in the area of structure-based drug design. Recent graduates have also opted for careers in teaching, information systems, communications and management, and have even crossed over into areas such as accountancy, law and merchant banking, where there is a demand for the skills developed in the biological and chemical sciences.

Further information

www.tcd.ie/Biochemistry
Tel: +353 1 896 1608

Botany

Students who wish to study Botany apply directly to the Science degree (TR071) and may select Botany as their specialist area for the third and fourth years.

Junior Freshman (first year) prerequisites: Biology 1101 & 1102.

Senior Freshman (second year) prerequisites: 4 of the following: Biology BY2201, BY2202, BY2203, BY2204, BY2205, BY2206, BY2207, BY2208, BY2209, BY2010.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Botany?

Botany is the scientific study of plants. These studies are pursued in the field, in the botanic garden and in laboratories. Plants range from the largest forest trees to single-celled algae of fresh and marine waters.

The study of plants is of vital importance; they are the source of the food we eat, the oxygen we breathe, most of the medicines we use, and are core to the understanding of the processes of global climate change. Dealing with the threats from global climate change will be one of the biggest challenges of this century. Human manipulation of plants in the future will need to provide food and energy for an expanding human population whilst conserving the biodiversity of living organisms and integrity of habitats.

What will you study?

Trinity College specialises in the study of the evolution and conservation of all forms of plant life and their response to global climate change impacts.

Courses include:

- Plant biodiversity and conservation
- Ecology
- Plant physiology and global climate change
- Long-term environmental change
- Plant molecular biology
- Pollination biology

The laboratories and greenhouses on Trinity College's campus, the College Botanic Garden and the internationally recognised Herbarium support teaching. All courses are derived from active research lines and emphasis is placed on your own research project in the Senior Sophister (fourth) year.

All students are given the opportunity to participate in field courses which alternate between Europe and the Tropics. Recent field courses have been held in Guyana, Thailand, and Gran Canaria.

Career opportunities

When you graduate you can move directly into a career related to plant biology, such as nature conservation, environmental consultancy, environmental protection or agricultural research as well as teaching at second-level. Alternatively, you might decide to go on to take a higher degree in Trinity College or elsewhere. The skills you acquire in the Sophister (third and fourth) years are also widely applicable in business and industry.

Further information

www.tcd.ie/Botany
Tel: +353 1 896 1274

Chemistry

Students who wish to study Chemistry for their degree apply to the Science degree (TR071) and may select Chemistry as their specialist subject for the 3rd and 4th years.

Junior Freshman (first) year prerequisite: Chemistry 1101 and Chemistry 1102 plus Mathematics or Mathematical methods.

Senior Freshman (second year) prerequisite: Chemistry CH2201 and CH2202.

For details of the first two years of the Science course, including entry requirements, see page 134.

Chemistry is also an integral part of the following courses:

TR074: Chemistry with molecular modelling, see page 156.

TR075: Medicinal chemistry, see page 161.

TR076: Nanoscience, physics and chemistry of advanced materials, see page 163.

What is Chemistry?

Chemistry is a central science. Without it, many modern disciplines such as materials science, molecular biology and environmental science would not be possible. Modern chemistry and chemical technology are vital and very major contributors to modern lifestyle in areas as diverse as food production, health, medicines and communications. Chemists are molecular engineers involved in developing novel target compounds for applications as diverse as pharmaceuticals and drugs, photo- and electro-responsive materials, and polymers and catalysts.

What will you study?

Junior Sophister (third year) courses will cover the three main disciplines:

- **Inorganic chemistry** – organometallic chemistry, catalysis, group theory, bio-inorganic chemistry, spectroscopic methods, identification and characterisation of compounds, inorganic polymers
- **Organic chemistry** – organic synthesis, spectroscopy, stereochemistry, heterocyclic chemistry, reaction mechanisms, amino acid and peptide synthesis
- **Physical chemistry** – macromolecules and interfacial chemistry, spectroscopy, quantum chemistry, kinetics, electrochemistry, thermodynamics, analytical chemistry, chemisorption and catalysis

In addition there are courses on environmental chemistry, computer programming, maths and physics, and you have the option of taking complementary courses from other disciplines.

Lectures are complemented by laboratory experimental classes where you will gain experience in more sophisticated preparative chemical techniques and will also be able to carry out your own spectroscopic analyses and computer-based modelling.

In the Senior Sophister (fourth) year, lectures consist of core fundamental material and an extensive range of optional courses that allow each student to develop her/his own particular interests. The practical component of this year is an extended research project which you will carry out from September to December. This may be conducted in Trinity College or in an academic laboratory abroad. A wide range of projects at the forefront of chemistry are available within the many research areas located in the School.

Study abroad

The School of Chemistry has exchange agreements with a large number of other universities where students carry out their final-year research projects, from September to December. Centres where students have completed their research projects in recent years have included Vienna, Berlin, Bologna, Toulouse and Utrecht in Europe and McGill and Duke Universities in North America. The areas of research cover modern chemical interests such as cancer chemotherapy and DNA chemistry, through device fabrication and materials processing, to homogeneous catalysis and supramolecular chemistry.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Career opportunities

The chemical and pharmaceutical industries, which contribute some 20% to Ireland's exports, are excellent employers of Trinity College's chemistry graduates. Former graduates of chemistry are working in companies such as Henkel, Wyeth, Glaxo-Smith-Kline and Bristol Meyers Squibb. Patent offices, government advisory and information services, libraries, public analytical laboratories, schools and third-level institutions also employ chemists. Or you may decide to carry out postgraduate research leading to a higher degree either in Trinity College or in another university in Ireland or abroad. Other equally successful routes graduates have taken in the past include careers in the business and financial services sectors, and in management.

Did you know?

- As well as offering a broad choice of topics for study in the traditional areas of chemistry (organic, inorganic and physical chemistry), the School of Chemistry has research strengths in the cutting-edge areas of medicinal and biological chemistry, materials and nano-chemistry and computational chemistry. Students can select a range of lecture courses from topics as diverse as the chemistry of cancer, biological polymers and synthetic materials, metal chelation therapy, catalysis and molecular recognition and synthetic receptors, providing fascinating illustrations of the basic modes of chemical reactivity. These topics are used to review important chemical principles, to gain insight into the history of discovery, and to become acquainted with cutting-edge research that fills the pages of the scientific literature and occasionally enters those of the popular press.

Further information

www.tcd.ie/Chemistry
Tel: +353 1 896 1726 / 2040

Environmental sciences

Students who wish to study Environmental sciences apply directly to the Science degree (TR071) and may select Environmental sciences as their specialist subject for the third and fourth years.

Junior Freshman (first year) prerequisites: Biology 1101 & 1102.

Senior Freshman (second year) prerequisites: 4 of the following: Biology BY2201, BY2202, BY2203, BY2204, BY2205, BY2206, BY2207, BY2208, BY2209, BY2210.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Environmental sciences?

Environmental sciences is by its nature a multidisciplinary research discipline – a study of the various interactions between the biological, chemical and physical components of our environment. Environmental scientists have training that is similar to other physical or life scientists, but is specifically applied to the environment. A broad scientific knowledge is required which may also involve an understanding of economics, law and the social sciences.

The undergraduate degree course offered by the School of Natural Sciences has been designed to provide for the needs of students with an interest in this rapidly developing academic and professional field. The programme comprises specially designed modules plus suitable modules from contributing disciplines. There should be ample choice within the listed optional modules for a selection which reflects a particular student's interests.

Field work is a core component of the course structure. Students attend field excursions in their Junior Sophister (third) year; students have a choice of up to three field trips which they can attend, as well as a mandatory introductory field trip. In addition, optional trips offered by Zoology and Botany allow the possibility of students to attend field courses in Terrestrial ecology, and a Mediterranean field trip.

What will you study?

Teaching is by lecture, seminar, practical laboratory and fieldwork classes in areas such as:

- Environmental governance
- Water technology
- Global environmental change
- Environmental chemistry

Joint modules with other disciplines include fundamentals of ecology, freshwater biology, environmental history, statistics and experimental design, earth surface processes, bioindicators and pollution, stable isotopes and groundwater quality, angiosperm diversity and systematics, and geographical information systems. In the Senior Sophister (fourth) year you will research and write a thesis on an environmental project. In the past, students have undertaken projects on air pollution, waste management, restoration ecology, water quality, habitat management and greenhouse gas emissions.

Career opportunities

As a graduate in this area you will be able to take advantage of the worldwide demand generated by increasing environmental awareness. Many graduates move straight into environmental consultancy or are working with regulatory authorities and county councils. The course also provides an ideal background for taking a higher degree or pursuing a career in business or industry.

Further information

http://www.tcd.ie/Botany/undergraduate/environmental-science/
Tel: +353 1 896 1274

Functional biology – the comparative physiology of organisms

Students who wish to study Functional biology apply to the Science degree (TR071) and may select Functional biology as their specialist area for the 3rd and 4th years.

Junior Freshman (first) year prerequisites: Biology 1101 & 1102

Senior Freshman (second year) prerequisites: Biology BY2201, BY2202, BY2203, BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Functional biology?

Functional biology is the comparative physiology of plants and animals; i.e. comparing the way different kinds of organisms function in the context of their structure (anatomy). Many of the mechanisms organisms use for survival are conserved across species, allowing the revelation of key functional principles. Furthermore, the mechanisms which organisms have evolved depend on their interactions with the environment through time. Finally, Functional biology has important roles to play in elucidating the effects of gene mutations and/or deletions affecting protein function and environmental effects on gene expression.

What will you study?

This course focuses on comparing and contrasting animal and plant physiology. Modules are provided from the disciplines of Botany and Zoology and from the School of Genetics and Microbiology. The Junior Sophister (third) year provides a broad knowledge and understanding of Functional biology, while in the final year a major component of the course is a lab-based research project chosen from the disciplines of Botany or Zoology. Final-year teaching also occurs through small-group tutorials in areas of specialisation in plant or animal Functional biology as well as through lectures.

Work in the Junior Sophister (third) year provides a broad overview of functional biology and includes core modules in:

- Comparative physiology
- Plant physiology
- Plant structure, anatomy, metabolism
- Applied lab techniques
- Plant molecular biology
- Developmental biology
- Parasitology
- Experimental design and analysis
- Neurogenetics
- Plant molecular genetics I
- Gene expression
- Broad curriculum (see www.tcd.ie/broad_curriculum or p. 12)

A major component of the Senior Sophister (fourth) year is the research project. Tutorials in specialist areas of functional biology are also selected as well as taught modules, including the following:

- Comparative physiology of eyes and vision
- Environmental physiology
- Plant molecular genetics II
- Plant developmental genetics.

Career opportunities

Functional biology acts as the perfect springboard for undergraduate students to go on to post-graduate bioscience degrees; e.g. Masters and PhDs in biological/physiological disciplines. Graduates of Functional biology are also ideally placed to contribute to the knowledge economy/society through careers with biotechnology companies and/or industry, having gained unique and valuable experience and training. The course also provides an excellent background for students who want to pursue a career in teaching biology.

Further information

www.naturalscience.tcd.ie/undergraduate/functional-biology.php
Tel: +353 1 896 1366

Genetics

Students who wish to study Genetics apply to the Science degree (TR071) and may select Genetics as their specialist area for the 3rd and 4th years.

Junior Freshman (first year) prerequisites: Chemistry 1101, Chemistry 1102, Biology 1101 and Mathematics or Mathematical methods.

Senior Freshman (second year) prerequisites: Biology BY2201, BY2203, BY2205 and BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

Alternatively, to study Human genetics exclusively, students should apply to course TR073 – Human genetics see page 158.

What is Genetics?

Genetics encompasses both the science of heredity – how phenotypic traits are inherited – and the modern field of molecular biology, which has figured out what genes are and how they work. Genetics provides an approach to studying everything from how cells work to the physiology and behaviour of organisms and the evolution of species. It is central to biology and is increasingly important in modern medicine. Reflecting this, the genetics course covers a wide field and all major groups of organisms.

What will you study?

Courses cover the molecular genetics of bacteria and viruses, man, and other animals and plants. Subjects are taught through a combination of lectures, tutorials and practical courses.

- **Medical genetics:** includes the identification of genes causing various clinical disorders and the development of genetic and stem-cell therapies to treat them
- **Neurogenetics:** studies how genes control the development and function of the nervous system and their influences on behaviour and psychiatric disease
- **Molecular and cell biology:** explores the control of gene expression and function of genes in various cellular processes in animal or human cells and bacteria, such as cell death, proliferation or differentiation
- **Developmental genetics:** investigates how genes in different cells control the development and growth of an organism
- **Bioinformatics and evolutionary genetics:** investigates evolutionary relationships between organisms and the processes that drive evolution
- **Population genetics:** deals with genetic variation in populations and the role of this variation in evolution
- **Plant genetics:** studies the genes that control plant development and physiology

In the Senior Sophister (fourth) year, you will be able to specialise in areas of particular interest, and will carry out an original research project in an area such as: hereditary blindness, cell death, neural development, bacterial stress responses or plant genetics. Specialist lecture courses include cancer genetics, genetics of vision, behavioural genetics and human evolutionary genetics.

Did you know?

- The School of Genetics and Microbiology is housed, in part, in the Smurfit Institute of Genetics, with state-of-the-art research facilities. The Institute has an international reputation for world-class research, reflected in an outstanding record of publication and funding and sixth place in the world rankings of university genetics departments. As such, it provides a superb environment for undergraduate education and research training of internationally recognised quality.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Study abroad

At the end of the Junior Sophister (third) year, you may be able to spend the summer months working in a human genetics research laboratory. This is often in the USA, with some financial assistance provided.

Career opportunities

Graduates have gone on to careers in diverse fields, many in science or areas related to it. Many genetics graduates go on to careers in academic or industrial research beginning with postgraduate study. Opportunities also exist in biotechnology and pharmaceutical companies, agricultural organisations, medical or clinical diagnostic laboratories, forensics, genetic counselling, public health and epidemiology programmes, and in teaching. Other graduates have gone on to careers such as medicine, patent law or science journalism. Even if you choose a career not directly related to the scientific subject, the skills of critical thinking and problem solving provided by the Genetics degree will put you in high demand.

Further information:

www.tcd.ie/Genetics
Tel: +353 1 896 1140

Geography

Students who wish to study Geography apply to the Science degree (TR071) and may select Geography as their specialist area for the 3rd and 4th years.

Junior Freshman (first) year prerequisite: Geography 1021 and/or Geography 1022

Senior Freshman (second year) prerequisite: Geography GG2021 and GG2022.

For details of the first two years of the Science course, including entry requirements, see page 134.

Alternatively, Geography may be combined with one other subject from an arts or social science discipline within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. Both subjects are normally studied for three years and one or both subjects in the fourth year. An honors degree is awarded in both subjects. For subjects that combine with Geography, see page 90.

See also:

TR029: Political science and geography, page 81

TR077: Earth sciences, page 157

Why study Geography?

Geography is truly interdisciplinary as it spans a broad spectrum of the social, biological, informational and physical sciences. As the world becomes interconnected geographers are well placed to bring their understanding and skills to bear on social and environmental issues. An important attribute of geographers, and one that is highly regarded in the workplace, is their ability to combine multidisciplinary knowledge with a wide range of transferable skills, including critical thinking, report-writing, numeracy and IT-literacy. These can be applied to careers which directly incorporate a geographic dimension, such as environmental consultancy or urban planning, and to wider areas such as business and public service.

Course content

The Junior Freshman (first year) Geography course aims to provide a solid grounding in physical geography, focusing on materials that are dealt with in greater depth in later years.

All students take 'Geography 1021' which considers the following themes:

- Climate change
- Global atmospheric and ocean systems
- Global geoecology
- Global geosystems
- Surface processes and landscape development

In addition, students may select to take 'Geography 1022' which introduces key concepts relating to the interactions between humans and their environment by examining case studies from the fields of conservation, environmental degradation and environmental hazards.

In the first year, as students study geography in combination with other subjects, they attend an average of four lectures per module per week. The Senior Freshman (second year) geography modules cover issues relating to cultural, economic and historical geography, and to natural and human-modified environmental processes and systems. Research skills are developed further through a course on collection and analysis of geographical data which includes a fieldwork component.

The Sophister years

There are four compulsory modules (5 credits each) in Junior Sophister (third) year:

- Advanced research methods in geography I
- Advanced research methods in geography II (which includes an overseas fieldtrip)
- Geographic information systems
- History and philosophy of geography

There are also additional optional modules (5 credits each) covering a wide range of subjects that include:

- Coastal processes and management I and II
- Globalisation
- Hydrology and water resources I
- Quaternary environmental change and climate
- Quaternary geomorphology I
- The origins of humanity

For their Senior Sophister (fourth) year, students undertake a research dissertation and choose from optional modules that include:

- Climate change
- Environmental governance I and II
- Globalisation and African development
- Historical geography I and II
- Hydrology and water resources II
- Property development, urban planning and the state
- Quaternary geomorphology II
- Reconstructing environmental change
- Understanding environmental change

Several of the Sophister year options require field and laboratory work. Students may also opt to take a number of courses outside geography in their Sophister years.

Assessment

A combination of continuous assessment and end-of-year examination is used.

Study abroad

There are opportunities for students to spend all or part of the third year studying abroad at Exeter, Bordeaux, Paris, Utrecht or Stockholm universities.

Career opportunities

A wide range of career options is potentially available to geography graduates. The combination of a broad-based discipline and training in highly relevant transferable skills is valued in today's job market, where adaptability and flexibility are widely regarded as assets. Careers taken up by graduating geography students in recent years include urban and regional planning, environmental consultancy and research and teaching as well as positions in such areas as financial services (including insurance), foreign affairs, leisure and tourism and overseas development.

Did you know?

- In recent years, Sophister year geography students have been involved in academic staff-led fieldwork in Iceland, Mallorca and Zambia, and in making digital video documentaries as part of their assessed work.

Further information

www.tcd.ie/Geography
Tel: +353 1 896 1576

Geology

Students who wish to study Geology apply to the Science degree (TR071) and may select Geology as their specialist area for the 3rd and 4th years.

Junior Freshman (first) year prerequisite: Geology 1101

Senior Freshman (second year) prerequisite: Geology GL2201, GL2202, GL2203, GL2204.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Geology?

Geology is the science of the Earth. It investigates the composition and evolution of this dynamic planet and its living organisms. It embraces the study of such diverse topics as dinosaurs, volcanoes, meteorites and earthquakes. It also deals with the origin and concentration of the materials on which our society is based.

What will you study?

For details of the topics covered in the Junior and Senior Freshman (first and second) years see pages 135-137. Fieldwork is an essential and integral part of Sophister (third and fourth year) geology.

In the Junior Sophister (third) year, a thorough grounding is provided in all major branches of geology. You will learn how each of the rocks contains information on the processes that formed them and the environment in which this took place. You will also study their response to enormous forces in the Earth which cause them to bend, buckle and crack; the measurement of geological time; investigation of the subsurface; and the evolution of life. In addition, you will learn skills in computing and data presentation.

In the Senior Sophister (fourth) year you will take four compulsory courses:

- Project (recent projects incorporating fieldwork have been based in various parts of Europe and also in North America)
- Fieldwork
- Geological literature and seminars
- Geology of Ireland and economic geology

You will also select five optional subjects from a wide range covering both academic and applied areas of geology. Optional subjects include:

- Petroleum geology and exploration
- Continental tectonics and landscape evolution
- Hydrogeology and groundwater quality
- Global igneous activity
- Metamorphism and the early solar system
- Micropalaeontology
- Palaeobotany, palynology and organic petrology
- Climate change
- Laboratory project

Study abroad

There are opportunities for students to spend part of their Sophister years abroad, we have formal agreements with Uppsala (Sweden) and Clermont-Ferrand (France), but other locations are also possible.

Career opportunities

Recent graduates have found professional career opportunities with mining companies, civil engineering firms, geological and environmental consultancies, oil companies, organisations based in computing and information systems, and government geological surveys. Geology graduates are also highly valued in more generalised fields of employment (e.g. in the finance sector) due to their adaptability, their many transferable skills and their experience at dealing with incomplete data sets.

Did you know?

- As a student of geology, you will undertake a two-week field trip to a tectonically active region in Spain.

