

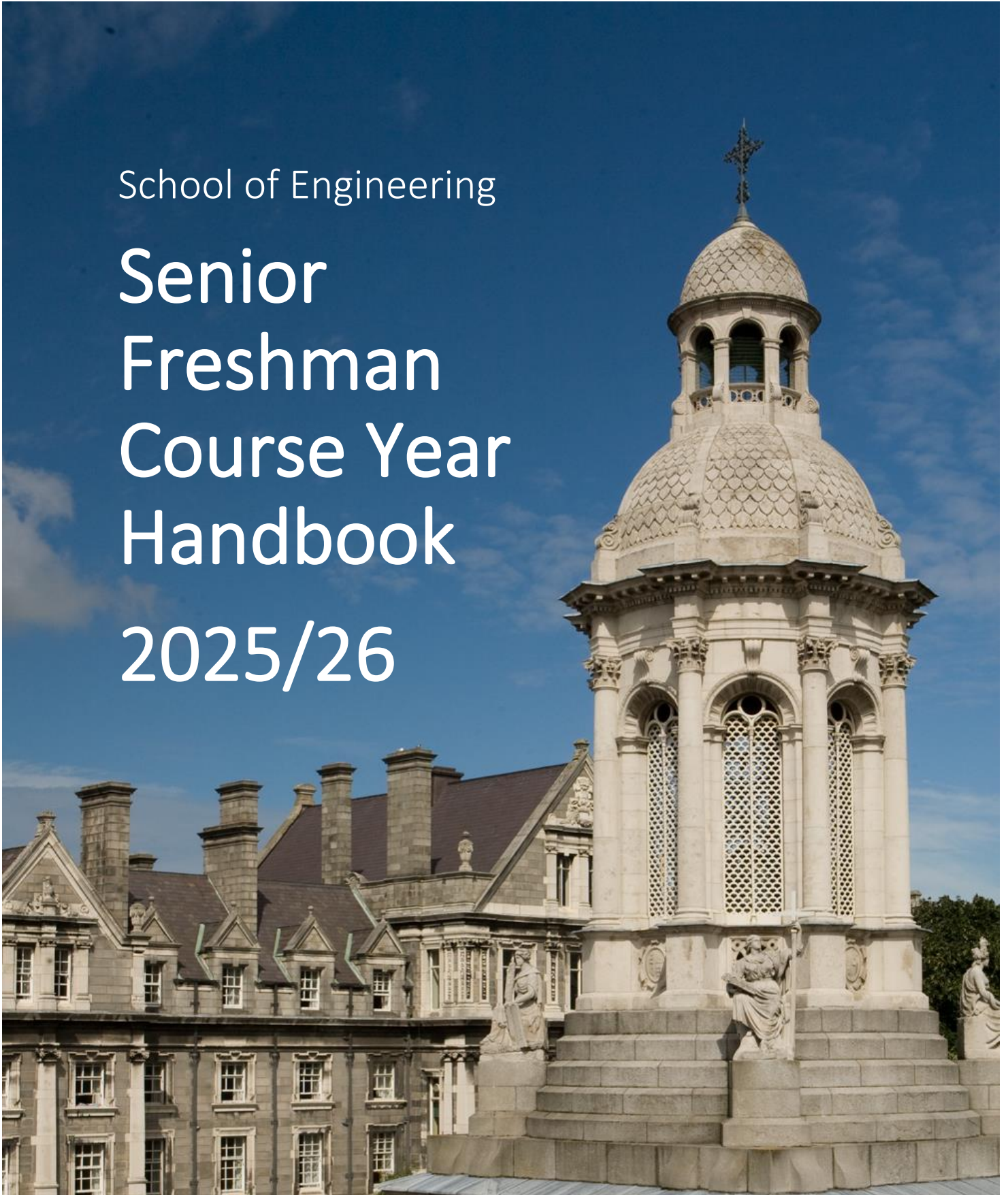


Coláiste na Tríonóide, Baile Átha Cliath  
Trinity College Dublin

Ollscoil Átha Cliath | The University of Dublin

School of Engineering

# Senior Freshman Course Year Handbook 2025/26



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**Alternative formats of the Handbook can be made on request.**

# 1. GENERAL COURSE INFORMATION

## 1.1 Introduction

You are very welcome to the second year of the teaching programmes offered by the TCD School of Engineering, an institution rich in tradition and progressive in outlook. The School was founded in 1841 and is one of the oldest Engineering Schools in the English speaking world. The Baccalaureus in Arte Ingeniaria (B.A.I.) degree was established in 1872 and early graduates played a major role in the development of local government services and infrastructure in 19th century Ireland, whilst others contributed as far afield as India, Australia, Africa and Japan. In addition to many famous engineers, the list of graduates includes landscape artist Nathaniel Hone, and songwriter Percy French. Well-known graduates of more recent vintage include Patrick Prendergast (current Provost of Trinity), Chris Horn of Iona Technologies, John Maguire of Trintech and Paul Noonan of Bell X1 fame.