Further information

www.tcd.ie/Geology
Tel: +353 1 896 1074

Microbiology

Students who wish to study Microbiology should apply to the Science degree (TR071) and may select Microbiology as their specialist area for the 3rd and 4th years.

Junior Freshman (first year) prerequisites: Chemistry 1101, Chemistry 1102, plus Mathematics or Mathematical methods, and Biology 1101.

Senior Freshman (second year) prerequisites: Biology BY2201, BY2203, BY2205 and BY2208.

For full details of the first two years of the Science course, including entry requirements, see page 134.

Microbes and microbiology

Although microbes have been studied for 300 years, mainly in the context of disease, only recently has it been fully realised that microbes are essential for the maintenance of many aspects of life on Earth. This includes recycling all nutrients and minerals, providing oxygen to our atmosphere, fuelling our digestive system and generating essential vitamins and nutrients for our survival. On the other hand, microbes cause a multitude of infectious diseases in humans, animals and plants. Diseases such as AIDS, malaria, cholera, avian influenza, bovine spongiform encephalopathy ('mad cow disease') and antibiotic-resistant Staphylococcus aureus (MRSA) infection are all caused by microbes. Despite this, we still know very little about microbes and some estimates suggest that over 95% of the microbial world is yet to be discovered!

Microbiology, as a science, investigates the structures and life processes of micro-organisms (such as bacteria, protozoa, fungi and viruses) together with their activities and effects, beneficial and detrimental, on plants, animals, man and the environment. It also studies the control of these effects and the harnessing of microbial processes for applications in biotechnology. A microbiologist is a versatile scientist and studies microbes at both cellular and molecular levels, using a wide range of techniques, and will also be proficient in microbial biochemistry and genetics.

What will you study during the course?

During the first two years, you will be exposed to a broad range of sciences, facilitating an understanding of how they interrelate, consolidating your fundamental scientific knowledge and allowing you to develop your study skills. Part of this will include microbiological modules within the subject of biology.

In the third year and final year, you will mainly be based in the microbiology section of the School of Genetics and Microbiology in the Moyne Institute of Preventive Medicine, which houses some world-class researchers in medical and molecular microbiology.

In the 3rd and 4th years, you will take a core course covering aspects of Microbial molecular and Cell biology, Microbial pathogenicity and Applied microbiology. As some of these topics are closely related to biochemistry, immunology and genetics, you will also take complementary courses from these disciplines.

Extensive laboratory and computer training cover the safe handling of pathogenic micro-organisms, separation of their components and products, genetic analysis, biotechnological techniques and research methods.

In the final year you will also choose from optional courses reviewing the leading edge of research and knowledge in topics such as:

- Gene regulation and expression in bacteria and eukaryotic microbes
- Bacterial cell surfaces and their proteins
- Molecular pathogenesis (disease mechanisms) of bacterial and protozoal infections
- Regulation, issues and standards in current microbiological practice
- Clinical microbiology
- Emerging pathogens

In the final year, you will also undertake a 9-week, full-time project under supervision in a research laboratory. You will work at the cutting-edge of research on topics like genetic transfer between bacteria, design of new anti-malarial drugs, and novel methods for disinfection in hospitals.

Career opportunities

Graduates in microbiology have a wide range of expertise and are considered versatile scientists for industry or pure research. This makes them sought after by pharmaceutical and medical research laboratories as research and quality assurance staff in drug and medical device manufacture, as analytical or R&D staff by the food and beverage industries, by public utilities, the health service, by teaching and training establishments and publishing houses, in life science sales and product development, medical relief organisations and many other areas. Such employment may find you working with multinational or small companies in Ireland or abroad, working with leading-edge biotechnologies in the production of drugs, enzymes, antibiotics, vaccines or agricultural products.

Many graduates go on to do a higher degree in Ireland or abroad and enter a rewarding career in many of the areas mentioned or continue a research career in a university.

Further information

www.tcd.ie/microbiology
Tel: +353 1 8961190

Molecular medicine

Students who wish to study Molecular medicine apply to the Science degree (TR071) and may select Molecular medicine as their specialist area for the 3rd and 4th years.

Junior Freshman (first year) prerequisites: Chemistry 1101 and Chemistry 1102. Also, Maths or Maths methods. Recommended: Biology 1101

Senior Freshman (second year) prerequisites: Biology BY2201, BY2203, BY2205 and BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Molecular medicine?

Molecular medicine is a joint degree programme offered by the School of Biochemistry and Immunology and the School of Medicine and has been inspired by the changing needs of medical research. It is a unique collaboration between the two schools, aimed at creating a science programme with a strong emphasis on translational research, i.e. a theory to therapy approach to learning whereby medical research advances can be directly translated into patient care.

Molecular medicine at Trinity College is the only such degree programme available in Ireland. Students will be given lectures at the cutting-edge of current scientific knowledge within the overarching research themes of cancer, immunology, neuroscience, genetics and microbiology, in addition to clinical lectures given at St. James's Hospital, which will focus on the application of research knowledge to the clinic.

What will you study?

In the Junior Sophister (third) year, the molecular medicine course will provide a broad knowledge and understanding of various fundamental science disciplines, biochemistry, cell biology, immunology, genetics and microbiology and some topics unique to the molecular medicine course as listed below.

Molecular medicine topics include:

- Clinical aspects of cancer and infection
- Stem cells and gene therapy
- Drug adsorption and metabolism

Science topics include:

- Endocrinology
- Membrane function
- Cellular regulation
- Immunology
- Protein chemistry
- Eukaryotic gene structure

A research project in the area of biochemistry, cell biology, immunology or clinical medicine forms an essential part of the Senior Sophister (fourth) year. Students will have a choice to perform their project in the School of Biochemistry and

Immunology, on the main College campus or in the Department of Clinical Medicine, St. James's Hospital. Examples of research areas from which topics may be chosen include the cell cycle and cell division, cytoskeleton, developmental biology, cancer, neurobiology, neurological disease, molecular and cellular parasitology, viral evasion mechanisms, cell signalling, metabolism, the immune system, genetic diseases, and control of cell death. The School also participates in an Erasmus scheme which offers the opportunity for students to spend their third year studying in a university in the United Kingdom, France or Germany.

Career opportunities

Graduates of this course will have the ability to work in all major aspects of molecular biology, biochemistry, and cell biology. You may decide to continue your studies at the postgraduate level and subsequently take up a career in medical or academic research. For example, it is possible to continue your studies towards a Masters or Ph.D. in several disciplines in life sciences including the School of Biochemistry and Immunology and the Institute of Molecular Medicine. Alternatively, you will be qualified to work in hospitals and commercial laboratories dealing with biotechnology, food science, pharmaceuticals or diagnostics. Other possibilities include such careers as teaching, information systems, communications and management, law, and banking, where there is a demand for the analytical skills developed in the science and medical disciplines.

Further information

www.tcd.ie/Biochemistry
Tel: +353 1 896 1608

Neuroscience

Students who wish to study Neuroscience apply to the Science degree (TR071) and may select Neuroscience as their specialist area after the second year.

Junior Freshman (first) year prerequisites: Chemistry 1101, Chemistry 1102. Also: Mathematics or Mathematical methods. Recommended: Biology 1101.

Senior Freshman (second year) prerequisites: Biology BY2201, BY2202, BY2203 and BY2204.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Neuroscience?

Neuroscience is the discipline concerned with the scientific study of the nervous system in health and disease. It probes the intricate machinery of the nervous system in an attempt to understand how we think, move, perceive, learn and remember. Research in the neurosciences is of considerable importance in medicine, considering the debilitating and costly effects of neurological and psychiatric disease. In this regard, a major goal of modern neuroscience research is to elucidate the underlying causes, and to produce more effective treatments for major brain diseases such as Multiple sclerosis, Alzheimer's disease, Parkinson's disease, schizophrenia and depression.

What will you study?

Neuroscience links neurobiology with cognitive science, and as a result modules are provided by several Schools within several faculties. The course involves in-depth instruction in the fundamentals of modern molecular and cellular biology, as well as on the structure and operation of the nervous system.

Other modules focus on the development of the nervous system, its response to injury and disease, the relationship of the brain to behaviour, imaging the brain, and the drug treatment of brain disorders. You will also be trained in scientific methodology and experimental design, data handling and research skills.

Junior Sophister (third) year courses include:

- Introduction to neuroscience
- Neuroanatomy
- Neurophysiology I
- Neurochemistry I
- Introduction to neurogenetics
- Developmental biology
- Cellular and molecular physiology
- Biochemistry and immunology
- General principles of pharmacology
- Applied laboratory techniques
- Research skills

Senior Sophister (fourth) year courses include:

- Neurophysiology II
- Neurochemistry II
- Neuroimmunology, neuroinflammation and experimental neuropathology
- Neuropharmacology
- Neuropsychology
- Neurogenetics
- Journal club

An important part of your final year is a major research project that is carried out in one of the several neuroscience research groups within the Trinity College Institute of Neuroscience (**www.tcd.ie/neuroscience**). The research project will be preceded by a literature review, and will lead to a dissertation.

Research projects are currently available in the following research areas: Neurobiology of Alzheimer's disease, Neurotoxicity of MDMA ('Ecstasy') and cannabis, Neurobiology of memory and learning, Neuroinflammation, Neurobiology of Parkinson's disease, Neurobiology of depression, Human sleep research.

Career opportunities

As a graduate of neuroscience you can expect to find employment in organisations that utilise your general scientific training as well as your specialist skills (some recent graduates are now employed by Wyeth Biopharma, Abbott and Quintiles).

You may also study for a higher degree in neuroscience, biological or psychological research, and pursue a research career in an academic, government, pharmaceutical, biotechnology or medical research organisation (some recent graduates are now employed by the Trinity College Institute of Neuroscience). If you do not want to pursue a research career, the course provides transferable skills suitable for a wide variety of careers in teaching, business, management and industry. Some graduates also go on to take professional degrees in medicine, speech therapy or allied health-related sciences.

Further information

www.tcd.ie/Neuroscience
Tel: +353 1 896 8484

Physics, Physics and astrophysics

Students who wish to study Physics or Physics and astrophysics apply to the Science degree (TR071) and may select one of these two courses as their specialist subject for the 3rd and 4th years.

Junior Freshman (first) year prerequisites: Mathematics, Physics.

Senior Freshman (second year) prerequisites: Mathematics, Physics.

For details of the first two years of the Science course, including entry requirements, see page 134.

Physics is also an important part of the following courses:

TR035: Theoretical physics, page 164.

TR076: Nanoscience, physics and chemistry of advanced materials, page 163.

Physics

Physics explores our universe in all of its diversity – from particles to planets, from crystals to chaos, from quanta to quasars and from superstrings to superconductors. Its applications are to be found in modern communications, in computers, lasers and many other technologies of vital importance. A physics degree will help you develop flexible skills in theory, data analysis and instrumentation.

Physics at Trinity College enjoys a worldwide reputation, and provides an exceptionally stimulating environment for study and for subsequent postgraduate research. In the Senior Sophister (fourth) year you will carry out a three-month research project in a modern research laboratory either in Trinity College or at another institution in Ireland or abroad, and many find this part of the course particularly rewarding. Project topics ranged from photogalvanic effects in semiconductors, to monitoring of uranium enrichment, to computational analysis of climate models to biophysics of proteins.

Studies in physics cover experimental and theoretical training in core subjects, including:

- Mechanics and special relativity
- Electromagnetism
- Quantum mechanics
- Laser and modern optics
- Solid-state physics

You will also take specialist courses in areas such as nanoscience, astrophysics, nuclear and elementary particle physics, superconductivity and computer modelling.

Physics and astrophysics

Since before the dawn of human civilisation man has gazed in wonder at the night sky. The exploration of our solar system and the universe beyond continues to fascinate us. Astrophysics is still a major part of human endeavour in science.

At the end of the Senior Freshman (second) year, you may choose to study for a degree in Physics and astrophysics by substituting roughly one quarter of the general physics courses with astrophysics courses in the final two years.

In the third year the astrophysics courses range over modern astronomical instrumentation, spectroscopy, space plasmas, stellar evolution, galaxies and an introduction to general relativity and modern cosmology. There is hands-on experience of astrophysical observation in the third-year laboratory, using optical and radio telescopes.

In the final year astrophysics lectures provide a more in-depth study of our own solar system, planetary systems around other stars, interstellar matter and galaxies. There is also a focus on modern developments in astronomy, such as dark matter, black holes and supernovae. Final-year students carry out either a physics or an astrophysics research project with the opportunity of working at an observatory elsewhere in Ireland or abroad.

Study abroad

Final-year students in both Physics and Physics and astrophysics may get the opportunity to carry out their research project at a laboratory or observatory abroad. In recent years students have worked at the Belgian Nuclear Research Centre, at the Universities of Potsdam and Regensburg in Germany, at the NASA Goddard Space Flight Center in the United States and at the European Space Agency in Madrid.

Career opportunities

Physics graduates are always in demand in Ireland and elsewhere in modern high technology industries, as well as in teaching. You may also find a career in academic institutions, government and industrial research organisations and production facilities, or the meteorological service. There are diverse opportunities in electronics, telecommunications, biophysics, hospital and health physics, automation and computing, as well as in a wide range of careers for which employers value the skills of problem-solving that come with the degree. It could also be a useful primary training for a legal, managerial or actuarial career for which a technical background is very attractive.

Did you know?

- A recent report by the Institute of Physics on Physics and the Irish Economy (2007) showed that physics-based sectors account for over 80% of manufacturing industry and over 80,000 jobs in the Republic of Ireland alone. That means more jobs than in the finance, banking and insurance sector!
- The School of Physics in Trinity College is the biggest physics department in Ireland (north or south). Over 100 physics graduates from Trinity College and other universities are currently doing research leading to Masters and Ph.D. degrees. Much of this research is in collaboration with research groups in other leading universities and institutes around the world.

Further information

www.physics.tcd.ie
Tel: +353 1 896 1675

Physiology

Students who wish to study Physiology apply to the Science degree (TR071) and may select Physiology as their specialist area for the 3rd and 4th years.

Junior Freshman (first) year prerequisite: Maths or Maths methods. Recommended: Biology 1101 and 1102.

Senior Freshman (second year) prerequisites: Biology BY2201, BY2202, BY2203 and BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Physiology?

Physiology is the study of how cells work, how they co-operate in organs like the heart or brain and how these organs function together in the body as a whole. Because knowing how the body works is essential for understanding how it goes wrong in sickness and disease, physiology is the scientific basis of human and animal medicine.

What will you study?

In the Physiology Department at Trinity College, which is part of the School of Medicine, we focus on human physiology and how it is affected by disease, although a comprehensive understanding of physiology will also involve studying comparisons in other mammalian species. There is a particular emphasis on themes which reflect major research interests in our department, including brain function and responses to physical exercise. As a student of physiology you will be provided with a detailed understanding of a range of cell and organ systems, and will receive training in scientific methodology, experimental design, data analysis and research skills.

During the second half of the Senior Sophister (fourth) year you will undertake an individual research project. This project will be based in Trinity College or in one of its associated hospital departments and will include a literature survey and production of a written dissertation. Some typical recent research projects have looked at the toxic effects of cannabis on brain cells, gastric motility in patients with pancreatitis, respiratory function in lung disease, the cellular mechanisms of memory formation, cardiovascular adaptations in athletes and muscle performance after different warm-up protocols.

Career opportunities

When you graduate you will be able to use your general scientific training and specialised knowledge of physiology to find employment in a wide variety of jobs. You may pursue further training in physiology and become a research scientist in a hospital, the pharmaceutical industry, a government agency or a university. Some graduates undertake further study in health-related fields such as medicine or physiotherapy.

Further information

www.medicine.tcd.ie/physiology
Tel: +353 1 896 2723

Zoology

Students who wish to study Zoology apply to the Science degree (TR071) and may select Zoology as their specialist area for the 3rd and 4th years.

Junior Freshman (first) year prerequisites: Biology 1101 and 1102, Maths or Maths methods.

Senior Freshman (second year) prerequisites: Biology BY2201, BY2202, BY2203, BY2208.

For details of the first two years of the Science course, including entry requirements, see page 134.

What is Zoology?

Zoology is the scientific study of the animal kingdom, along with its evolution, diversity and environment. This involves building knowledge of both the structure of different kinds of animals and how they function, and the complex relationships that govern how animals relate to each other and their surroundings. Zoology provides fundamental information on three areas of our society: the environment, food production and human health.

What will you study?

The course highlights the major concerns of modern zoology in relation to environmental and medical biology, and introduces you to cell biological and other analytical techniques, fieldwork and computer-aided data handling procedures.

Work in the Junior Sophister (third) year provides a broad overview of zoology and includes core courses in:

- Ecology
- Physiology
- Animal behaviour
- Biodiversity
- Developmental biology
- Vertebrate form and function
- Parasitology
- Applied molecular biology

There are also additional options selected from the environmental or medical zoology programmes.

A major component of the Senior Sophister (fourth) year is the research project. In previous years projects have included parasites in African children, conservation of squirrels, deep sea fisheries and others on biodiversity, climate change and pollution. Tutorials in specialist areas are selected from freshwater biology, marine biology, wildlife biology, evolution and behaviour, molecular biology, developmental biology and parasitology.

Career opportunities

Many graduates are pursuing academic and research careers, in Ireland and overseas. Others have entered the agricultural and fisheries sectors, the wildlife service, and aid agencies, as advisers and technical experts and as inspectors and managers. Trinity College Zoology graduates have furthermore taken up publishing of wildlife magazines and educational literature, film making and careers in the media, fish farming, computer software development, second and third-level teaching, museum work, tourism, environmental lobbying with organisations such as Greenpeace, environmental consultancy and wildlife conservation and management.

Further information

www.tcd.ie/Zoology
Tel: +353 1 896 1366

Chemistry with molecular modelling

COURSE CODE: **TR074**
PLACES 2010: **5**
POINTS 2009: **430**
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	HC3	Mathematics
	HC3	In one of physics, chemistry, physics/ chemistry or biology
Advanced GCE (A-Level)	Grade C	Mathematics
	Grade C	In one of physics, chemistry or biology

See also:

TR071: Chemistry, page 142
TR075: Medicinal chemistry, page 161
TR076: Nanoscience, physics and chemistry of advanced materials, page 163

What is Molecular modelling?

Molecular modelling is the use of computer modelling to understand and explore chemistry. Advancements in molecular modelling have lead to an explosive growth in a range of applications. This course focuses on modelling the structure and reactivity of molecules and solids including:

- The simulation of the structure and properties of materials including organic molecules, semiconductors, catalysts, DNA, proteins, etc.
- The modelling of how electrons are arranged in materials and behave during chemical reactions
- Computational medicinal chemistry and drug design

Is this the right course for you?

The programme will suit you well if you want to obtain a chemistry degree but are also interested in learning to use molecular modelling to understand and solve chemical problems in a range of areas such as drug design and materials chemistry.

Course overview

The course is based on the Chemistry degree (see page 142). Core components of the Chemistry degree are taken along with special molecular modelling courses, practical work and project work.

The Freshman years

You will study the same foundation courses in chemistry and mathematics and one of biology or physics as students in the science course – TR071 (see page 134). However, some of the experimental chemistry laboratory class time is spent in computer laboratories. Special lectures are given to introduce the concepts of molecular modelling to highlight applications.

There are approximately 19 hours of supervised study in lectures and tutorials and around 6 hours of laboratory time per week in the Freshman (first two) years.

The Sophister years

In the third and fourth years you will take core courses in chemistry with additional courses in molecular modelling including general molecular modelling, modelling protein structure, drug design, molecular dynamics, and modelling in solid-state materials chemistry.

In the Junior Sophister (third) year, about half of your laboratory class time is spent in computer laboratories performing computational experiments using molecular modelling.

As a Senior Sophister (fourth-year student) you will undertake a computational project, typically from late September to mid-December. This may be done in Trinity College or in an academic or research laboratory abroad.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Study abroad

The School of Chemistry has exchange agreements with a large number of other universities where students may carry out their final-year research projects. Centres where students have completed their research projects in recent years include Vienna, Berlin, Madrid, Toulouse and Utrecht in Europe and McGill and Duke universities in North America.

Career opportunities

The degree is fundamentally chemistry-based and so the opportunities available to regular chemistry graduates remain open (see TR071 – Chemistry page 142). In addition the specially developed computational skills make graduates an attractive prospect for employers both within computing environments and in other professions. Career opportunities range from teaching and research to working in the chemical and pharmaceutical industries, one of the largest and fastest growing sectors of the Irish economy. Chemists also fit comfortably into management and business. Examples of industries where people are employed directly in scientific computing include: pharmaceutical (computational drug design), chemical (developing catalysts), materials chemistry (semi-conductors/magnetic materials), financial services and meteorology.

Further information

Contact: Prof. Graeme Watson
E-mail: **watsong@tcd.ie**
Tel: +353 1 896 1357
www.tcd.ie/Chemistry/teaching/molecular/

Graduate profile

Dr. Aron Walsh
Ph.D., School of Chemistry, Trinity College Dublin
Currently: Marie Curie Research Fellow,
University College London

I began an undergraduate degree in Computational Chemistry (now called Chemistry with Molecular Modelling) in Trinity College in 1999. I chose this course out of my childhood love for chemistry sets and Nintendo, and didn't really know what to expect. The degree allowed me to develop skills in chemistry, physics, mathematics and computer science, but it was not until a final year research project, that I realised the power (and fun) of computer modelling of chemical systems. This experience drove me to accept a Ph.D. position in the group of Professor Graeme Watson, and I spent three years studying the electronic structure properties of post-transition metal oxides. During this time, I had the opportunity to use some of the largest supercomputers in the world, publish research papers based on my simulations, and most excitingly, to see an experimental group from Oxford University verify my predictions! After graduating, I moved to Denver, Colorado to work for the U.S. Department of Energy on the development of new materials for converting sunlight into electricity. In 2009, I was awarded a research fellowship from the European Union to move to University College London, and continue my research on energy materials and processes. I have had the opportunity to present my research around the globe, everywhere from Hawaii to Seoul, and I currently hold a visiting fellowship to Fudan University, Shanghai. The goals of science are universal, and pursuing a career in science has allowed me to experience a world I never knew existed.

Earth sciences

COURSE CODE: **TR077**
PLACES 2010: **12**
POINTS 2009: **470**
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	HD3 or OC3	Mathematics
	HC3	In two of: physics, chemistry, biology, mathematics, physics/chemistry, geology, geography, applied mathematics or agricultural science
GCSE	Grade B	Mathematics
Advanced GCE (A-Level)	Grade C	In two of physics, chemistry, biology, mathematics, geology, geography or applied mathematics

Combinations of subjects not permitted:
Physics/chemistry with physics or chemistry
Agricultural science with biology
Applied mathematics with mathematics

See also:
TR001: TSM, page 90
TR071: Science, page 134

Earth sciences

This degree programme focuses on Planet Earth, and in particular the composition and structure of the Earth's surface layers, atmosphere and oceans, the dynamic processes that influence and shape our world, and the formation and distribution of resources that we depend upon. Notable areas of study include climate change, geomorphic hazards (earthquakes, landslides, volcanism, flooding), pollution and the availability and exploitation of resources, including energy resources. The degree aims to produce articulate and informed graduates with a broad knowledge of Planet Earth by providing students with a firm grounding in those sciences that relate directly to the surface of the Earth and to surface-forming and atmospheric and oceanic processes. Particular emphasis is placed on the development of critical thinking, a scientific approach to understanding, and training in relevant, transferable skills, including laboratory- and field-based analytical techniques.

Is this the right course for you?

In an increasingly interconnected and complex world, employers are seeking graduates who can combine analytical rigour with an understanding of real-world problems that are not limited to a single discipline. The Earth sciences

degree at Trinity College, positioned on the interface between geography, geology, environmental sciences, physics and chemistry, provides an insight into the complexities of physical processes influencing the inhabited surface of the Earth and its atmosphere and oceans. The degree is both highly challenging and also potentially hugely rewarding: not only do the earth sciences underpin many of the problems currently faced by humankind, they are also a source of many of the solutions!

Course overview

In the Junior Freshman (first) year students take six modules: Geology; Introduction to geography I (physical); Introduction to geography II (human-environment); Maths; Foundation physics, and Introduction to physical chemistry.

In the Senior Freshman (second) year, students take courses in Geology (Mineralogy, Palaeontology and stratigraphy, Petrology, Structural geology and Mapwork, plus a module of Fieldwork); Geography (Changing worlds and Collection and analysis of geographical data); Geochemistry for earth scientists; Physics for earth scientists and a module from the Broad Curriculum (see page 12 or **www.tcd.ie/Broad_Curriculum**).

The Sophister (third and fourth) years enable students to take a variety of modules from the existing Geography and Geology degree programmes (see pages 147-149). In their Senior Sophister year, students also have the opportunity to take some modules drawn from outside the Earth sciences degree programme.

Assessment

Most modules are assessed by a combination of continuous assessment and end-of-year examinations.

Study abroad

The School of Natural Sciences has exchange agreements with a large number of other universities where students may carry out part or all of the Junior Sophister (third) year of the degree. In addition, the Earth sciences degree includes at least one overseas field course, together with opportunities for students to base their research project work outside Ireland.

Career opportunities

Areas such as environmental consultancy, environmental planning, overseas assistance, the assessment, exploitation and management of resources, including mineral reserves such as oil and gas, risk assessment, environmental analysis, teaching, and research all potentially offer careers for graduates from the Earth sciences degree.

Further information

www.naturalscience.tcd.ie/undergraduate/earth-science.php
E-mail: **earthsciences@tcd.ie**
Tel: +353 1 896 2002

Human genetics

COURSE CODE: **TR073**
PLACES 2010: **15**
POINTS 2009: **500**
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	OC3 or HD3	Mathematics
	HC3	In two of physics, biology, chemistry, physics/ chemistry, mathematics and applied mathematics
GCSE	Grade B	Mathematics
Advanced GCE (A-Level)	Grade C	In two of physics, biology, chemistry, mathematics and applied mathematics

Combinations not permitted:

Physics/chemistry with physics or chemistry

Applied mathematics with mathematics

Human genetics (TR073) focuses on the genes of humans, while the Genetics option in Science (TR071) examines plant, human and other animal genes.

Students who apply for the general-entry Science course (TR071) have the option of selecting Genetics as their specialist subject for the Sophister (third and fourth) years of the course. See page 146.

What is Human genetics?

Human genetics is the study of genes – or heredity – in humans. It also examines the effects of these genes on both individuals and societies. It has developed rapidly in the last decade as new technology has made it possible to study genes in much greater detail. Examples of remarkable advances in knowledge include:

- The discovery of the molecular basis of many inherited disorders
- The development of genetic and stem-cell-based therapies for inherited disorders
- The ability to trace the evolution of mankind
- The application of DNA finger-printing to forensic science

Is this the right course for you?

Human genetics is a knowledge-driven, dynamic and exciting field. As most graduates of this programme go on to careers in research, you must be prepared to take this route as a career option.

Course overview

This course provides you with a strong base in the basic sciences of biology, chemistry and mathematics, as well as in the classical principles of genetics – molecular, population and quantitative genetics, bioinformatics and molecular evolution.

Over the four-year period of your degree programme, the course will also demonstrate the importance of studies in model organisms, especially the mouse. Seminar and tutorial programmes, organised with staff from various disciplines, are an integral part of your studies, and encompass such subjects as the interactions between genetics and the social sciences, ethics, linguistics, philosophy and law, and the general relationship between genes, society and culture.

The Freshman years

In the Junior and Senior Freshman (first two) years you will concentrate on the areas of biology, chemistry and mathematics, and will also be introduced to the principles of genetics in separate tutorials.

In each of the first two years you will take some of the same courses as Science students: biology, chemistry and mathematics in the Junior Freshman (first) year and biology modules BY2201, 2203, 2204, 2205, 2208 and 2209, chemistry and mathematics in the Senior Freshman (second) year – see page 135-137. In addition you will have a weekly genetics tutorial with faculty from the Department.

The Sophister years

In the 3rd and 4th years you will undertake specialised studies in areas such as:

- **Medical genetics:** includes the identification of genes causing various clinical disorders and the development of genetic and stem-cell therapies to treat them
- **Neurogenetics:** studies how genes control development and function of the nervous system and their influences on behaviour and psychiatric disease
- **Molecular and cell biology:** explores the control of gene expression and function of genes in various cellular processes, such as cell death, proliferation or differentiation
- **Computer programming:** provides an essential skill for this field, where large amounts of data must be analysed, and one which is easily transferable to other careers
- **Population genetics and human evolution:** deals with genetic variation in populations and the role of this variation in evolution, especially in humans
- **Cancer genetics and mutation:** studies the mechanisms of mutation and its role in cancer

Subjects are taught through a combination of lectures, tutorials and practical courses.

In the Senior Sophister (fourth) year, you will be able to specialise in areas of particular interest, and will carry out an original research project in an area such as: hereditary blindness, cell death, neural development, stem-cell biology, human evolution and psychiatric genetics. Specialist lecture courses include cancer genetics, genetics of vision, behavioural genetics and human evolutionary genetics.

Why study Human genetics at Trinity College?

We are housed in the Smurfit Institute of Genetics, with state-of-the-art research facilities. The Institute has an international reputation for world-class research, reflected in an outstanding record of publication and funding and sixth place in the world rankings of university genetics departments. As such, it provides a superb environment for undergraduate education and research training of internationally recognised quality.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Study abroad

At the end of the Junior Sophister (third) year, you may be able to spend the summer months working in a human genetics research laboratory. This is often in the USA, with some financial assistance provided.

Career opportunities

Many Human genetics graduates go on to study for a higher degree or to a career in research, whether in a university, research institute, or in industry. Opportunities exist in biotechnology and pharmaceutical companies, agricultural organisations, medical or clinical diagnostic laboratories, forensics, public health and epidemiology programmes, and in teaching. Genetic counselling is a rapidly expanding field that might also interest you. Other graduates have gone into careers such as medicine, patent law or science journalism. Even if you choose a career not directly related to the scientific subject, the skills of critical thinking and problem solving provided by the Human genetics degree will put you in high demand.

Further information

www.tcd.ie/Genetics
Tel: +353 1 896 1140

Mathematics

COURSE CODES:	**TR031**	**TR001 (TSM)**
PLACES 2010:	**30**	**25**
POINTS 2009:	**415**	**460*-560***
DEGREE AWARDED:	**B.A.**	

TSM points: See note on page 24

Special Entry Requirements:

Leaving Certificate	HB3	Mathematics
Advanced GCE (A-Level)	Grade B	Mathematics

TR031: Mathematics is studied as a single honor course.

TR001 (TSM): Mathematics must be combined with one other subject within the two-subject moderatorship (TSM) programme. TSM is a joint honor programme. An honors degree is awarded in both subjects.

For subjects that combine with mathematics see page 90.

Single honor and TSM students follow the same mathematics modules. However, for TSM students the workload is less intense than that of the single honor programme, and TSM students must be more selective.

See also:

TR035: Theoretical physics, page 164

Course overview

The course aims to provide you with a firm foundation in all the basic areas of mathematics and then allow you to specialise in the areas that most suit your interests and talents. Mathematics is an excellent choice for anyone hoping to meet the demand for mathematics graduates in the job market which values numeracy, ability in abstract reasoning and the skill to turn ideas into methods. With an academic staff that brings expertise and experience from many parts of the world, the course aims to be world class, while also catering for those with talents in different mathematical areas.

Is this the right course for you?

If you have a natural ability in mathematics and are genuinely interested in applying mathematical solutions to problem solving, then this course will suit you well. It is also a great start for a career in actuarial work, finance or accounting, although these will require further training. The course has been successful over a long period in providing diverse career opportunities for many students.

Course content

This four-year programme is designed to provide you with a broad mathematical training that will, in turn, allow you to work in any environment that requires strong numerical and logical skills.

The modules offered can be grouped into four areas:

- Pure mathematics which explores basic concepts and abstract theories
- Applied and computational mathematics to solve practical problems
- The mathematics of theoretical physics
- Statistical models and methodology

All students take common modules in their first semester, and gradually more choice is offered in subsequent semesters until, as a Sophister (third and fourth-year student) you will be able to specialise in the areas that appeal most to you.

The Freshman years

In the Junior Freshman (first) year there are core modules in algebra and analysis, which introduce not only topics that are fundamental to a wide range of mathematics but also a structured way of dealing with mathematical ideas that is absolutely universal to mathematics. They are quite intensive.

In addition, during your first semester you will be introduced to the following topics. In the second semester, you will continue with two of them.

- **Classical mechanics** (this leads on to many of the mathematical modules essential for the Theoretical physics degree)
- **Introduction to statistics** (this opens the way for many subsequent optional modules)
- **Introduction to computer architecture and programming** (this will include practical work)

There are approximately twenty hours of classes per week in the Junior Freshman (first) year.

In the Senior Freshman (second) year you will continue to study algebra and analysis. In addition you will select modules of your choice from a range that includes exploring some of the Junior Freshman topics in greater depth, or you may choose new topics or 'Broad Curriculum' modules (see p. 12). This allows you to begin tailoring the degree to your own strengths and areas of interest.

The Sophister years

In the Sophister (third and fourth) years you will have the opportunity to choose subjects from a selection of over 20 wide-ranging options. Many subjects cover topics from the first and second year, but additional possibilities include computer engineering, mathematical economics, cryptography and computer-aided design.

An important aspect of the course is an independent research project conducted under the supervision of a member of staff.

Did you know?

- The research of the School of Mathematics was particularly favourably compared to research in other Irish Mathematics departments in a recent independent bibliometric study of the public research base.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examination, with all work undertaken during your last two years counting towards your final degree result.

Study abroad

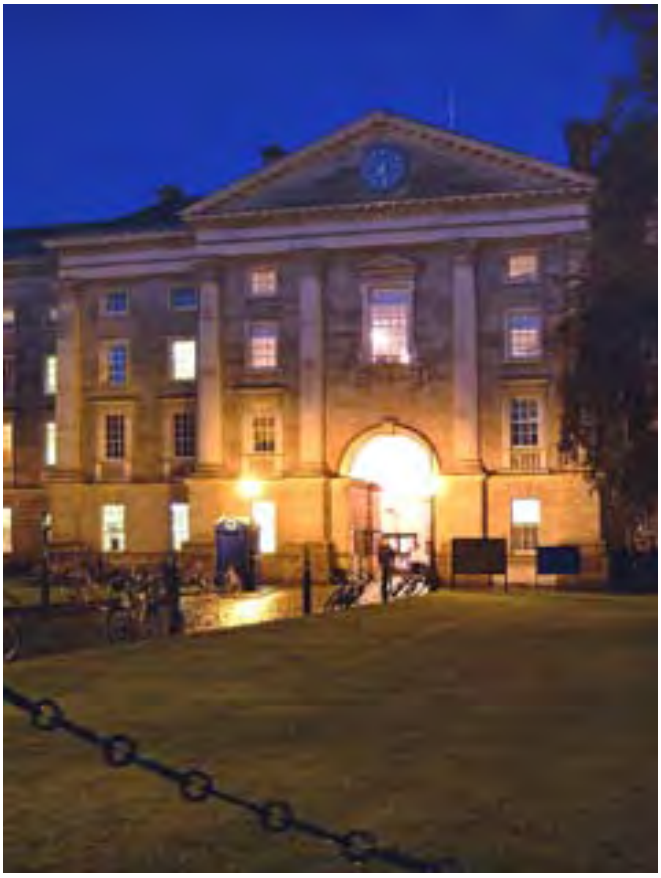
You may choose to spend the Junior Sophister (third) year at a European university as part of the Erasmus exchange programme.

Career opportunities

A degree in mathematics opens up the possibility of a career in a variety of industries and sectors. Graduates have found employment in computing, where mathematics skills have immediate and practical application. The financial services and internet security sectors are also common first destinations for graduates. Other options include statistics, teaching, accountancy, actuarial work, finance, and all areas of pure and applied mathematics. Many of these involve further study or intensive research.

Further information

www.maths.tcd.ie
Tel: +353 1 896 1949



Medicinal chemistry

COURSE CODE: **TR075**
PLACES 2010: **28**
POINTS 2009: **460**
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	OC3 or HD3	Mathematics
	HC3	In two of: physics, chemistry, biology, mathematics, physics/chemistry, geology, geography, applied mathematics or agricultural science
GCSE	Grade B	Mathematics
Advanced GCE (A-Level)	Grade C	In two of physics, chemistry, biology, mathematics, geology, geography or applied mathematics

Combinations not permitted:
Physics/chemistry with physics or chemistry
Agricultural science with biology
Applied mathematics with mathematics

See also:
TR071: Chemistry, page 142
TR074: Chemistry with molecular modelling, page 156
TR076: Nanoscience, physics and chemistry of advanced materials, page 163

What is Medicinal chemistry?

Medicinal chemists are the creative talent behind the modern pharmaceutical industry. As well as being expert chemists, they have a particular expertise in molecular design, the synthesis of drugs and the understanding of biological functions.

Is this the right course for you?

Yes, if your dream is to design and prepare new drugs, if you want to understand the biological reasons by which they cure diseases, if you have a natural flair for chemistry and are simultaneously interested in developing skills and expert knowledge relevant to the rapidly growing pharmaceutical industry.

Did you know?

- Medicinal chemists are the professionals behind the discovery and development of new drugs such as Taxol which is manufactured by Bristol Myers Squibb in Swords (Co. Dublin) and has saved the lives of many women with breast cancer.

Course overview

This degree provides you with a sound general grounding in chemistry but focuses on, and extends into, topics of relevance to the design and production of new medicinal compounds and understanding their biological actions.

The Freshman years

In the first two years you will follow the Science (TR071) programme, taking chemistry (1101 & 1102), biology (1101 & 1102) and mathematics in the Junior Freshman (first) year. In the Senior Freshman (second) year you will take chemistry and 20 prescribed units of biology with the option of further biology (20 units) or mathematics (20 units) – see pages 135-137. In addition, special sessions held specifically for your group will introduce you to the ideas and techniques of medicinal chemistry.

The Sophister years

In the Junior and Senior Sophister (third and fourth) years the course will branch off into the more specialised aspects of medicinal chemistry, although there will be considerable overlap with the Chemistry programme (page 142).

The overlap will be mainly in organic chemistry, with less emphasis being placed on physical chemistry and inorganic chemistry in order to allow for the introduction of the new medicinal chemistry units.

In the Junior Sophister (third) year, your special medicinal chemistry courses will include:

- Basic principles of medicinal chemistry
- Pharmacology (how drugs interact with the body)
- Drug design (how chemists design new drugs for specific diseases)
- Anti-viral and anti-cancer agents
- Anti-microbial and anti-infective agents (compounds that can combat the microorganisms that cause disease)
- Anti-malarial chemistry (study of the development of new drugs in this area)
- Steroid drugs (study of drugs based on the steroid skeleton)
- Industrial chemistry (short course on medicinal chemistry in industry)

In the Senior Sophister (fourth) year, you will cover the medicinal chemistry of the cardiovascular and central nervous systems, combinational chemistry and drug delivery, as well as computational medicinal chemistry and modern analytical methods. Case studies in medicinal chemistry, such as AIDS or anti-ulcer drugs, will also feature on your programme.

Practical work in the final year will consist of a research project. This may be carried out either in Trinity College under the supervision of a member of staff, in a chemistry department at an overseas university, or in a commercial laboratory.

Study abroad

To date, arrangements have been made for students to carry out their final-year research projects, from October to December, in Regensburg, Madrid, Liverpool, Copenhagen, Montpellier and Bologna universities.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Career opportunities

As with graduates in other types of chemistry, the skills acquired during this course will make you highly attractive to employers in a wide variety of areas. In addition to the pharmaceutical industry itself, business, finance, administration and teaching are all possibilities open to you as a graduate of medicinal chemistry. Former graduates of this course are working in companies such as Wyeth, Abbot, GlaxoSmithKline, Servier and Deloitte & Touch.

Medicinal chemistry would also serve as an excellent primary degree for a graduate course in medicine.