In joining the engineering community, you made a creative contribution to making the world a more liveable place and to building economic prosperity. The core philosophy of the B.A.I./M.A.I. degrees is to first establish the basic principles common to all aspects of engineering. Thus, all students follow a common programme for the first two 'fresh' years followed by two 'sophister' years of specialisation in the different branches of engineering if they wish to take the B.A.I. degree and three years of specialisation if they go on to M.A.I. level. Admission to the M.A.I. level is subject to performance in the Junior Sophister and Senior Sophister years, see the School Examination Regulations. The M.A.I. is a professional degree accredited by Engineers Ireland and is recognised across the world through international agreements.

While there is a strong focus on technical content and problem solving in the syllabus, personal skills such as communication and teamwork are an integral part of your education. These skills are crucial in promoting an approach to lifelong learning, and this is particularly important in the dynamic context of engineering. The curriculum is revised on an ongoing basis and we hope that you will find it stimulating and intellectually rewarding. You will be given the opportunity to provide us with considered feedback of your experience during each year of your studies.

The College, of course, has a great deal to offer besides the formal academic programme, including the cultural, recreational and sporting activities of the many student clubs and societies. You are strongly encouraged to participate in the breadth of college life in a balanced way. It is up to you to make the most of your Trinity experience.

Finally, be aware that College offers a wide range of support services. If you are experiencing problems or need to seek advice (personal, financial, health, career or academic), there are a number of sources of help available: these are listed in Section 12 of this booklet. Do not hesitate to call on these services should the need arise. Each of you has been allocated a tutor, and he/she is an excellent resource to help you with identifying relevant support services.

We wish you a successful and enjoyable second year at university.