Further information

www.tcd.ie/Chemistry/teaching/medicinal
Tel: +353 1 896 3411

Nanoscience, physics and chemistry of advanced materials

COURSE CODE: **TR076**
PLACES 2010: **9**
POINTS 2009: **445**
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	OA2 or HC3	Mathematics
	HC3	In two of physics, chemistry, biology, physics/chemistry, applied mathematics and mathematics
GCSE	Grade A	Mathematics
or		
Advanced GCE (A-Level)	Grade C	Mathematics
Advanced GCE (A-Level)	Grade C	In two of physics, chemistry, biology, mathematics, or applied mathematics

Combinations not permitted:
Physics/chemistry with physics or chemistry
Applied mathematics with mathematics

See also:
TR035: Theoretical physics, page 164
TR071: Science, page 134
TR074: Chemistry with molecular modelling, page 156
TR075: Medicinal chemistry, page 161

What is Nanoscience and Advanced materials?

The ability to create new technologies or devices would not be possible without the use of advanced materials. Energy is an important issue for any new device, and making devices smaller approaching the nano-scale can reduce the energy cost, while increasing speed. These nanostructures or nanodevices can behave in surprising ways which are not like miniaturised versions of the macroscopic devices. Ultimately this behaviour is explicable by quantum mechanics but new methods of fabricating or interacting with such nanostructures is what nanoscience is all about, ideally to the benefit of technology and to people. Nanoscience incorporates applications in photonics, medical diagnostics, ultra-fast electronics and many other areas which in addition use advanced materials. Advanced materials include superconductors, polymers, lasers and optoelectronics and they can be found in applications ranging from computers and electronics, to telecommunications and broadcasting, to airlines and healthcare. In nanoscience size matters.

Is this the right course for you?

This course will appeal to you if you are interested in science and have a strong desire to apply your scientific skills to industries and technologies that are shaping our futures.

Course overview

This degree will teach you how to use and apply the principles of chemistry and physics to solve practical problems associated with the development of new technologies and their application to the areas of nanoscience. To understand how to make, develop, control and use advanced materials, nanostructures or nanodevices it is advisable to have a thorough grounding in both chemistry and physics.

The Freshman years

In the first two years you will follow the Science (TR071) programme, taking chemistry, physics and mathematics (pages 135-137). There will be special tutorials on historical and modern aspects of nanoscience and materials science from world leading experts based in the Schools of Physics and Chemistry, and in CRANN (Centre for Research on Adaptive Nanostructures and Nanodevices) – **www.crann.tcd.ie** – which is Ireland's research centre for nanoscale materials. In the Senior Freshman (2nd year) there will be special courses on the properties of materials and other aspects of nanoscience.

There are approximately 15 hours of lectures/tutorials and 6 hours in laboratory classes each week.

The Sophister years

In the Sophister (third and fourth) years, you will study specialised courses in materials physics and chemistry.

The course in the Junior Sophister (third) year includes lectures on solid state physics and chemistry, quantum mechanics, lasers, thermodynamics, electrochemistry, macromolecules, spectroscopy, group theory, materials preparation and microelectronic technology.

The practical course will introduce you to a wide range of techniques for the synthesis, preparation and characterisation of modern materials. Some laboratory training is provided in CRANN using their state-of the art facilities in nanofabrication and nanocharacterisation.

The Senior Sophister (fourth year) course further explores nanoscience and other topics, including more advanced solid state physics and chemistry, non-linear optics, materials for electronic and optoelectronic devices, conducting and insulating polymers and metal oxides, superconductivity, surface and interface effects, computer simulation and advanced growth techniques (with specific examples of their applications in the nanosciences).

In the final year you will also carry out a research project, frequently abroad in an industrial laboratory, to become familiar with the applications of advanced materials, nanostructures or nanodevices in real-life situations. Many students do their projects in innovative research areas such as nano-technology, and smart and biomimetic materials. Laboratories where projects have taken place include the IMEC micro- and nano-electronics research centre in Leuven, Belgium; The Scripps Research Institute, La Jolla, California; and the University of Potsdam (Universität Potsdam) Germany.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Study abroad

Many students carry out their final year project abroad, mainly in Australia, Belgium, France, Germany or the USA. This allows students to develop their practical skills in materials science and to learn about different countries and cultures.

Career opportunities

This degree will provide you with a flexible qualification for employment in cutting-edge high technology industries, such as the semiconductor, polymer and optical industries. There are also opportunities to carry out postgraduate study in advanced materials, a key research area in Trinity College itself.

Did you know?

- Many graduates from this course go on to do research in the CRANN research centre for nanoscale materials. It is housed in the new Naughton Institute in Trinity College and has state of the art facilities for research into the nanoworld! CRANN was pioneered by the Schools of Physics and Chemistry in Trinity College.

Further information

www.tcd.ie/Nanoscience_Advanced_Materials
Tel: +353 1 896 1726 / 2040

Theoretical physics

COURSE CODE: **TR035**
PLACES 2010: **40**
POINTS 2009: **470**
DEGREE AWARDED: **B.A.**

Special Entry Requirements:

Leaving Certificate	HB3	In mathematics and physics
Advanced GCE (A-Level)	Grade B	In mathematics and physics

See also:

TR031: Mathematics, page 160
TR071: Science, page 134
TR076: Nanoscience, physics and chemistry of advanced materials, page 163

What is Theoretical physics?

Theoretical physics explores the natural world at its most fundamental level, using mathematical theories guided by experimental investigation. For some it is the foundation for an academic career in mathematics or physics. For others it provides the basis for many career options in industry, medicine, law, finance and computing. Trinity College provides a course which ranges widely across physics and mathematics. Its graduates are in demand for their technical skills and versatility.

Is this the right course for you?

If you enjoy mathematics and seeing how physical theories can be developed to unlock the secrets of the universe on every scale from the quark to the Big Bang, you will be stimulated by this course. If you want to keep a wide range of options open for the future, you can do this in Theoretical physics. It consistently attracts a spirited and talented class that makes the most of the Trinity experience.

Course overview

The course combines much of the mathematics and physics curricula, including several modules specifically designed with the Theoretical physics programme in mind. In the Freshman (first and second) years students take 40 credits in maths and 20 credits in physics (from a total of 60 credits). In the Sophister (third and fourth) years students take, on average, 30 credits in maths and 30 credits in physics. There are approximately 24 hours of lectures, tutorials and laboratory classes per week.

Course content

Cosmology, astrophysics, chaos, relativity and quantum mechanics are some of the exciting topics that you will study. In the practical classes you will study the latest ideas in magnetism, superconductivity, laser technology and semiconductors.

	Junior & Senior Freshman (1st & 2nd years)	Junior Sophister (3rd year)	Senior Sophister (4th year)
A total of 60 ECTS credits is to be taken in each year.	40 credits maths, 20 credits physics	30 credits maths, 30 credits physics	25-35 credits maths, 25-35 credits physics (total 60 credits)
Maths	■ Algebra ■ Analysis ■ Mechanics ■ Equations of mathematical physics	■ Classical field theory and electrodynamics ■ Quantum mechanics ■ Statistical physics	■ Quantum field theory ■ Differential geometry ■ General relativity ■ Partial differential equations Other mathematical modules and a project option are available each year
Physics The teaching of physics is divided into two modules (each of 10 credits) in each of the Freshman years and 5 credit lecture and 10 credit practical/project modules in the Sophister years	Topics in both classical and modern physics are taken: The physics of motion, Thermal physics, Oscillations and waves, Optics, Materials, Quantum physics, Nuclear physics, Electromagnetic interactions, Special relativity, Chaos and complexity, Astrophysics. There are laboratory classes and group study projects	■ Atomic and nuclear physics ■ Condensed matter physics I ■ Condensed matter physics II ■ Astrophysics I or Computer simulation I ■ There is also a laboratory class, and workshops to develop communication skills	■ Condensed matter theory ■ Electron and photon physics ■ High energy physics Optional courses are in: ■ Nanoscience ■ Advanced topics In addition you will complete a computational physics project. There are also tutorials to develop your physics problem solving ability

Assessment

Continuous assessment and end-of-year examinations make up the assessment process.

Career opportunities

Many of our graduates proceed to Ph.D. degrees in leading institutions throughout the world (such as Cambridge University, Harvard, and Imperial College London) in mathematics and experimental physics as well as theoretical physics. Alternatively, an infinite world of possibilities beckons. The broad scientific background and skills that the course develops are in great demand by employers in diverse areas including patent law, journalism, weather forecasting, telecommunications, medical physics, information technology, scientific computing and teaching.

Further information

www.maths.tcd.ie or www.physics.tcd.ie
Tel: +353 1 896 1949 / 2019

Information systems (Part-time/evening)

This four-year programme comprises two distinct components:

- Diploma in Information systems (2 years)
- B.Sc. (Hons.) in Information systems (2 years)

Diploma in Information systems

Minimum Entry Requirements:

Six passes in the Leaving Certificate, or equivalent, with a minimum grade C3 in ordinary level English and Mathematics.

Applicants who will be at least twenty-three years of age on 1 January of proposed year of admission may be admitted as mature students without having the minimum matriculation qualifications.

In addition, candidates must have at least two years relevant work experience.

Application Procedure:

This is not a CAO course. Students are required to apply directly to the School of Computer Science and Statistics. Completed applications must be returned by 30 June 2011 for entry to the academic year 2011/12.

Late applications will be considered subject to availability.

Details of how to apply are available at: **www.scss.tcd.ie/undergraduate/bscis**

This flexible two-year course is intended for information technology (IT) professionals and for those who wish to work in information technology. Graduates are equipped to apply skills such as systems development and design, project management and technical support in business, industry and government. The syllabus includes technologies, techniques and methods drawn from research and internationally-accepted best practice. Lectures are delivered on up to three evenings per week with occasional classes at weekends.

On completion of the course the student will:

- Be able to design, develop and implement appropriate IT solutions
- Understand the principles, methods, tools and architectures used in the development and management of IS and IT
- Be aware of pressing current issues concerning the use of IT in practice
- Possess business, communication and IT skills, developed through extensive practical assignments and project work

B.Sc. Degree in Information systems

Entry Requirements:

Students who successfully complete the Diploma in Information systems may apply for entry to this two-year degree course, leading to the award of B.Sc. (Hons.) in Information systems.

Holders of other qualifications at a sufficiently high level and deemed to be equivalent to the Diploma in Information systems may also apply for direct entry to the degree course.

Application Procedure:

This is not a CAO course. Students are required to apply directly to the School of Computer Science and Statistics. Completed applications must be returned by 30 June 2011 for entry to the academic year 2011/12.

Late applications will be considered subject to availability.

Details of how to apply are available at **www.scss.tcd.ie/undergraduate/bscis**

This flexible two-year honours degree course is intended for those who wish to become senior professionals and managers in business information technology (IT). Graduates are equipped to manage in all sectors of the IT industry and in a range of functions in business, industry and government. The syllabus includes technologies, techniques and methods drawn from research and internationally-accepted best practice. Lectures are delivered on up to three evenings per week with occasional classes at weekends.

On completion of the course the student will:

- Have an understanding of the role, application and potential of IT in business, industry, government and society
- Have well-developed business, communication and IT skills
- Be able to create and develop IT policies and strategies
- Be able to manage IS and IT operations
- Be able to design, develop and implement appropriate IT solutions
- Have in-depth knowledge of one or more specialist IT topics that interest them

Further information

www.scss.tcd.ie/undergraduate/bscis
E-mail: **undergraduate@scss.tcd.ie**
Tel: +353 1 896 1765



Health Sciences

Dental hygiene (diploma)

COURSE CODE:	**TR802**
PLACES 2010:	**8**
POINTS 2009:	**455**
AWARD:	**Diploma**

This is a restricted entry course.

Applications MUST be submitted by 1 February of the proposed year of entry.

Applicants will receive a questionnaire in March to be completed and returned.

Entry Requirements:

Leaving Certificate

A pass in English, mathematics and in four other subjects, one of which must be physics, chemistry, biology, agricultural science or physics/chemistry.

Of the six subjects presented two must be of a standard of at least grade C3 on higher Leaving Certificate papers. The remaining four subjects must be presented to a standard of at least grade D3 on ordinary Leaving Certificate papers.

All offers of admission to this course are made subject to a negative HBsAg test result.

See Precautions against infectious diseases page 198.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

What is a Dental hygienist?

The role of the dental hygienist is to improve oral and dental health for individuals as well as for groups in collaboration with a registered dentist. The dental hygienist, as a clinician, focuses on the prevention and treatment related to the risk factors associated with gum diseases and dental decay. The dental hygienist is also an oral health promoter who plans, implements and evaluates oral health promotional activities for groups and individuals. The dental hygienist works within the dental team and with other groups of health care workers to provide a holistic approach to patient care.

Is this the right course for you?

If you have an interest in working in oral health, and particularly preventative oral health, then this course is right for you. You will need to be able to develop good patient care skills, so an empathic personality is crucial for a high standard service to the people in your care. You need to be a good team player and show initiative to achieve the best for people in your care.

Course overview

This two-year course is based in the Dublin Dental School and Hospital at Trinity College. It has academic, project-based and clinical components, and is carried out in the Dublin Dental School and health board units. Emphasis is on small-group interactive learning, health promotion projects, evidence-based learning, and clinical practice. You will be integrated with undergraduate Dental science students to a minor extent and Dental nursing students for some elements of the course to ensure effective teamwork throughout the dental profession.

Course content

The curriculum has a modular design and some modules are prerequisites for others.

Students who have achieved a dental nursing qualification in the last 3 years, which is recognised by the Irish Dental Council, may be exempt from the core courses.

First year modules

- Microbiology and pathology (core)
- Physiology and medical emergencies (core)
- Psychology and social concepts in patient care (core)
- Basic preventive and therapeutic oral care
- Restorative and prosthetic dental materials and therapy
- Dental radiography
- Head and neck anatomy
- Computer skills
- Orthodontics
- Pharmacology and local anaesthesia
- Oral health promotion part I
- Laboratory and clinical practice

Second year modules

- Radiography (log book completion)
- Local anaesthesia
- Oral health promotion part II
- Behavioural science
- Human diseases and general pathology
- Periodontology and research methods
- Cariology and paedodontics
- Professional responsibilities
- Clinical practice

After qualifying as a dental hygienist you will be able to:

- Describe the role of the dental hygienist and function within a dental team in oral health promotion and the provision of primary health care
- Plan, implement and evaluate oral health promotional and educational activities for groups and individuals
- Carry out procedures to measure and assess the levels of oral health and oral hygiene
- Debride and polish the teeth
- Place fissure sealants
- Apply fluoride-containing preparations and desensitising agents to the teeth
- Recognise abnormalities in the mouth and inform the dentist
- Take dental radiographs
- Administer local anaesthetic for dental hygiene procedures
- Place temporary dressings and re-cement crowns temporarily

Assessment

As well as written examinations at the end of each module, a community-based health education project, competence tests in various clinical procedures, clinical credits, demonstration of a reasonable level of patient care and a final written and clinical examination contribute to assessment.

Your degree and professional practice

The Diploma in Dental hygiene conferred by Trinity College Dublin entitles graduates to register immediately after graduation as a dental hygienist on the Register of the Irish Dental Council. This registration is mandatory for working as a dental hygienist in Ireland.

Career opportunities

As a dental hygienist, you have the option of being self employed or employed. You may find employment in general or specialist dental practices, in health boards, hospitals and within the commercial sector.

Further information

www.dentalhospital.ie (Select the Education link)
Course director: Karin Nylund RDH.LDH.MA.MSc.
E-mail: **knylund@dental.tcd.ie**
Tel: +353 1 612 7206

Dental nursing (diploma)

COURSE CODE:	**TR801**
PLACES 2010:	**25**
POINTS 2009:	**365***
AWARD:	**Diploma**

Entry Requirements:

Leaving Certificate
A pass in English, mathematics and in four other subjects, one of which must be physics, chemistry, biology, agricultural science or physics/chemistry.

Of the six subjects presented, two must be of a standard of at least grade C3 on ordinary Leaving Certificate papers. The remaining four subjects must be presented to a standard of at least grade D3 on ordinary Leaving Certificate papers

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

What is a Dental nurse?

The dental nurse plays an important role in the organisation and management of the dental practice, assists the dentist in all aspects of patient treatment and plays a vital role in patient care.

The modern dental nurse trains in all aspects of clinical practice and dental health education. This course gives you the skills and practical competence needed to work in a dental surgery. You learn about the day-to-day running of a dental practice and acquire the qualifications for entry to the Dental Council Voluntary Register of Dental Nurses.

Dental nurses are valuable members of the dental team. This is an auxiliary profession, supporting members of the dental team in the delivery of dental treatment.

Main duties include infection control, chair-side assistance, preparation and maintenance of the dental surgery, and patient care.

Skills required of students considering Dental nursing should include the following: communication and organisation skills, the ability to use initiative, and be prepared to work closely providing support and assistance during the provision of dental treatment. The dental nurse may also be involved with the administration of the dental surgery.

Is this the right course for you?

Yes, if you have an interest in working as part of a dental team in the delivery of oral healthcare.

You will need to be able to develop good patient skills and be able to communicate effectively, while having a caring and understanding personality is an advantage.

Course overview

This two-year course is divided into practical and academic (modular) components. Both the formal academic teaching and your practical clinical experience are gained at the Dublin Dental School and Hospital on Trinity College's campus.

In second year, you will spend time on external placements in the operating theatre of a general hospital and in a health-service executive dental clinic. You will also spend time gaining experience in general dental practices throughout the Dublin area.

The programme consists of lectures, tutorials, demonstrations and practical experience. You will be assessed on a continuous basis regarding suitability and application of theory to practice. By the end of the course, you will have developed appropriate skills in patient and team management. You will be integrated with undergraduate Dental science students for some elements of the course to ensure effective teamwork throughout the dental profession.

Course content

First year modules

- Introductory module
- Microbiology and cross-infection control
- Dental and oral pathology
- Physiology and medical emergencies
- Clinical dentistry I
- Computer studies
- Head and neck anatomy
- Oral health and the community
- Social concepts in patient care
- Clinical dentistry II

Second year modules

- Practice management
- Health psychology
- Conscious sedation

Assessment

Year 1 is assessed by written examinations, practical examinations, continuous clinical assessment and an oral presentation.

Year 2 is assessed by written examinations, clinical and sedation OSCE, clinical practical examination, case report and presentation.

Career opportunities

As a graduate of Dental nursing, you will be able to find work in a variety of working environments including dental hospitals and health-service executive dental clinics, as well as in general and specialist dental practices. Depending on the work setting, advancement in the field may include: senior dental nurse, clinic nurse manager, practice manager, marketing representatives for relevant companies, and oral health promotion.

Successful completion of this programme will permit entry onto the Dental Council Voluntary Register of Dental Nurses, Ireland.

Further information

Please contact the Dental Nurse Tutor Tel: +353 1 6127238
E-mail: **dentalnursetutor@dental.tcd.ie**
www.dentalhospital.ie (from the main menu select: education, dental nursing, full-time)

Dental science

COURSE CODE: **TR052**
PLACES 2010: **32**
POINTS 2009: **570***
DEGREE AWARDED: **B.Dent.Sc.**

Special Entry Requirements:

Leaving Certificate	HB3 + HC3	In two of: physics, chemistry, biology, physics/chemistry or agricultural science. If you do not have a qualification in physics you must present mathematics at OC3/ HD3 or better
Advanced GCE (A-Level)	Grade B + Grade C	In two of: physics, chemistry or biology If you do not have a qualification in physics you must present GCSE mathematics at grade B or better

Combinations of subjects not permitted:

Physics/chemistry with physics or chemistry

Agricultural science with biology

All offers of admission to this course are made subject to a negative Hepatitis B antigen (HBsAg) test result.

See precautions against infectious diseases page 198.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

Course overview

This five-year programme is designed to ensure that graduates can safely and effectively deliver the full range of primary dental care, including prevention, diagnosis and treatment of oral and dental diseases. Treatment involves areas such as the restoration of damaged teeth, the correction of irregularities, the replacement of missing teeth and surgical procedures such as the removal of teeth.

Is this the right course for you?

Yes, if healthcare in general interests you and if you would like to specifically focus on oral healthcare and its impact on individuals. The nature of dentistry makes it essential that you also have an ability to build a caring and professional relationship with patients, co-workers and the wider community. You should also enjoy undertaking work that requires considerable attention to detail with small margins for error. The course is long (five years) and intense as the academic year is longer than for students of other courses.

Why study at Trinity College?

This course is based in the Dublin Dental School and Hospital which is located on Trinity College's campus. The clinical facilities are of a very high standard with emphasis on the use of information technology. The curriculum is delivered in a problem-based learning (PBL) format, which aims to provide you with the skills to continuously evaluate and update your knowledge and clinical practice through your professional career. The class sizes are small ensuring that students receive considerable staff input into their progress throughout the programme.

Problem-based learning (PBL)

Problem-based learning (PBL) is designed to encourage students to learn subjects such as chemistry, biochemistry and physiology in an integrated manner and in a context that is relevant to the future clinical situations in which the knowledge will be applied. Structured problems are set to meet specified learning objectives and students organise themselves (under supervision) to undertake research to find out about how to achieve the learning objectives. Problem-based learning also encourages students to engage in self-directed learning and aims to provide graduates with the skills necessary for life-long learning which is a requirement for all health care professionals.

Course content

The course is delivered mainly through small-group tutorials (PBL) that consist of student-led discussions on topics and problems presented and facilitated by staff. These topics tie in with the development of the practical and clinical skills that you will develop in laboratories and clinics. Lectures, demonstrations, simulations, audiovisual and e-learning opportunities are also provided as appropriate.

You will provide patient care under the strict supervision of qualified dental staff from the second year onwards.

The first dental year

During the first dental year you will cover the following subject areas (approximately 30 hours per week):

- PBL tutorials (6 hours/week)
- Anatomy workshops and lectures
- Physics project-based learning
- Introduction to dentistry
- Computer applications (ECDL)
- Behavioural science
- Ethics and law

The second dental year

The objectives of the second dental year are to ensure that you develop an understanding of:

- Normal function at cell and system levels and the integration of body systems
- Bacteria, viruses and their relationship to the human immune system
- Clinical signs and symptoms of systemic and oral disease
- Basic clinical skills necessary for the treatment of patients
- The principles of experimental design, data collection and analysis
- Relevant elements of the biological and medical sciences appropriate to the needs of a practising dentist
- Health and safety

In addition you will develop communication skills with particular reference to patient care, learn how to interpret and explain the clinical signs and symptoms of systemic and oral disease with particular reference to dental practice and begin to practice the clinical skills necessary for the treatment of patients. Courses in the second year are complemented by knowledge of the relevant elements of the biological and medical sciences appropriate to the needs of a practising dentist.

Clinical training begins in the second year with students learning the vital basic skills of history taking, examination and diagnosis. Approximately half way through the year you will start providing very simple treatments for patients.

Years three, four and five

During the later years of the course you will be encouraged to take an approach to the management of oral health and disease which is based on the best available scientific evidence. In tandem with this, you will also need to be aware of related general healthcare issues for individuals and communities. In these three years you will provide more complex patient care.

Topics you will study in years three, four and five include:

- Human diseases, including both medical and surgical aspects
- Public dental health with an emphasis on disease prevention and epidemiology, as well as on the care of special needs patients
- Children's dental health which includes orthodontics (braces) and dental care specific to children
- Restorative dentistry which involves fillings and crowns; periodontology which includes treatment for gum disease
- Prosthodontics which involves the various type of artificial replacements for missing teeth
- Experimental design, data collection and analysis

Assessment

In keeping with the PBL-style curriculum, a wide variety of assessment methods are used in all years. There are end-of-term integrated written assessments, practical tests, skills tests of competence, clinical examinations, written reports and oral/verbal presentations. The written assessments include short essay, short answer and multiple choice type questions.

Study abroad

Students in the fourth year can participate in an Erasmus exchange programme with dental schools in Norway, Sweden, Spain and the UK. Between the fourth and fifth dental years, some students undertake voluntary placements in a wide variety of international locations such as developing countries.

Career opportunities

Career prospects for graduates of dentistry are excellent. While most graduates enter general practice, many also enter the health board dental service, which provides care for special needs patients and children in health clinics operated by the regional health boards. A smaller number of openings exist in dental schools and hospitals for house officers or registrars. These positions can lead on to training in specialist areas. Other possibilities include postgraduate research or a university teaching career.

Your degree and professional practice (B.A., B.Dent.Sc)

The degree Bachelor of Dental Science (B.Dent.Sc) conferred by Trinity College Dublin entitles graduates to register immediately after graduation as a dentist on the Register of the Dental Council of Ireland as well the regulatory bodies of other countries in the European Union (such as the UK, France, Germany, etc.).

Graduates who wish to practice in countries outside the EU such as the USA or Canada will be required to undergo additional training and pass specified examinations.

Further information

www.dentalhospital.ie (from the main menu select: Education, Dental science, Undergraduate)
Tel: +353 1 896 1789 / 1690
E-mail: **info@dental.tcd.ie**

Dental technology (ordinary degree)

COURSE CODE:	**TR803**
PLACES 2010:	**6**
POINTS 2009:	**355**
DEGREE AWARDED:	**B.Dent.Tech**

This is a restricted entry course.

Applications MUST be submitted by 1 February of the proposed year of entry.

Applicants will receive a questionnaire in March to be completed and returned.

Entry Requirements:

Leaving Certificate

A pass in English, mathematics and in four other subjects, one of which must be physics, chemistry, biology, agricultural science or physics/chemistry.

Of the six subjects presented two must be of a standard of at least grade C3 on ordinary Leaving Certificate papers. The remaining four subjects must be presented to a standard of at least grade D3 on ordinary Leaving Certificate papers.

Applications may also be considered from those who do not satisfy the above requirements but can demonstrate appropriate relevant experience in dental technology.

Course overview

This three-year course is designed to give you a high level of understanding and technical skills in all of the basic disciplines of dental technology. You will get a good background in the relevant material science and learn how to accurately cast dental alloys, make porcelain restorations and create high-quality dental appliances. You will be integrated with undergraduate Dental science students for some elements of the course to ensure effective teamwork throughout the dental profession.

Is this the right course for you?

As a dental technologist, you will be working as part of the dental team fabricating prosthetic dental devices. Therefore, if you have an interest in oral health and are simultaneously creatively minded, you will be suited to this course.

Course content

Based in the Dublin Dental School and Hospital on Trinity's campus, this course includes lectures and practicals in the basic sciences, and in all aspects of laboratory techniques and technology. In the third year, you will be based in a dental laboratory, both to learn laboratory management and to develop your technical skills.

First year

- Oral masticatory system
- Physics
- Chemistry
- Computer studies
- Dental technology theory and practice

There are approximately 30 hours of classes per week in the first year.

Second year

- Business studies
- Material science
- Dental technology theory and practice

Third year

- Dental technology practice for patients
- Completion of dissertation

Assessment

Continuous assessment in the practical aspects of your work is combined with end-of-year written examinations in years one and two.

You will also undertake production work for patients throughout the year and record this experience in a log diary. In addition you will undertake a literature review and dissertation which will be examined by external and internal examiners.

Career opportunities

This course qualifies you to pursue a career as a dental technologist working in a dental laboratory – perhaps becoming a dental laboratory owner; to teach dental technology; to partake in further studies – dental materials science or research. It would also assist you in becoming a representative for a dental materials/equipment company or to move into forensic work.

Further information

www.dentalhospital.ie (from the main menu select: Education, Dental technology)
E-mail: **Yvette.kavanagh@dental.tcd.ie / simon.langran@dental.tcd.ie**
Tel: + 353 1 612 7312

Human health and disease

COURSE CODE: **TR056**
PLACES 2010: **33**
POINTS 2009: **515***
DEGREE AWARDED: **B.Sc.**

Special Entry Requirements:

Leaving Certificate	HC3	Biology
	HC3	In one of physics, chemistry, agricultural science, physics/ chemistry
Advanced GCE (A-Level)	Grade C	Biology
	Grade C	In one of physics, chemistry

What is Human health and disease?

Human health and disease is focussed on learning about the structure and function of the human body, how the human body adapts to disease and the design of novel therapies and interventions to circumvent the disease process. For example, researchers try to understand how Alzheimer's disease affects brain function in order to develop improved treatments for this disease. Similarly, understanding the inflammatory processes that occur in the gastrointestinal system will lead to improvements in healthcare for patients with Crohn's disease and inflammatory bowel disease.

In addition to the main learning objectives, you will also develop a core skill set in the following areas; laboratory technique, data analysis, public presentation, report writing, research methodology and critical thinking.

Is this the right course for you?

The programme will suit you if you want to obtain a degree that is related to human health and are also interested in gaining instruction in topics and research skills relevant to understanding the body's adaptations to disease.

Course overview

The Freshman (first two) years

You will study the structure and function of the human body from a 'molecule to man' perspective through lectures and laboratory classes in cell biology, biochemistry, physiology and anatomy. The relevance of your course of study to society at large will be explored through the study of a module in science, technology and society. Modules based on critical thinking, problem-based learning, presentation skills and research and statistics will further contribute to the development of a core skill set, as outlined above.

The Sophister (third and fourth) years

In the third and fourth years, a combination of modules which cover diseases of specific organ systems will be taken, e.g. gastrointestinal disease, cardiovascular disease etc. Delivery of clinically focussed material by specialist clinicians within each of these areas will be included.

As a fourth-year student, you will undertake advanced modules on the molecular basis of disease and cutting-edge advances in biomedical science. A major component of the fourth year will be a comprehensive laboratory-based project in biomedical research supervised by leading researchers in Trinity College and its affiliated teaching hospitals. Project areas may be in the areas of cancer biology; investigation of brain disorders; multiple sclerosis; tissue engineering; exercise and rehabilitation; gastrointestinal disorders; inflammatory disorders.

Assessment

You will be assessed by a combination of continuous assessment and end-of-year examinations.

Did you know?

- The School of Medicine in Trinity College is a member of EuroLife, a consortium of leading European medical schools which aims to enhance research and training in the medical sciences that underpin developments in human healthcare. This will allow opportunities for students to undertake research within a EuroLife institution abroad.

Career opportunities

The course will emphasise the crucial links between the scientific, clinical and pharmaceutical sectors and their role in advances in patient care. Graduates will therefore be ideally qualified to participate in health-related research within academia or industry and will also be excellent candidates for entry to graduate medicine programmes. A B.Sc. is also an appropriate qualification for entry into a broad range of other careers (e.g. teaching, management).

Further information

Contact: Dr Neil Docherty, Department of Physiology, School of Medicine
E-mail: **dochertn@tcd.ie**
Tel: + 353 1 896 2047

Human nutrition and dietetics

COURSE CODE: **DT223**
POINTS 2009: **530**
DEGREE AWARDED: **B.Sc. (Hum.Nut.& Diet.)**

Special Entry Requirements:

This is a joint course between TCD and the Dublin Institute of Technology (DIT). For full details of admission requirements contact the DIT.

Application Procedure:

Admissions to this course are processed by the DIT (course code DT223). In addition to standard CAO applications, advanced entry and mature entry applications are considered. Further details are available from:

The Admissions Office
Dublin Institute of Technology
143-149 Rathmines Road
Dublin 6
Tel: +353 1 402 3445
Fax: +353 1 402 3399
E-mail: **admissions@dit.ie**
Website: **www.dit.ie/study**

Course overview

This course qualifies you to practice professionally as a nutritionist or dietitian.

Is this the right course for you?

Dietitians prevent disease by promoting healthy eating habits and by helping individuals to change their diets and eating habits to improve health and alleviate disease. You will obviously need a strong interest in science subjects but, more importantly, will need to be interested in the relationship between food and health.

If you like the idea of combining science subjects and working with people on a one-to-one basis in health care, then this course is right for you.

Course content

This degree course is the only one leading to a professional qualification in dietetics in the Republic of Ireland.

This is a four-year full-time course and leads to a B.Sc. honors degree in Human Nutrition and Dietetics awarded jointly by TCD and the DIT. The degree is recognised by the Irish Nutrition & Dietetic Institute (INDI), the British Dietetic Association (BDA), the American Dietetic Association (ADA), and the Nutrition Society.

The Freshman years

During the Junior and Senior Freshman (first two) years you develop a broad understanding of the relevant pre-clinical subjects. You will study:

- Cell biology, Physiology, Biochemistry
- Chemistry, Clinical chemistry, Physics
- Research methodology and statistics
- Nutrition science, Nutrition through the life cycle
- Communications, Professional practice studies and Behavioural science
- Microbiology/ Immunology and Food studies.

The Sophister years

In the Junior and Senior Sophister (third and fourth) years, foundation subjects are strengthened (Research methods), specialist subjects are introduced (management, epidemiology, medicine and therapeutics, medical science) and the degree subjects studied to an advanced level (nutrition, dietetics). Clinical classes are introduced in third year, in the areas of medicine and clinical nutrition/dietetics.

You will undertake a three-month research project in the final year, with the option to carry this out in a partner European or American university.

Professional placements

Practice placements are a compulsory element of the programme. These placements are divided into three blocks, one at the end of each of the first three years. Each placement will be followed by a period of college-based consolidation.

Practical placements are arranged in a variety of hospital and community settings in Ireland.

Assessment

End-of-year written examinations, together with continuous assessment of course work, practical work and assignments make up the assessment process. Oral examinations are conducted in some subjects.

Continuous assessments are carried out during your professional placements. You will also write a thesis to report the results of your final-year research project, and present and defend it orally.

Career opportunities

When you graduate, you will be well placed to find work as a dietitian or clinical nutritionist in a hospital or in the community. You will also be qualified to work in, for example, a food company or in clinical nutrition product sales and marketing. Some of our graduates have also chosen academic careers in research or education.

Further information

http://www.medicine.tcd.ie/nutrition-dietetics

Additional information can also be obtained from:

- The Irish Nutrition and Dietetic Institute (**www.indi.ie**)
- The Nutrition Society (**www.nutritionsociety.org**)

Medicine

COURSE CODE:	**TR051**
PLACES 2010:	**109**
POINTS 2009:	**723**
DEGREES AWARDED:	**M.B. (Bachelor in Medicine), B.Ch. (Bachelor in Surgery) and B.A.O. (Bachelor in Obstetrics).**

This is a restricted entry course.

Applications MUST be made online via **www.cao.ie** not later than 1 February 2011.

Applicants must also register for the HPAT-Ireland admission test by 20 January 2011 (via **www.hpat-ireland.acer.edu.au**).

Students must achieve all grades required for matriculation requirements and course requirements in ONE SITTING of their Leaving Certificate/Matriculation/ Advanced GCE (A-level) examinations. See note 3B (page 28) for further details.

Special Entry Requirements:

Leaving Certificate	HB3 + HC3	In two of physics, chemistry, biology, physics/chemistry or agricultural science If you do not have a qualification in physics you must present mathematics at OC3/HD3 or better
Advanced GCE (A-Level)	Grade B + Grade C	In two of physics, chemistry or biology If you do not have a qualification in physics you must present GCSE mathematics at grade B or better

Combinations of subjects not permitted:

Physics/chemistry with physics or chemistry

Agricultural science with biology

See page 198 for vaccination requirements with regard to Hepatitis B, Hepatitis C and Tuberculosis.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

Why study Medicine at Trinity College?

The School of Medicine at Trinity College was founded in 1711 and has played a central role in the golden age of Irish medicine. Today it is an international leader in biomedical research and education.

Students of medicine at Trinity College will follow a five-year programme leading to the degrees of Bachelor in Medicine, Bachelor in Surgery and Bachelor in Obstetrics. Following graduation you are required to spend one year service as a resident house officer (intern) in an approved hospital(s) before becoming a fully registered medical practitioner.

The major characteristics of medicine at Trinity College are:

- Integration of scientific and clinical material and delivery in context
- Facilitation of active learning and a deep strategic approach
- Early and comprehensive development of technical and interpersonal skills
- Defined programme of clinical rotations
- Continuous review and revision of the assessment programme to ensure alignment with the stated outcomes and course content
- Promotion of multiple assessment formats including continuous assessment
- Recognition of the patient as an active partner
- Prioritisation of personal and professional development

Teaching hospitals

Trinity College's two main general teaching hospitals, St. James's Hospital and the Adelaide and Meath Hospital incorporating the National Children's Hospital, are up-to-date tertiary level hospitals. They have several specialist units. Specialist affiliated hospitals include:

Coombe Women's and Infants University Hospital, The Central Mental Hospital (Dundrum), Children's Hospital (Temple Street), Naas General Hospital, National Maternity Hospital (Holles Street), Our Lady's Hospital for Sick Children (Crumlin), The Rotunda Hospital, The Royal Victoria Eye and Ear Hospital, St. Patrick's Hospital, Our Lady's Hospice, Harolds Cross, National Rehabilitation Hospital, Peamount Hospital, Bloomfield Care Centre.

Is this the right course for you?

The medical programme at Trinity College is a challenging but highly rewarding experience. The academic requirements are high and there will be considerable demands on your time. As medicine is ultimately about the care of people, you will also need to feel comfortable in a people-oriented environment where teamwork will be equally as valuable as your individual contribution.

Course content

The first medical year

The course is delivered as a set of five modules.

Module 1: Human development, behavioural sciences and ethics

Aims:

- To give students an understanding of concepts of normality in physical and psychological human development
- To enable students to understand the evolution of man and the functioning and relationships of individuals in relation to society and environment
- To equip students with a thorough and integrated knowledge of normal human function and behaviour
- To provide students with their first professional experience of health care through the family case study

Teaching methods and topics:

- Family case study where students, guided by a family physician, make a number of visits to a family with a young baby and observe the physical and mental development of the baby and its assimilation into its family
- Lectures deal with the physical and psychological aspects of general human development
- Small-group psychology tutorials using clinical scenarios to facilitate learning
- Ethical issues that may arise in the safe delivery of health care
- The skills that contribute to active learning and the development of information-handling skills and critical thinking
- Aspects of teamwork and also the ability to give and receive constructive criticism and to self-assess realistically

Module 2: Evolution and life

Aims are to assist students to explore:

- The areas of basic science that impact on man and his survival in the environment
- The principles of biochemistry, genetics, and immunology at a basic level

Teaching methods:

- Small-group learning tutorials with related lectures as appropriate. All topics will be multidisciplinary and scenarios will be set in a human context. Disciplines contributing to this integrated module include chemistry, biology, anatomy, physiology, biochemistry and immunology

Modules 3 and 4: Human form and function 1 and 2

Aims:

- To enable students to build up a three-dimensional mental model of the normal macroscopic structure of the human body, commencing with a general overview of the bones, joints and muscles
- Human physical development and function at cell, organ, systems and whole body levels
- To develop an understanding of how structure relates to function with particular emphasis on the biomechanical and surgical implications
- To introduce students to current diagnostic imaging techniques and their use in the diagnosis of disease

Teaching methods:

- Most learning occurs in practical workshops using protected specimens; there are also lectures
- Small-group learning tutorials with related lectures as appropriate. All topics will be multidisciplinary and scenarios will be set in a human context. Disciplines contributing to this integrated module include physics, chemistry, biology, anatomy, physiology, biochemistry and immunology

Module 5: Science and humanities

Aims:

- To consider medicine, health and illness from theories drawn from the Humanities, Arts and Social sciences
- To gain insight into the human condition

Teaching methods:

- Most learning will take place in small-group tutorials. There will also be core lectures

The second medical year

In this year there are seven modules.

Module 1: Molecular and translational medicine

Aims:

- To provide an insight into the mechanisms of the development of pathological processes at molecular level

This module is largely lecture-based and also uses computer-based practical programmes.

Module 2: Clinical biochemistry

Aims:

- To build on the understanding of basic biochemistry acquired in the first year of the course and to consider how that knowledge may be used for diagnosis of disease states

Module 3: Principles of pharmacology and practical scientific research

Aims:

- To develop a knowledge and understanding of the pharmacological basis of therapeutics
- To consider the range of drugs and treatment strategies available for disease prevention and control

Module 4: Head and neck anatomy

Aims:

- The anatomy of the head and neck is included in this module and is delivered by lectures and workshops

Module 5: Neuroscience

The disciplines of anatomy, biochemistry, pharmacology and therapeutics, physiology and psychiatry all participate in this module.

Aims:

- To consider all aspects of the nervous system, from biophysics to behaviour, in health and disease

This module consists of lectures, practicals and interactive workshops.