Professor Anil Kokaram  
Head of School  
School of Engineering

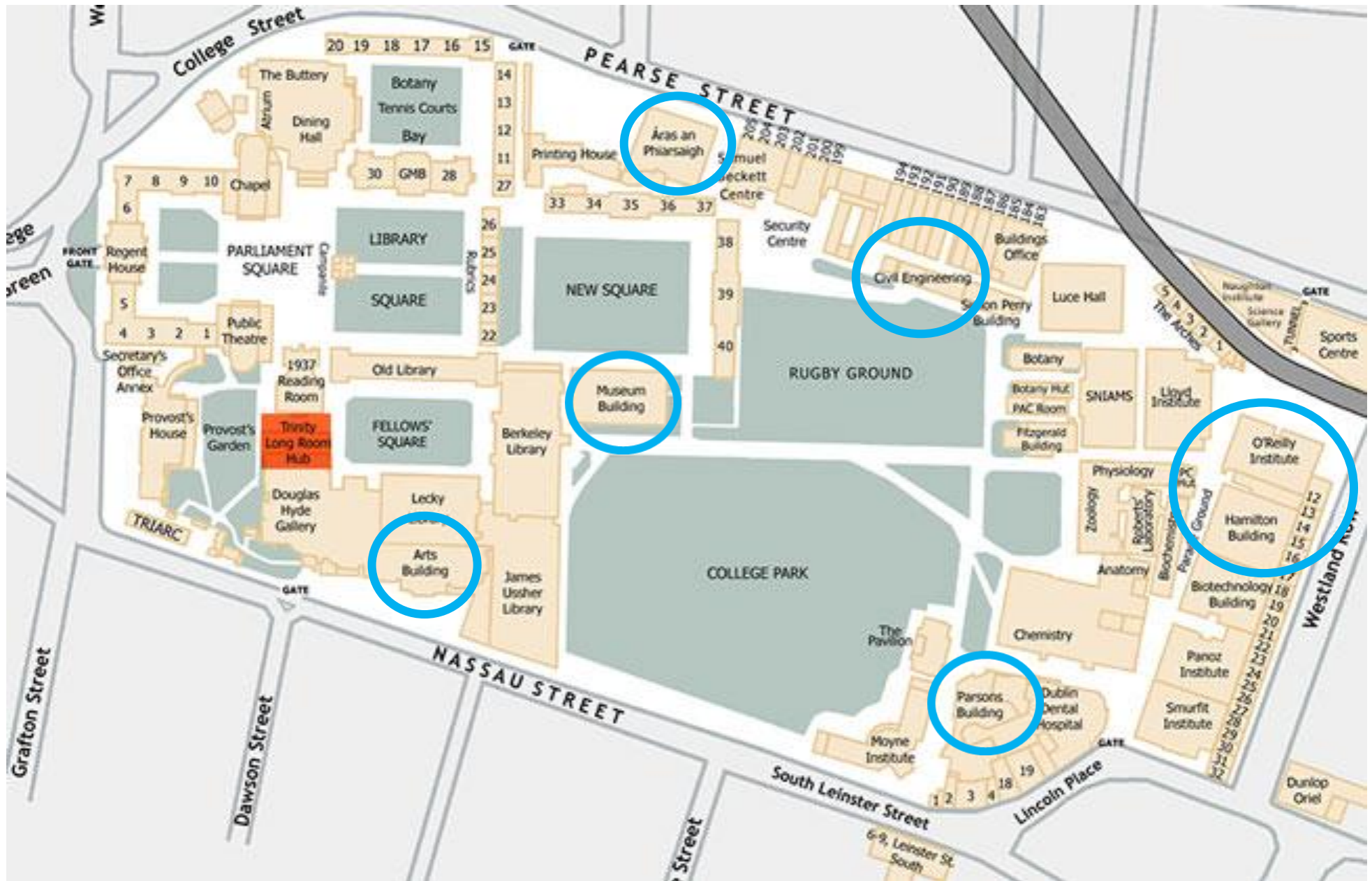
Associate Professor John Gallagher  
Director of Undergraduate Teaching & Learning  
School of Engineering

## 1.2 Contact Details

| Staff Name           | Role/Title                                                                              | Contact 1                   | Contact 2             |
|----------------------|-----------------------------------------------------------------------------------------|-----------------------------|-----------------------|
| Anil Kokaram         | Head of School                                                                          | Aras an Phiarsaigh          | EngineeringHOS@tcd.ie |
| Michael Monaghan     | Head of School in interim                                                               | EngineeringHOS@tcd.ie       |                       |
| John Gallagher       | Director of Undergraduate Teaching & Learning<br>Associate Professor                    | Simon Perry Building        | J.Gallagher@tcd.ie    |
| Sarah O'Brien        | Internship Coordinator & Industry Liaison                                               | +353 1 896 1142             | obries57@tcd.ie       |
| Sara Doherty         | Finance Officer                                                                         | +353 1 896 3792             | sdoherty@tcd.ie       |
| Chloe O'Connor       | Global Officer                                                                          | InternationalEng@tcd.ie     |                       |
| Daniel Wearen        | Postgraduate Officer                                                                    | +353 1 896 2217             | wearend@tcd.ie        |
| Sarah McCormack      | <b>Civil Structural &amp; Environmental Engineering</b><br>Head of Department           | <i>Simon Perry Building</i> | mccorms1@tcd.ie       |
| Mary Curley          | <b>Civil, Structural &amp; Environmental Engineering</b><br>Administrative Officer      | +353 1 896 1457             | curleyma@tcd.ie       |
| Seamus O'Shaughnessy | <b>Mechanical &amp; Manufacturing Engineering</b><br>Stream Coordinator                 | <i>Parsons Building</i>     | oshaugse@tcd.ie       |
| Bruce Murphy         | <b>Biomedical Engineering</b><br>Stream Coordinator                                     | <i>Parsons Building</i>     | murphb17@tcd.ie       |
| Tania Panero Garcia  | <b>Mechanical, Manufacturing &amp; Biomedical Engineering</b><br>Administrative Officer | PANEROGT@tcd.ie             |                       |