Module 6: Aetiology and mechanisms of disease

Aims:

- To revise and develop further an understanding of the nature and significance of microbes in the 21st century
- To explore aspects of prevention and control of infection and the challenges which are presented as a result of globalisation
- To consider human-host responses to pathogens
- All disciplines use lectures, laboratory practicals and small-group tutorials

Module 7: Fundamentals of clinical and professional practice

Aims:

- To develop, at first in a laboratory setting, the technical skills essential for the delivery of a safe, effective service to patients. Students learn a range of practical skills including taking a clinical history, performing an examination and interpreting simple investigations
- To focus directly on the range of skills necessary to ensure that students have rational and empathetic interactions with patients, in particular excellent listening and communication skills
- To assist the development of the student as a member of a multidisciplinary health care team

Modes of delivery include communication workshops with role play and video recording, skills laboratory, and workshops on suturing, catheterisation, phlebotomy, etc. Attendance at gerontology day care centres, diagnostic imaging and cardiology departments, and pulmonary function laboratories are organised.

The third medical year

There are six modules.

Module 1: Pharmacology and therapeutics

Aims:

- To ensure that students have a broad knowledge of the treatment of a wide range of common diseases
- To ensure that students can prescribe safely and effectively in hospital and for the wider community
- To develop an appreciation of how to critically appraise information in relation to drug therapy and assess the evidence base contained in peer-reviewed journals

Module 2: Laboratory and investigative medicine

Aims:

- To expand and deepen the understanding of the role of microbes in the causation of human health and disease
- To consider in detail how disease processes affect the cell and consequently disrupt function at organ, system and organism levels

Module 3: Principles of surgical practice and Module 4: Principles of medical practice

Aims:

- To provide a safe, structured clinical environment in which to apply the skills, knowledge and attitudes developed in the earlier years
- To facilitate the practice of effective, patient centred, evidence-based medicine
- To provide the student with experience of practice in the hospital setting
- To develop the student's capacity to reflect and self-assess accurately and to appreciate the need to do clinical audit
- To encourage and provide opportunities for multi-professional teamwork
- Clinical team attachments begin with a general introduction in the first week of September. Students are team attached in groups of two. Students are also advised to do at least one elective in either July or August which may be spent in any discipline or area of their choice in any location worldwide

Module 5: Advanced clinical and professional practice

Aims:

- To further develop, at first in a laboratory setting, the technical skills essential for the delivery of a safe effective service to patients. Students learn a range of practical skills including taking a clinical history, performing an examination and interpreting simple investigations
- To practice the range of skills necessary to ensure that students have rational and empathetic interactions with patients, in particular excellent listening and communication skills
- To further assist the development of the student as a member of a multidisciplinary health care team

Module 6: Evidence-based medicine and elective practice 1

Aims:

- To ensure that students gain experience in searching the scientific literature and obtaining appropriate material
- To develop a critical approach to published material
- To learn to prioritise aspects of their findings
- To learn to collate information and to deliver a succinct and factual report of their findings
- To learn to present their material verbally to their peers in a structured and meaningful way
- To have an opportunity to explore at some depth and with guidance, a topic that impacts scientifically or clinically on the current practice of medicine
- To understand the importance of teamwork and the problems that arise during group collaboration and the ways in which they may be managed

In these group projects, students are offered a choice of project titles by the various departments in the medical school. Students select the project of their choice and, following a meeting with the staff project leader, they work in groups of 10 to review the literature and draw up a written report. They also make a verbal presentation to the class.

Medical Moderatorship and Intercalated M.Sc. in Biomedical sciences

After completing year three successfully, you may be permitted to take a year out from the medical course to undertake a moderatorship in science in an approved subject. This is subject to the availability of places and the agreement of the head of department concerned. An intercalated M.Sc. in Biomedical sciences is also available to medical students who successfully gain a 1st or 2:1 in third-year modules. The M.Sc. is a two-year programme, full-time in the first year and part-time in the second. The subjects undertaken are molecular medicine, neuroscience and bioengineering. Both courses offer students the opportunity to gain experience in scientific research if you are interested in the possibility of a career in academic medicine.

The fourth and fifth medical years

During these two years the emphasis is on continuous enhancement of the skills and attitudes acquired in the first three years of the course. There is, of course, some acquisition of important new knowledge and most of this is achieved through interaction with a wide range of consultants and mentors both on the wards and at various hospital conferences. The undergraduate student becomes an integrated member of each team to which s/he is attached and is expected to participate fully in all aspects of that team's activities. This expectation will inevitably involve some early morning and late evening work. The duration of team attachments vary from two weeks to two months so that each student is exposed to a wide range of general and specialist areas. There are excellent library facilities available on both of the major teaching hospital sites. There is a range of special structured tutorials included in the final year to ensure comprehensive cover of important areas for all students.

The majority of hospital attachments take place in St. James's Hospital in Dublin and the Adelaide and Meath Hospital incorporating the National Children's Hospital in Tallaght; however some training also takes place in regional hospitals around Ireland and in hospitals dedicated to particular areas of medicine.

Study abroad

From the beginning of the third medical year students must attend hospital continuously and credit for clinical exposure may be obtained in a number of units including a general hospital abroad and an overseas medical centre. Students may also avail of the opportunity to undertake the Erasmus programme. The School of Medicine currently has a one-year exchange programme for students with Tours University in France.

Assessment

The assessment structure is wide and varied and includes in-course assessment of practical and clinical skills, as well as case studies, research projects, formal written and oral examinations and objective structured clinical examinations.

Intern year

On completion of the medical course a doctor must spend one year as a resident medical officer/intern at a hospital or hospitals recognised for the purpose before being eligible for full registration with the Irish Medical Council. The University does not assume responsibility for these appointments. To practise in Great Britain and Northern Ireland, registration with the General Medical Council in the UK is necessary.

Career opportunities

As a doctor, you will have plenty of options to choose from when it comes to making a decision about your career. Most people wait until their year as an intern is complete before committing to one area over another. Some then enter general practice, while many more continue their training as a general physician or surgeon, or in a related specialist field. Alternatively, you might, as others have done, prefer to work in an area such as hospital management, or make research your priority by opting for a career in academic medicine.

Further information

Medical School Office
Trinity College Dublin
Tel: +353 1 896 1075
E-mail: **MedAdmin@tcd.ie**
www.medicine.tcd.ie

Midwifery

COURSE CODES:	**TR913**	**TR914 (Mature)**
PLACES 2010:	**30**	**10**
POINTS 2009:	**410**	**167***
DEGREE AWARDED:	**B.Sc. (A.Obs.)**	

Special Entry Requirements:

Leaving Certificate	O/HD3	Mathematics
	O/HD3	In one of biology, physics, chemistry, physics/ chemistry or agricultural science
GCSE	Grade C	Mathematics
	Grade C	In one of biology, physics or chemistry

Note for mature applicants:

Applications must be received by the CAO by 1 February of the proposed year of entry. You are not required to submit a mature-student supplementary application form to Trinity College. However, you will be invited to attend a written assessment by the Nursing Careers Centre.

Screening (including a medical) and vaccination will be organised by the health service provider responsible for the practice area where you will be on placement.

See page 198 for vaccination requirements with regard to Hepatitis B, Hepatits C and Tuberculosis.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

What is a Midwife and midwifery?

The term 'midwife' means 'with woman'. The concept of partnership between the woman and the midwife is fundamental to midwifery practice and is based on mutual trust, support and collaboration. The midwife uses midwifery skills to provide care that is individual to each woman and recognises the woman's ownership of her birth experience. Care for women experiencing a physiological pregnancy and birth is the core of practice of the midwife. The midwife is the key professional providing continuity of care and promoting choice and control to women in pregnancy and birth, and to women and their babies following birth.

Course content

This four-year programme will be offered in partnership with two linked maternity care providers: The Coombe Women's Hospital and The Rotunda Hospital. The first three years combine learning in university and midwifery practice in the maternity hospitals and will take place during the academic year with the usual academic holidays. The final year will include a 36-week period of internship in midwifery practice for which the students will be salaried.

This programme will provide you with the knowledge and skills to meet the needs of women and their families in an individualised, culturally sensitive manner. There are two components to the midwifery degree programme – a theoretical component and a midwifery practice component.

Like all professional courses in health sciences, Midwifery places extra demands on students' time. It can be demanding, both physically and emotionally and so you should ensure that you are in a position to fully engage with the course during your time in College.

Theoretical component

The theoretical component of the course will be taught in the Trinity School of Nursing and Midwifery, D'Olier Street, and in the Trinity Centre for Health Sciences in St. James's Hospital. Teaching methods include lectures, small-group teaching, tutorials and practice classes. In first year you will typically spend 3-4 days in theory classes and one day in practice during theory blocks. Each day in theory will consist of approximately 6 hours per day in lectures, tutorials and laboratory practicals.

The programme content will cover such areas as:

- Midwifery practice – knowledge and skills
- Communication and interpersonal skills
- Professional, personal, ethical and legal issues
- Knowledge base for midwifery practice to include: biological sciences, psychology, pharmacology, non-pharmaceutical approaches
- Social theory for midwifery practice
- Research
- Health promotion
- Maternal and social care services in Ireland

Midwifery practice component

For the practice component you will be based in one of the maternity care providers: the Coombe Women's Hospital or the Rotunda Hospital. Midwifery students will also undertake other practice placements, for example, mental health, medical and surgical. In first-year students will be required to complete three, four-week practice placements, which will consist of 30 hours supernumerary (unpaid) practice per week in a practice setting. The final year will include a 36-week period of internship in midwifery practice for which the students will be salaried.

Midwifery practice placements take place throughout the four years of the programme. You will begin your first midwifery practice placement after Christmas of the first year of the programme. Before this placement you will have spent approximately one day per week with lecturers and midwives in the maternity hospitals.

Which maternity care provider will you train with?

After you accept an offer to this programme, you will receive a welcome pack from Trinity College. This pack contains a form asking you to indicate which maternity care provider you would prefer to be linked with. Requests are dealt with on a first-come, first-served basis. Where possible you will be assigned your first choice, however, if the number of applicants exceeds the number of places available you will be assigned your second choice. A reserve list is held and if a vacancy arises it may be possible to transfer to your first choice.

Assessment

Assessment of learning in midwifery practice is an important component of the programme and will take place throughout the programme. Other forms of assessment include written examinations and assignments, presentations, debates, teaching sessions, etc.

Career opportunities

As a graduate you will be eligible to apply to have your name entered in the midwives division of the Register of Nurses maintained by An Bord Altranais and begin your career as a midwife. Midwives may choose to work in a variety of health care settings. The majority of midwives practise within the Health Service, in maternity hospitals, maternity units of large and small general hospitals, in private maternity hospitals, etc. Midwives can also practice independently and there is a small-group of midwives who do so. There are also a number of midwife-led initiatives being developed.

Midwives have an option to develop their career in many different ways; progress is along three broad pathways: practice, management, education and research. The opportunities are endless. Midwives educated in the Republic of Ireland may move freely within the European Union and in most countries worldwide.

Further information

www.tcd.ie/Nursing-Midwifery/courses/undergrad_bsc_midwifery.php
E-mail: **nursing.midwifery@tcd.ie**
Tel: +353 1 896 2692

Nursing:

General nursing, Psychiatric nursing, Intellectual disability nursing, Children's and general integrated nursing

	PLACES 2010:	POINTS 2009:
TR091 General:	**92**	**395**
TR092 General (mature applicants):	**14**	**159***
TR093‡ General, Adelaide:	**29**	**385**
TR094‡ General, Adelaide (mature applicants):	**4**	**168**
TR095 Psychiatric:	**20**	**385***
TR096 Psychiatric (mature applicants):	**25**	**144**
TR097 Intellectual disability:	**17**	**360***
TR098 Intellectual disability (mature applicants):	**13**	**144***
TR911 Children's and general integrated:	**15**	**475***
TR912 Children's and general integrated (mature applicants):	**5**	**171**

DEGREE AWARDED: **B.Sc. (Cur.)**

Special Entry Requirements:

Leaving Certificate	O/HD3	Mathematics
	O/HD3	In one of biology, physics, chemistry, physics/chemistry or agricultural science
GCSE	Grade C	Mathematics
	Grade C	In one of biology, physics or chemistry

‡ See note 16, page 29.

Note for mature applicants:

Applications must be received by the CAO by 1 February of the proposed year of entry. You are not required to submit a mature-student supplementary application form to Trinity College. However, you will be invited to attend a written assessment by the Nursing Careers Centre.

Screening (including a medical) and vaccination will be organised by the health service provider responsible for the practice area where you will be on placement. See page 198.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

See also:

TR913/914: Midwifery, page 181

Course overview

With over one thousand undergraduate nursing students in Trinity College, you will become part of a vibrant student community. You will meet students from all disciplines as you study core modules, and form cohesive classes within your own discipline as you specialise within your chosen area. Nursing students are taught predominantly in the Nursing School building on D'Olier Street, offering students an opportunity to meet and interact with their classmates. With its proximity to Trinity College's main campus, Nursing students are never far from the centre of student life.

This four-year nursing programme (Children's and general is 4.5 years) is offered in partnership with six health service providers. Students remain with the same health service provider for the duration of their programme and become an integral part of the hospital. Trinity College's six linked health service providers are:

General nursing

- The Adelaide and Meath Hospitals, incorporating the National Children's Hospital (AMNCH) at Tallaght
- St. James's Hospital

Psychiatric nursing

- Health Service Executive Dublin Mid-Leinster
- St. Patrick's Hospital

Intellectual disability nursing

- Stewart's Hospital Services Ltd, Palmerstown
- St. Anne's Sisters of Charity of Jesus and Mary, Moore Abbey

Children's & general integrated nursing

- The Adelaide and Meath Hospitals, incorporating the National Children's Hospital (AMNCH) at Tallaght

Is this the right course for you?

You will need to have a keen interest in healthcare, be capable of working as part of a team, and have a caring and understanding personality and outlook to enjoy working as a nurse.

Like all professional courses in health sciences, nursing places extra demands on students' time. It can be demanding, both physically and emotionally and so you should ensure that you are in a position to fully engage with the course during your time in College.

Course content

This course will give you the knowledge, skills, attitude and professional values necessary to provide high-quality, competent and caring nursing practice in the discipline of nursing you choose to follow. There are two components to the nursing degree course – a theoretical component and a clinical component.

Theoretical component

The majority of the theoretical component of the course will be taught in the Trinity School of Nursing and Midwifery building, which is located on D'Olier Street, minutes from the main campus. Classes are also held on other sites including the main Trinity College campus and in the Trinity Centre for Health Sciences in St. James's Hospital. Teaching methods include lectures, tutorials, practical classes, clinical skills laboratories, group teaching, web-based learning and reflective workshops.

For the theoretical component, students will undertake modules of study that are shared with all nursing disciplines and modules that are discipline-specific. The subjects of study are Nursing, Biological sciences, Psychology and Sociology, with the emphasis being on Nursing (see the table below for module titles). In years one and two students will concentrate on nursing, biological, behavioural and social sciences. In years three, four and five (where applicable), students will develop and enhance their knowledge, skills and attitudes for professional nursing practice.

Clinical component

For the clinical component you will be based in one of the health service providers for the duration of the course. Part of your course work will be unpaid practice placements in a variety of clinical settings. For General, Psychiatric & Intellectual disability disciplines, this will consist of 45 weeks taking place in four- to six-week blocks in each year of the programme. During the fourth year of the programme you will undertake a 36-week roster of continuous placement and you will be a paid health service employee. The Children's and general integrated course will consist of 58 weeks of unpaid practice placements along with a 36-week roster of continuous placement where you will be a paid health service employee. The rostered placement spans the fourth and fifth years of the course.

As the course progresses you will be prepared to undertake a number of different clinical placements in your chosen discipline. These include:

General nursing

- **Medical nursing** – general/specialist (including day care, outpatients, coronary care, high dependency units)
- **Surgical nursing** – general/specialist (including day care, outpatients, coronary care, high dependency units)
- **Accident and Emergency and outpatients**
- **Child care and paediatrics**
- **Mental health and psychiatric nursing**
- **Care of the older person**
- **Home nursing/community** (including primary health care, voluntary and statutory agencies, intellectual disability)
- **Operating theatre**
- **Maternity care**

Psychiatric nursing

- **Psychiatric nursing** (acute and long-term care in mental health)
- **Community-based care and rehabilitation**
- **Specialist areas** (e.g. addiction studies, child and adolescent psychiatry, special care units, behaviour therapy and forensic psychiatry)
- **Care of the older person**
- **Adult general nursing**
- **Management**

Intellectual disability nursing

- **Education and development of the child** – including a balance of caring and developmental experiences across a variety of generic and specialist settings
- **Education and development of the adult** – e.g. training, work, activation and living areas
- **Disorders of human behaviour** – specialising in the care of persons with disorders of human behaviour, including those with intellectual disability
- **Acute nursing** – specialising in the care of persons with acute nursing needs, including those with intellectual disability who have physical disability/illness
- **Specialist areas** – e.g. physiotherapy, communication, speech and language, and physical education
- **Management**

Children's and general nursing

- **Medical nursing** of infants, children and adolescents within a family-centred framework (general and specialist placements)
- **Surgical nursing** of infants, children and adolescents within a family-centred framework (general and specialist placements)
- **Accident and Emergency nursing** of infants and children within a family-centred framework
- **Operating theatre nursing** of infants, children and adolescents within a family-centred framework
- **Mental health issues** for children and adolescents and their families
- **Community nursing** within a family-centred framework
- **Maternity and neonatal care** within a family-centred framework

Which health service provider will you train with?

After you accept an offer to one of the nursing disciplines you will receive a welcome pack from Trinity College. This pack contains a form asking you to indicate which health service provider you would prefer to be linked with. Requests are dealt with on a first-come, first-served basis. Where possible you will be assigned your first choice; however, if the number of applicants exceeds the number of places available you will be assigned your second choice. A reserve list is held and if a vacancy arises it may be possible to transfer to your first choice. Most students are allocated their first choice of health service provider.

Modules of study

The Freshman (first and second) years

Shared learning modules (All disciplines)	Discipline-specific modules
Health promotion and research (yr 1) Communication and essential skills for nursing practice (yr 1) Historical, legal and theoretical foundations of nursing (yr 1) Scientific basis for nursing (yr 1) Introduction to psychology (yr 1) The sociology of health and illness (yrs 1 and 2) Professional concepts for nursing (yr 2) Advanced anatomy and physiology (yr 2) Psychological themes for nurses (yr 2) Elective (yr 2)	**General nursing:** Introduction to general nursing 1 (yr 1) Introduction to general nursing 2 (yr 1) Nursing in specialist services (yr 1) Community nursing and care of the older person (yr 1) General nursing 1 (yr 2) General nursing 2 (yr 2) General nursing 3 (yr 2) General nursing 4 (yr 2) Foundations of disease and pharmacological intervention (yr 2)
	Psychiatric nursing: Theoretical perspectives on mental health/illness (yr 1) The nature of mental health nursing (yr 1) Recognising mental distress/illness (yr 1) Psychotherapeutic skills and mental health nursing (yr 1) Psychotherapeutic approaches and mental health nursing (yr 2) Working with people with acute mental distress/illness (yr 2) Working with people with enduring mental health problems (yr 2) Caring for the person with physical ill health (yr 2) Psychopharmacology (yr 2)
	Intellectual disability nursing: The lifespan of the person with intellectual disability (yrs 1 & 2) Concepts of intellectual disability (yrs 1 & 2) Holistic understandings of care (yr 1) Approaches to nursing practice (yrs 1 & 2) Frameworks for intellectual disability: policy and practice perspectives (yr 2) Foundations of disease and pharmacological intervention (yr 2)
	Children's and general nursing: All modules as per general nursing, plus: Introduction to children's nursing (yr 1) The sick child (Part A) (yr 2) Healthcare needs of child and family (yr 2)
When not on clinical placement you can expect to spend at least 25 hours each week in guided study and approximately 10 hours in individual study. The first clinical placement of the course takes place after the Christmas vacation in the first year.	

The Sophister (third, fourth & fifth) years

Shared learning modules (All disciplines)	Discipline-specific modules
Research (yrs 3 and 4) Elective (yr 3) Growth and development for professional practice (yr 4)	**General nursing** General nursing 5 (yr 3) General nursing 6 (yr 3) Clinical assessment and therapeutics (yr 3) Psychology and sociology applied to nursing (yr 3) Advanced biological sciences and clinical skills (yr 3) Disability, rehabilitation, palliative care and pain management (yr 4)
	Psychiatric nursing Psychology and sociology applied to nursing (yr 3) Introduction to the needs of specialist client groups (yr 3) Mental health nursing in the community (yr 3) Working with the older person (yr 3) Working with people who experience multiple and complex needs and clinical skills (yr 3) Contemporary issues in mental health nursing (yr 4)
	Intellectual disability nursing Psychology and sociology applied to nursing (yr 3) Therapeutic interventions for care 2 (yr 3) Approaches to nursing practice 3 (yr 3) Frameworks for intellectual disability practice 2 (yr 3) Advanced biological sciences and clinical skills (yr 3) Contemporary issues in intellectual disability nursing (yr 4)
	Children's and general nursing All modules as per general nursing, plus: The sick child (Part B) (yr 3) Healthcare needs of child and family (yr 4) The adolescent and their family – the healthy child (yr 4) Contemporary aspects of children's nursing (yr 4) Continuing healthcare (children's nursing) (yr 4)
During fourth year (and fifth year, where applicable), you will be on a 36-week roster of continuous placement and you will be a paid health service employee.	

Assessment

A combination of examinations, essays, clinical projects, clinical skills, laboratory techniques, literature reviews (review of past and current literature relating to the subject matter), reflective practice (thinking about an experience and reflecting on its meaning) and clinical assessments is used.

Career opportunities

As a graduate you will be eligible to apply to have your name entered in the relevant division(s) of the Register of Nurses maintained by An Bord Altranais and work as a nursing professional in your chosen discipline. The Children's and general nursing programme combines the general programme and integrates a children's programme which results in a programme which spans the seven ages of man and allows for registration as both a children's and a general nurse with An Bord Altranais.

You should have no problem getting employment as nursing staff are in short supply worldwide. You will also be qualified to continue your education and to further specialise should you wish to do so. The Trinity School of Nursing offers a wide range of postgraduate courses for furthering your studies. Nurses also take up careers in industry, particularly in the marketing of healthcare products.

Further information

www.tcd.ie/Nursing-Midwifery
Tel: +353 1 896 2692

E-mail: **nursing.midwifery@tcd.ie**

Occupational therapy

COURSE CODE: **TR054**
PLACES 2010: **40**
POINTS 2009: **495***
DEGREE AWARDED: **B.Sc. (Cur. Occ.)**

Special Entry Requirements:

Leaving Certificate	HC3	In one of: physics, chemistry, biology, physics/ chemistry or agricultural science
Advanced GCE (A-Level)	Grade C	In one of: physics, chemistry or biology

See Precautions against infectious diseases page 198.

Garda Vetting:

Students will be required to undergo Garda vetting.

See page 23 for further details.

What is Occupational therapy?

The World Federation of Occupational Therapy maintains that Occupational therapy is a profession concerned with promoting health and well-being through occupation. The main goal of occupational therapy is to enable people to participate in meaningful activities of everyday living, for example self care, work and leisure activities. Occupational therapists believe that participation in everyday activities can be supported or restricted by physical, social, attitudinal and legislative environments. By enabling people to engage in activities that hold meaning for them, occupational therapists aim to enable people to improve their day-to-day quality of life.

Occupational therapy interventions consider:

- **The individual person** – improving or maintaining their level of physical, cognitive (thinking), affective (emotional) and social ability
- **The occupation** – examining the self-care, leisure and work-related activities people value in their daily lives and making changes to these activities so that they better meet the individual's abilities
- **The environment** – manipulating or adapting the physical environment so that it does not impede but, if possible, enhances performance; and influencing the social, cultural and institutional environment in ways that enable people to live as independent a life as possible and reach their full potential

Occupational therapists work in a variety of settings, including community, hospitals, rehabilitation units, schools, and, reform centres. Examples of what occupational therapists do include:

- Adapting the home of an elderly person to make it easier and safer for him/her to use
- Working with people with depression and schizophrenia using activities such as cooking a meal to foster a sense of achievement, develop personal skills and facilitate successful experiences
- Using play activities to improve the play and movement skills of children with cerebral palsy
- Running life-skills programmes that enable people with intellectual disabilities develop skills such as budgeting so that they can live more independently in the community
- Advising community groups about ways to promote health and maintain activity in their lives
- Enabling people to select and effectively use equipment and appliances, including wheelchairs, dressing aids, computers and other assistive technology, to increase their independence
- Assessing the ability of someone with acquired brain injury to return to work and then modify that person's work (the job itself and the workplace) to enable this, where possible, to happen

Is this the right course for you?

Yes, if you are a creative thinker who is open to finding solutions to a multitude of problems and if working with people with diverse abilities is something you enjoy and find stimulating. Visiting an occupational therapy department will give you a good understanding of what is involved in this profession.

Occupational therapy at Trinity College

Occupational therapy is based in the Trinity Centre for Health Sciences in a new purpose-built complex in the grounds of St. James's Hospital. State-of-the-art teaching facilities at the O.T. school include a capacity for tele-conferencing. The Trinity Centre houses other health sciences disciplines including students studying medicine, physiotherapy, therapeutic radiography and nursing. This gives a multidisciplinary dimension to studying and working with other health professionals. The centre is about 2 miles from the main campus and is beside a Luas station on the line running between Tallaght and Connolly Station in the city centre. Courses which take place on the main campus in College Green, for example psychology, anatomy and social policy, expose students to the wider facilities of Trinity College.

Course content

This four-year degree course incorporates a practical approach to solving problems and fosters a research-oriented and reflective attitude.

The Freshman years

The courses studied in the Freshman (first two) years include the study of occupation, occupational therapy theories and interventions with people from children to older adults, anatomy, physiology, psychology, disability studies, research methods and statistics. You will be encouraged to 'learn by doing' in subjects related to personal development such as communications and creative problem solving and in courses that teach the professional and technical skills of practice such as assistive technology. You will be required to engage in service learning through voluntary work and will use experiential learning and group work to develop knowledge and skills in an activity of your choice. During the first two years, there are a total of 11 weeks in supervised professional practice in a variety of health and community care facilities around the country.

The Sophister years

During the Sophister (third and fourth) years you will further develop your knowledge of the theories, principles and practice of occupational therapy; gain an understanding of health/social care systems and policies and of the importance of practicing in an evidenced-based manner. Service learning is continued and incorporates a peer education methodology. Additionally, you will be expected to complete a group research project. You will have opportunities to develop important self-directed learning and research skills, which are key areas for practice. Over the course of these two years, you will spend a total of 20 weeks in supervised professional practice.

Assessment

Assessment includes written examinations, essays, project work, presentations, a research project, and competency based assessment while on supervised practice education.

Study abroad

Students may elect to spend one or more of their professional practice training blocks abroad. To date students have studied/trained in Belgium, Scotland, Australia, and Canada

Career opportunities

As a qualified occupational therapist from Trinity College, Dublin, you will be well equipped to pursue a very rewarding career working with people of all age groups in a wide range of service settings. The course is approved by the World Federation of Occupational Therapists (**www.wfot.org.au**), which means as soon as you complete your degree you are qualified to work as an occupational therapist in Ireland as well as abroad. Many graduates from the Trinity College course are working in all parts of the world. Most occupational therapists, over time, develop specialised expertise in areas such as physical rehabilitation, mental health, hand therapy, intellectual disability, paediatrics, services for the elderly and community occupational therapy. Work opportunities in Ireland are expanding, particularly in school settings and in primary care community practices areas. Other examples include work in schools and in private practice, and work with people who are homeless and people who are in prison; others run healthy living and stress management clinics. A number of occupational therapists move into management – managing occupational therapy departments or other health/social care related services. Additionally, the course offers many opportunities for further study.

Did you know?

- The course is the longest established university-based occupational therapy course in Ireland and has an excellent track record of employment in Ireland and abroad. It uses many innovative teaching methodologies, e.g. peer education, problem-based learning, as well as more traditional methods. Students and staff collaborate on projects that involve both research and service delivery in new areas of practice. For example, students facilitate a staff-led advocacy project for people with intellectual disabilities and are involved in leisure-based groups for residents of a nursing home and occupation-focused services for students with mental health difficulties.

Further information

www.medicine.tcd.ie/occupational_therapy
E-mail: **plantd@tcd.ie**
Tel: +353 1 896 3210

Pharmacy

COURSE CODE: **TR072**
PLACES 2010: **75**
POINTS 2009: **545***
DEGREE AWARDED: **B.Sc. (Pharm.)**

Special Entry Requirements:

Leaving Certificate	OC3 or HD3	Mathematics
	HC3	Chemistry
	HC3	In one of physics, biology, mathematics, applied mathematics, geography, geology or agricultural science
GCSE	Grade B	Mathematics
Advanced GCE (A-Level)	Grade C	Chemistry
	Grade C	In one of physics, biology, mathematics, geology, geography or applied mathematics

What is Pharmacy?

Pharmacy is the study of all aspects of drugs, both natural and synthetic in origin, including their chemistry, their uses in medicines, and how they work within the body. Pharmacists work in a variety of settings – community pharmacies, hospitals, long-term care facilities, and within the pharmaceutical industry to name just a few. In many respects, their role as a key healthcare professional is to help people achieve the best results from their medications.

Is this the right course for you?

While this degree is an essential requirement if you wish to practise as a community or hospital pharmacist, Pharmacy at Trinity College opens a wide variety of professional opportunities in both industry and the healthcare sector.

As much of the course is scientifically led, a strong interest in this area will be important and will make your four years of study more enjoyable.

Course content

The Pharmacy syllabus has been designed to provide you with an all-round education in both the basic and pharmaceutical sciences, and in the practice of pharmacy itself. There are approximately 16 hours of lectures, 6 laboratory sessions and 1 tutorial per week over the course of the Junior Freshman (first) year.

Some of the subjects covered during the four years of the course are:

- **Biology:** A basic introduction to the molecular and cellular basis to life so that you can better appreciate how drugs and medicines work. It also includes introductory genetics, microbiology and developmental biology
- **Physiology:** The biology of the human body is an essential prerequisite to the study of pharmacology. Physiology covers the anatomy and physiology of all the major body systems, such as blood, the heart, digestive and nervous systems
- **Biochemistry:** A basic introduction to the ways in which drugs are metabolised and how they act or cause toxicity by interacting with basic systems within cells and tissues
- **Microbiology:** Studies bacteria, fungi and viruses. These are particularly important in pharmacy because these organisms cause so many diseases. Some medicines must be made free of microbes by either sterilisation or by being prepared aseptically
- **Pharmaceutical calculations and data handling:** Teaches both mathematics and data handling to assist you with the application of both in pharmaceutical calculations and statistics
- **Medicinal chemistry:** Covers the principles of drug design and isolation
- **Pharmaceutical analysis:** Deals with the theory and practice of pharmaceutical analysis
- **Physical pharmacy:** Covers the fundamental physiochemical principles of pharmacy of importance to formulation design, performance and stability
- **Pharmaceutical chemistry:** Deals with aspects of the sources, identification, analysis and stability of the materials used in medicines. Additional topics include advanced drug discovery and design, molecular mode of action of drugs and the chemistry of drug metabolism
- **Pharmaceutical biotechnology:** Develops an understanding of how genetics and biotechnological methods can be used to develop new drugs, especially proteins
- **Pharmaceutics and pharmaceutical technology:** This subject is concerned with the formulation, production and evaluation of all types of medicines such as tablets, creams and injections
- **Pharmacognosy:** The study of plants and animals, as well as substances extracted from them, which are used in pharmacy and are active in the treatment and prevention of diseases
- **Pharmacology:** Develops knowledge about how drugs work at the molecular, biochemical and cellular level that is essential if drugs are to be used effectively to treat disease in humans and in animals. The course also gives an appreciation of factors affecting the therapeutic benefits and adverse risks of medicines
- **Practice of pharmacy:** This subject examines what pharmacists do in each of the areas of professional practice and because this involves working with patients, their families and others in the health service it also includes sociological and psychological subjects as well as a study of the health service

In the final year, you will undertake a research project and will also prepare a dissertation on an aspect of pharmacy practice linked to a community, hospital or industry option of your choice. In the past students have chosen the following as subjects for investigation:

- Establish new bioassay for the detection of anticancer compounds in complex plant extracts
- Essential Oil analysis of two Irish species – chemistry and biological activity
- Quality of medicines information on the internet
- Development of quick reference guides for pharmacists about medicines
- An investigation of new approaches for diagnosing diabetes
- A role for dopamine in a potentially lethal interaction between caffeine and MDMA 'Ecstasy'.
- Production and characterisation of porous microparticles of a model protein designed for pulmonary delivery
- Are we able to predict the physical stability of amorphous drug/polymer composites?
- SAR studies of 6-fluoroquinolones
- Molecular probes for proteins which regulate cancer-cell proliferation: chemistry and modelling of novel nuclear receptor targeting agents

Assessment

A combination of continuous assessment and oral and written end-of-year examinations is used. Practical examinations are also an important means of assessment. Senior Sophisters (fourth-year students) submit a dissertation based on their projects.

Career opportunities

Your career prospects as a Pharmacy graduate are excellent. Employment opportunities exist in community, hospital and industrial pharmacy, as well as in state services such as medicines licensing. In addition, you can opt to undertake research, or apply for entry to one of the postgraduate courses in hospital, industrial or community pharmacy.

Further information

www.tcd.ie/Pharmacy
Tel: +353 1 896 2809

The Pharmacy degree and professional qualification

The Pharmacy degree alone does not entitle you to practice as a pharmacist.

After the four years in Trinity College students are required to undertake a further one year training period, known as the 'pre-registration year' or 'pharmacy internship year'. The pre-registration training year may be taken in a range of pharmaceutical settings including hospital, community and industrial environments, where you will work under the supervision of a tutor pharmacist. You will be entitled to register as a pharmacist with the Pharmaceutical Society of Ireland (PSI) on the successful completion of the pre-registration year and the PSI's Licence Examination.

The B.Sc. (Pharm.) degree is in full compliance with the EU directives governing free movement of pharmacists, entitling graduates to register and work throughout the EU (including Northern Ireland) following registration with the Pharmaceutical Society of Ireland

Graduate profile

Dr. Máirín Ryan

"Following a pre-registration year in hospital pharmacy practice I took up a position as clinical pharmacist in St. James's Hospital and subsequently assumed responsibility for delivery of inpatient and outpatient clinical pharmacy services for HIV/AIDS patients. I then did a Ph.D. in the Dept. of Pharmacology and Therapeutics, Trinity College focussing on pharmacoeconomics of HIV therapy. I subsequently moved from clinical practice to become the Chief Pharmacist at the National Centre for Pharmacoeconomics. I am now a lecturer in pharmacoeconomics in the Dept. of Pharmacology and Therapeutics and the lead investigator for a program of economic analyses of HIV clinical trials in Africa. I am also a member of the scientific advisory board for the Infectious Diseases Institute at Makerere University in Uganda. I and two graduates from the Trinity College medical school co-founded the Réalta Global AIDS Foundation in 2004, a registered charity which focuses on improving outcomes for Africans with HIV/AIDS and other poverty related conditions. In 2007, I was appointed as Director of Health Technology Assessment at the Health Information and Quality Authority where the team will be responsible for conducting health technology assessments to inform national health policy and service decisions. I feel that my training as a pharmacist has been an invaluable basis for my work to date, obviously as the starting point for developing clinical pharmacy skills but also in my current role. Health technology assessment is a research-driven process which involves compiling all of the evidence around investment in new technologies including drugs and assessing that evidence to inform the best decisions for patient care; which is essentially what pharmacists are trained to do."

Student profile

Margaret Donnelly (SS Pharmacy, 2010)

"Studying Pharmacy at Trinity College is a truly unique experience. At the end of your four years you achieve so much more than the B.Sc. Pharm. You are taught skills that can be applied to a wide variety of careers. While at times the academic side was challenging, the lecturing staff are always supportive and are only too happy to offer help and guidance to those who ask. There is a unique community spirit fostered in the School. This is reflected in the students who always support and encourage one another in achieving their goals. We are very lucky in having our own social society, DUPSA (Dublin University Pharmaceutical Student's Association) which has been crowned 'Best small-medium society' in College. DUPSA are well renowned for hosting some of the best social events during the term, not least the Pharmacy Ball which is always a night to remember. To study Pharmacy at Trinity College was definitely one of the best decisions I've made!"

Physiotherapy

COURSE CODE: **TR053**
PLACES 2010: **40**
POINTS 2009: **520***
DEGREE AWARDED: **B.Sc. (Physio.)**

Special Entry Requirements:

Leaving Certificate	OC3 or HD3	Mathematics
	HC3	In two of physics, chemistry, biology, physics/chemistry, mathematics or agricultural science
GCSE	Grade B	Mathematics
Advanced GCE (A-Level)	Grade C	In two of physics, chemistry, biology, or mathematics

Combinations of subjects not permitted:
Physics/chemistry with physics or chemistry
Agricultural science with biology

Garda Vetting:
Students will be required to undergo Garda vetting.
See page 23 for further details.

What is Physiotherapy?

Physiotherapy – or physical therapy – places full and functional movement at the heart of what it means to be healthy. It involves treating patients of all ages with a range of illnesses and conditions, including those with back and neck problems, sports injuries, arthritis, or those recovering from strokes and operations. The methods employed include exercise therapy, manipulative procedures, and a variety of electrical treatments.

Physiotherapists may be part of a multidisciplinary medical team that includes physicians, nurses, speech and language therapists, psychologists, occupational therapists and social workers among others. Alternatively they may work from clinics or specialise in particular areas of the discipline.

Is this the right course for you?

Physiotherapy is both physically and academically demanding and you will need to have considerable emotional stability. Visiting a local general hospital or other area where physiotherapists work will give you a good understanding of what exactly is involved.

Physiotherapy at Trinity College

Physiotherapy is based in the Trinity Centre for Health Sciences in a purpose built complex at St. James's Hospital. This complex houses other health science disciplines and allows physiotherapy students to share courses with those in the other health sciences to give a multidisciplinary approach to studying and working.

The centre is about 2 miles from the main campus and is beside a Luas station on the line running between Tallaght and Connolly Station in the city centre.

Course content

The major objective of this four-year course is to enable you to become a competent professional with the ability to work independently with patients.

There are two components to Physiotherapy: theory and clinical practice. In the first year the emphasis is on laying a foundation of theoretical knowledge and the second year introduces students to the clinical skills and procedures used by physiotherapists. Clinical sciences are taught mainly in the second and third years. In the third and fourth years students spend up to fifty percent of their time on clinical placement. In the fourth-year students have an opportunity to develop specialist knowledge in a particular area of physiotherapy and undertake a research project.

The Freshman years

As a Freshman (first and second year) student you will have approximately 20 hours of teaching each week divided between lecture and practical classes.

Courses covered in the first two years include:

- **Physiology**
- **Anatomy**
- **Physics**
- **Chemistry**
- **Pathology**
- **Biomechanics and movement** – includes procedures to improve strength, mobility and balance
- **Electrotherapy procedures** – includes the use of electrotherapy to alleviate pain, improve circulation and re-educate muscles
- **Manipulative procedures** – includes the use of soft tissue massage and manipulations to improve mobility and improve circulation
- **Exercise therapy** – the use of exercise in prevention and treatment

You will also start to study various conditions and specialities frequently seen in physiotherapy such as respiratory conditions and musculoskeletal conditions.

At the end of second year you will start clinical placements under the supervision of skilled and experienced tutors. These may be taken in hospitals, clinics, day centres or within private and community practice.

The Sophister years

In the Junior Sophister (third) year half of the time is spent on academic studies and the other half on clinical placements in a variety of settings both within and outside the Dublin area.

In the Senior Sophister (fourth) year, you will undertake an investigative project on a topic related to physiotherapy in conjunction with advanced study in an area of your choice. Examples of subject choices available include care of the elderly, paediatrics, women's health, sports injuries and pain.

Assessment

End-of-year written examinations and tests in certain subjects, such as anatomy, make up the theoretical assessment structure.

In addition, you will be continuously assessed during your clinical placement and will have practical exams on the skills element of the course, including your assessment of a patient while on a clinical placement.

Career opportunities

Successful completion of the course entitles you to membership of the Irish Society of Chartered Physiotherapists, the accrediting body for physiotherapy in Ireland.

Physiotherapists are sought throughout the world and you will be able to work with a wide range of conditions or to specialise, as you wish. There is also great scope for you to continue to develop your skills and expertise in areas such as manipulative therapy, sports injuries, neurology, cardiology, respiratory, research, education, management or private practice.

Did you know?

- All students will have clinical placements at Trinity College's associated teaching hospitals of St. James's and AMNCH in Tallaght where there is an established expertise in most areas of physiotherapy. These placements allow students to gain experience in some of the specialist areas of physiotherapy including neurology, respiratory care, coronary care, orthopaedics, women's health, care of the elderly, sports and out-patients.

Further information

www.medicine.tcd.ie/physiotherapy
Tel: +353 1 896 2110 / 1

Radiation therapy

COURSE CODE:	**TR055**
PLACES 2010:	**30**
POINTS 2009:	**515***
DEGREE AWARDED:	**B.Sc. (Ther. Rad.)**

SPECIAL ENTRY REQUIREMENTS:

Leaving Certificate	HC3	In one of physics, chemistry, biology, physics/chemistry
Advanced GCE (A-Level)	Grade C	In one of physics, chemistry or biology

GARDA VETTING:

Students will be required to undergo Garda vetting.
See p. 23 for further details.

What is Radiation therapy?

Radiotherapy is one of the main methods used to treat patients with cancer. This course qualifies you to work as a radiation therapist – the practitioner who is responsible for the delivery of a course of radiotherapy.

When you qualify, you will work with a multidisciplinary team comprising clinical oncologists and physicists to plan and deliver the best course of treatment for patients. As a graduate radiation therapist you will be the main point of contact for the patient during the course of their treatment and involved in many aspects of their care. As radiotherapy is expanding in Ireland so is the opportunity for role development, making this an exciting time to be entering the profession.

Is this the right course for you?

The radiation therapist requires very specialist skills. Your degree will cover many science subjects so you will have to have a keen interest in biology, physics and chemistry. The development of your clinical skills requires you to be interested in patient care as well. Your job will also be both physically and emotionally demanding.

Course content

This four-year degree gives you a broad academic base on which to develop the clinical skills of radiotherapy. It qualifies you to analyse, evaluate and make decisions and to initiate, participate in and encourage research into the profession. There are both theoretical and clinical components to this degree, the emphasis being more on the theoretical component in the first two years and more on the clinical and research component in the last two years. The contact hours are high in this course and the subjects are taught through lectures, laboratory-based practical sessions, workshops and tutorials.

The Division has the largest radiotherapy treatment simulation and planning laboratory in Europe and is the hub of a sophisticated teleconferencing system that facilitates links both nationally and internationally. This system is used both clinically and academically.

The Freshman years

The first two years of the course cover the basic sciences – physics, chemistry and biology. You will also study the structure and function of the human body through anatomy, physiology, biochemistry and genetics, and will be introduced to psychology, pathology, research methodology and statistics, introductory cancer medicine, clinical physics and basic professional attitudes and skills.

A clinical component will introduce you to radiotherapy and will develop your understanding of the complexities of the cancer patient pathway.

The Junior Freshman year

In the Junior Freshman (first) year, there are approximately 20 - 30 hours per week in class or 35 hours per week in clinical placement.

The subjects you will cover in class are:

- Biological principles and practices
- Chemical principles and properties
- Physics for radiation therapy
- Principles and practices of cancer care 1
- Clinical practice of radiation therapy
- Research methodology and statistics

The Senior Freshman year

Second year courses include:

- Biochemistry and human genetics
- Physiology
- Anatomy 1
- Physics for radiation therapy 2
- Principles and practices of cancer care 2
- Communication
- Research methodology and statistics

The Sophister years

In the Sophister (third and fourth) years, you will study more specialist subjects that are specifically related to cancer and patient care, and complete a project in this area.

The Junior Sophister year

Third-year courses include:

- Principles and practices of cancer care 3
- Anatomy 2
- Physics for radiation therapy 3
- Radiobiology
- Radiotherapy treatment planning
- Radiotherapy simulation
- Clinical practice of radiation therapy 3

The Senior Sophister year

Fourth year courses include:

- Principles and practices of cancer care 4
- Radiotherapy simulation
- Radiotherapy treatment
- Health care management
- Clinical practice of radiation therapy 4
- Research project

A significant clinical component is also part and parcel of the final two years. The clinical sites are the radiotherapy departments attached to St. Luke's Hospital, Dublin; St. James' Hospital, Dublin; Beaumont Hospital, Dublin; Cork University Hospital; University College Hospital Galway; the Mater Private Hospital, Dublin; St. Vincent's Private Hospital, Dublin; the Galway Clinic; the Limerick Clinic; the Beacon and Whitfield Clinics. The duration of the clinical placement is 3 months in Junior Sophister (third) year and 5 months in Senior Sophister (fourth) year.

Assessment

This course will be assessed by written end-of-year examinations, individual and group project work and continuous assessment. A clinical portfolio and research project are a substantial component of the assessment processes in your final year.

Throughout the course you will be examined in both theoretical and clinical subjects, and must satisfactorily complete your clinical component. Part of the clinical programme will take place during the vacation periods.

Career opportunities

There is a worldwide need for radiation therapists, so you should have no difficulty finding employment when you graduate.

The broad scientific content of the degree also means that you will be well qualified to start a career in research and development, medical technology, or the marketing of products associated with cancer medicine in particular, and in the health sector generally.

Did you know?

There are information days held throughout the year for students interested in finding out more about radiation therapy.

For details of the next information day, please contact Claire Poole on: + 353 1 896 2973.

Further information

www.medicine.tcd.ie/radiation_therapy
Tel: + 353 1 896 3248/3234
E-mail: **mcoffey@tcd.ie** or **dougallm@tcd.ie**

Bachelor in midwifery studies

DEGREE AWARDED: **B.M.S.**

Application Procedure:

This is not a CAO course. Students are required to apply directly to the University. Completed applications must be returned by 15 April 2011 for entry to the academic year commencing in Autumn 2011.

Application forms are available from:
Admissions Office, Trinity College, Dublin 2.
Tel: +353 1 896 4444
E-mail: **admissions@tcd.ie**

Registered nurses and midwives in the employment of public health care agencies may apply to their health service employer for inclusion in the Department of Health and Children's part-time fees initiative. Where fees are not paid by the health service employer, students registered for the B.M.S. will be required to pay tuition fees.

This course will only run if there are sufficient numbers of suitable applicants.

Course overview

Contemporary trends and developments in the delivery of health care present a challenge to the midwifery profession in terms of reclaiming and expanding the midwife's role and responsibilities.

This degree programme aims to provide practicing midwives with an increased level of knowledge, skills and attitudes about the principles and processes of practice. The programme will:

- develop students' knowledge of the nature of midwifery
- enable students to analyse the full extent of the midwife's role and to consider a range of issues relevant to contemporary midwifery practice
- challenge students' thinking and assumptions about the profession

Who is eligible to apply?

Midwives who hold registration as a midwife with An Bord Altranais, the Irish nursing board, and who qualified with the Diploma in Midwifery (or equivalent), may apply for admission into this one-year programme leading to a Bachelor in midwifery studies honors degree.

Midwives already holding registration as a midwife with An Bord Altranais but without the Diploma in Midwifery (or equivalent) may apply for admission to a one-year part-time Access to degree programme which, on successful completion, will allow access to the beginning of the degree year.

Course structure

This course takes place over one academic year on a part-time basis. You will be required to attend the University for one study week at the beginning of the course and one day a week throughout the teaching terms. Although there is no specific clinical component, students are expected to be practising midwifery whilst undertaking the course and will undertake an assignment which has a particular practice-based focus.

Course content

The course comprises five modules:

- Governance in midwifery practice
- Expectant approach to midwifery practice
- Health care quality and informatics
- Communication and the facilitation of learning in midwifery practice
- Research methods

Assessment

Assessment methods are designed to require both an analytical approach to reading and reference to the student's own practice. A combination of essays, projects and group work is used and a research proposal forms part of the research methods module.

Further information

www.tcd.ie/Nursing-Midwifery/courses/undergrad_bms_hons.php
Tel: +353 1 896 2692
E-mail: **nursing.midwifery@tcd.ie**

Bachelor in nursing studies

DEGREE AWARDED: **B.N.S.**

Application Procedure:

This is not a CAO course. Students are required to apply directly to the University. Completed applications must be returned by 15 April 2011 for entry to the academic year commencing in Autumn 2011.

Application forms are available from:

Admissions Office, Trinity College, Dublin 2
Tel: +353 1 896 4444
E-mail: **admissions@tcd.ie**

Registered nurses and midwives in the employment of public health care agencies may apply to their health service employer for inclusion in the Department of Health and Children's part-time fees initiative. Where fees are not paid by the health service employer, students registered for the B.N.S. will be required to pay tuition fees.

This course will only run if there are sufficient numbers of suitable applicants.

Course overview

Contemporary trends and developments in the delivery of health care have brought about an expansion of the nurse's role and responsibilities. These developments have resulted in the need to provide the nurse with a depth and breadth of knowledge at graduate level.

This degree programme aims to provide nurses with an increased level of knowledge, skills and attitudes about the principles and processes of practice. The programme will develop students' knowledge concerning the nature of nursing and challenge their thinking and assumptions about their profession.

Who is eligible to apply?

Candidates who hold registration with An Bord Altranais, the Irish nursing board and who qualified with the Diploma in Nursing studies (or equivalent), may apply for admission into this one-year programme leading to a Bachelor in Nursing studies honors degree.

Nurses already holding registration with An Bord Altranais, but without the Diploma in Nursing (or equivalent) may apply for admission to a one-year part-time Access to degree programme which, on successful completion, will allow access to the beginning of the degree year.

Course structure and content

The Bachelor in Nursing studies is a part-time modular programme. Lectures are provided one day per week and there is one study week at the start of the academic year in Trinity College. Successful completion of the programme will result in the award of a Bachelor in Nursing studies degree (B.N.S.).

The programme is composed of five compulsory modules, which address current issues in nursing practice and health care.

- Leadership and management in nursing practice
- Health care quality and informatics
- Communication and the facilitation of learning in nursing practice
- Contemporary issues in nursing practice
- Research methods

Assessment

All modules are assessed by continuous assessment (assignments). To achieve an overall pass a minimum of 50% must be achieved in each module.

Further information

www.tcd.ie/Nursing-Midwifery/courses/undergrad_bns_hons.php
Tel: +353 1 896 2692
E-mail: **nursing.midwifery@tcd.ie**

Precautions against infectious diseases

IMPORTANT: PLEASE READ THIS SECTION CAREFULLY.

Clinical speech and language studies: Students must produce a negative Hepatitis B s-Antigen (HBsAG) and Anti HB Core Antigen (Anti-HBc) test result before being permitted to register for this course. In the case of a positive result from the above, a Hepatitis B e-antigen (HBeAG) test with a negative result will be required before registration. International applicants are advised to undergo the HBsAg test in their home country and to forward the result to the relevant office as soon as possible thereafter. The College reserves the right to retest prior to admission.

Dental science, Dental hygiene, Dental nursing, and Dental technology: Registered students in Dental science, Dental hygiene, Dental nursing, and Dental technology must remain free of any life-threatening infectious condition that could be transmitted to a patient or fellow health worker. Such conditions could include but are not limited to; HIV, hepatitis B, hepatitis C, pulmonary tuberculosis, chickenpox and measles.

Students in Dental science and Dental hygiene must produce a negative Hepatitis B virus infection result (i.e. negative HBsAg or in the presence of a positive HBsAg, negative HBeAg and negative HBV-DNA where applicable) and a negative Hepatitis C antibody test (and if positive a negative PCR test for Hepatitis C RNA) carried out not more than six months prior to entry, before being permitted to register with the College. International students are advised to undergo testing in their home country and to forward the result to the Dental School Office as soon as possible thereafter. The College reserves the right to retest prior to admission.

Students admitted to these courses who are not already deemed to be immune to hepatitis B will required to undergo a course of vaccination. Details of vaccination programmes may be obtained on request from the Dental School Office, Trinity College, Dublin 2.

Student dental nurses and student dental technicians will not be permitted to commence practical clinical experience until they have completed the course of vaccination.

Medicine: With regard to the transmission of infectious diseases, the School of Medicine at TCD strikes a balance between our pastoral responsibility to individual students applying for entry and our overriding duty of care to the public with whom medical students are in close contact. In this context, the School is obliged to ensure that reasonable and appropriate measures are taken not only to safeguard the students and their colleagues, but also the patients and members of the public. Details of vaccination programmes and the Blood Borne Viruses (BBV) policy for medical students are available at the Medical School office.

All health care professionals have a duty of care to the public. In the interests of reducing the risk of the transmission of infectious diseases from patients to students, or student to patient, all new entrants must attend their regular medical practitioner or the Student Health Service prior to registration to certify their vaccination status or immunity to tuberculosis, measles, mumps, rubella and chickenpox. In addition, students must produce evidence of their hepatitis B and C status and where appropriate confirmation that they do not have active disease. Students who are Hepatitis B negative but not already deemed to be immune to Hepatitis B will be required to undergo a course of vaccination. Details of specific investigations required and the vaccination programmes available are communicated to applicants as part of the admissions process (in the Infectious Diseases Information booklet) and are available at all times in the Medical School office.

Nursing and Midwifery: Students accepted on to pre-registration undergraduate Nursing and Midwifery programmes, prior to the first practice placement, must be immunised against Hepatitis B, measles, rubella, tuberculosis and varicella unless immunity as a result of natural infection or previous vaccination has been documented. Screening (including medicals) and vaccination will be organised by the health service provider responsible for the practice area where the student is going on placement, after orientation. Some health service providers may require students to be screened for additional conditions, for example MRSA.

Occupational therapy: Students accepted on to the pre-registration undergraduate Occupational therapy programme, prior to the first practice placement, must be immunised against Hepatitis B, measles, rubella, tuberculosis and varicella unless immunity as a result of natural infection or previous vaccination has been documented.

Physiotherapy: Students accepted on to the undergraduate Physiotherapy programme, prior to admission, must be immunised against Hepatitis B, Hepatitis C, measles, rubella, tuberculosis and varicella unless immunity as a result of natural infection or previous vaccination has been documented. In the interests of reducing the risk of the transmission of infectious disease, all new entrants must attend Trinity College Health Service or their medical practitioner in the first semester of study to certify their Hepatitis status, vaccination status or immunity to, tuberculosis, measles, rubella and chickenpox.

Students in Physiotherapy must produce a negative Hepatitis B virus infection result (i.e. negative HBsAg or in the presence of a positive HBsAg, negative HBeAg and negative HBV-DNA where applicable) and a negative Hepatitis C antibody test (and if positive a negative PCR test for hepatitis C RNA) carried out not more than six months prior to entry. Students admitted to this course who are negative but not already deemed to be immune to Hepatitis B will be required to undergo a course of vaccination. Overseas applicants are advised to undergo testing in their home country and to forward the result to the Discipline of Physiotherapy. Further information relating to vaccination requirements is available from the Discipline of Physiotherapy (see below).

General: Some health service providers may require students to be screened for additional conditions, for example MRSA, which will be completed at the clinical site. All costs associated with tests for infectious diseases and vaccination must be met by the student.

If Irish law or regulatory practice changes between the date of publication of this document and the date of registration for new entrants to these courses, Trinity College reserves the right to require that the criteria adopted by law and/or regulation in relation to the ability to practice clinically in Ireland be satisfied before registration is permitted.

Details of vaccination requirements will be provided to all incoming students, and full details of all requirements regarding precautions against infectious diseases may be obtained on request from the following offices:

Clinical speech and language studies:
Department of Clinical Speech and Language Studies
Trinity College
Dublin 2

Tel: +353 1 896 1588

Dental science:
The Dental School Office
Lincoln Place
Trinity College
Dublin 2

Tel: +353 1 896 1789 / 1690

Medicine:
School of Medicine
Chemistry Building
Trinity College
Dublin 2

Tel +353 1 896 1075

Nursing and Midwifery:
The Allocations Office
The School of Nursing and Midwifery
24 D'Olier Street
Dublin 2

Tel: +353 1 896 2031

Occupational therapy:
Discipline of Occupational therapy
Trinity Centre for Health Sciences
St. James's Hospital
James's Street
Dublin 8

Tel: +353 1 896 3210

Physiotherapy:
Department of Physiotherapy
Trinity Centre for Health Sciences
James's Street
Dublin 8

Tel: +353 1 896 2110

Radiation therapy:
Department of Radiation therapy
Trinity Centre for Health Sciences
James's Street
Dublin 8

Tel: +353 1 896 3234

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Alert list – 2011

New course option

TR071 **Science – Functional biology**

Functional biology is introduced as a new optional specialisation for the third and fourth years of the Science (common entry) programme. Functional biology is the comparative physiology of plants and animals: i.e. it compares the way different kinds of organisms function in the context of their structure (anatomy).

Course option withdrawn

TR071 **Science – Physics and computer simulation**

Physics and computer simulation is no longer available as an optional specialisation for the third and fourth years of the Science (common entry) programme. However, students may still choose Physics or Physics and astrophysics as optional specialisations. Alternatively, students may apply for the single honor Theoretical physics programme.

New course title

TR076 **'Physics and chemistry of advanced materials'** has been renamed **'Nanoscience, physics and chemistry of advanced materials'**

Revised entry requirement

TR027 **Irish studies**

There are now two distinct strands in the Irish studies programme:

Strand A – This strand contains a number of Irish language modules. Applicants who wish to choose this strand must attain at least a grade HC3 in Leaving Certificate Irish or a grade C in A-level Irish.

Strand B – All of the courses in this strand are taught through the medium of English. There are no special entry requirements for Strand B.

Students choose a strand after admission to the Irish studies programme.

Associated colleges for Education

- Froebel College is no longer an associated college of Trinity College Dublin. This follows a new agreement between Froebel College and NUI Maynooth.
- Students of Colaiste Mhuire, Marino will no longer become registered students of Trinity College. All teaching will take place in Marino. However, the course will continue to be accredited by Trinity College and the degree will be awarded by Trinity College.
- Students of Church of Ireland College of Education (CICE) will continue to be registered students of Trinity College. However, most of the teaching will take place in CICE.

Important dates for applicants

1 December 2010	TCD Open Day.
20 January 2011	Closing date for registration for the HPAT-Ireland test for entry to Medicine.
20 January 2011	Final date for CAO online discounted application fee.
1 February 2011	Normal closing date for CAO. Applications to restricted entry courses and applications from mature students must be made to the CAO by this date. Closing date for submission of mature-students supplementary application forms to the Admissions Office, Trinity College, Dublin 2 (for all full-time courses except Nursing or Midwifery). Applications from non-EU students wishing to pursue a full degree other than Medicine or Dental science should be submitted to the International Office, East Theatre, Trinity College, Dublin 2, Ireland. Applications from non-EU students wishing to apply for Medicine or Dental science should be submitted to the Admissions Office, Trinity College, Dublin 2, Ireland.
26 February 2011	Date of HPAT-Ireland test for entry to Medicine.
1 March 2011	Closing date for applications to sit the University matriculation examination. Applications from EU and non-EU students wishing to study as a visiting student for up to one academic year should be submitted to the International Office.
19 March 2011	Provisional date for Music and Music education entrance examination.
1 May 2011	Late closing date for CAO. Late applications to restricted entry courses will not be considered. Late applications from mature students will not be considered.
31 May 2011	Closing date for receipt of applications for the Reid Entrance Exhibition.
1 July 2011	Closing date for submission of a 'Change of Mind' to CAO.

See **www.tcd.ie/calendar/term-dates** for Term Dates 2011-2012

Copies of this publication are available free of charge from

The Admissions Office
Trinity College
Dublin 2, Ireland

Telephone: +353 1 896 4444
Fax: +353 1 872 2853
Email: **admissions@tcd.ie**
Website: **www.tcd.ie**