|                                                                                                                                |                                                                                    |                                                            |                           |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------|
| Nicole Byrne                                                                                                                   | <b>Mechanical, Manufacturing &amp; Biomedical Engineering</b><br>Executive Officer | +353 1 896 1837                                            | nbyrne3@tcd.ie            |
| Melissa Caffrey                                                                                                                | <b>Mechanical, Manufacturing &amp; Biomedical Engineering</b><br>Executive Officer | +353 1 896 3667                                            | caffrem@tcd.ie            |
| Daniel Kilper                                                                                                                  | <b>Electronic &amp; Electrical Engineering</b><br>Head of Department               | dan.kilper@tcd.ie                                          |                           |
| Michael O’Riordan                                                                                                              | <b>Electronic &amp; Electrical Engineering</b><br>Executive Officer                | +353 1 896 1558                                            | oriordmi@tcd.ie           |
| Caroline Murphy                                                                                                                | <b>Electronic &amp; Electrical Engineering</b><br>Executive Officer                | +353 1 896 1580                                            | murphc49@tcd.ie           |
| Andrew Butterfield                                                                                                             | <b>Computer Engineering</b><br>BAI/MAI Coordinator                                 | <i>O’Reilly Institute</i>                                  | Andrew.Butterfield@tcd.ie |
| Ceara O'Connor                                                                                                                 | <b>Computer Science and Statistics</b><br>School Administrative Manager            | CEOCONNO@tcd.ie                                            |                           |
| Lynn Daly                                                                                                                      | <b>Computer Science and Statistics</b><br>Administrative Officer                   | +353 1 8961524                                             | lynn.daly@scss.tcd.ie     |
| Hannah Archbold                                                                                                                | <b>Computer Science and Statistics</b><br>Administrative Officer                   | + 353 1 896 1768                                           | Hannah.archbold@tcd.ie    |
| <b>Academic Registry</b>                                                                                                       |                                                                                    |                                                            |                           |
| All enquiries regarding forms, letters, student fees, examinations, registration etc. to be directed to the Academic Registry. |                                                                                    | Via phone at<br>4500 [for students]<br>or 4501 [for staff] | academic.registry@tcd.ie  |

### 1.3 Key Locations of Study for Engineering



References/Sources for  
help & services:

[Interactive College Map](#)

[Blackboard](#)

[Academic Registry](#)



## 1.4 Key Dates

# SEMESTER / TERM 1

| Important Dates |            |                                                                                                 |
|-----------------|------------|-------------------------------------------------------------------------------------------------|
| WEEK            | DATE       | MICHAELMAS TERM (2025)                                                                          |
| 4               | 15/09/2025 | Teaching and Learning                                                                           |
| 5               | 22/09/2025 | Teaching and Learning                                                                           |
| 6               | 29/09/2025 | Teaching and Learning                                                                           |
| 7               | 06/10/2025 | Teaching and Learning                                                                           |
| 8               | 13/10/2025 | Teaching and Learning                                                                           |
| 9               | 20/10/2025 | Teaching and Learning                                                                           |
| 10              | 27/10/2025 | <b>Study/Review (Monday, Public Holiday)</b>                                                    |
| 11              | 03/11/2025 | Teaching and Learning                                                                           |
| 12              | 10/11/2025 | Teaching and Learning                                                                           |
| 13              | 17/11/2025 | Teaching and Learning                                                                           |
| 14              | 24/11/2025 | Teaching and Learning                                                                           |
| 15              | 01/12/2025 | Teaching and Learning                                                                           |
| 16              | 08/12/2025 | <b>Revision / Assessment</b>                                                                    |
| 17              | 15/12/2025 | <b>Assessment</b>                                                                               |
| 18              | 22/12/2025 | <b>Assessment /Christmas</b>                                                                    |
| 19              | 29/12/2025 | <b>Christmas Period - College closed</b><br><i>24 December 2025 to 1 January 2026 inclusive</i> |
| 20              | 05/01/2026 | <b>Foundation Scholarship Examinations</b>                                                      |
| 21              | 12/01/2026 | <b>Markings</b>                                                                                 |

# SEMESTER/TERM 2

| WEEK | DATE       | HILARY TERM (2026)                                            |
|------|------------|---------------------------------------------------------------|
| 22   | 19/01/2026 | Teaching and Learning                                         |
| 23   | 26/01/2026 | Teaching and Learning                                         |
| 24   | 02/02/2026 | Teaching and Learning ( <i>Monday, Public Holiday</i> )       |
| 25   | 09/02/2026 | Teaching and Learning                                         |
| 26   | 16/02/2026 | Teaching and Learning                                         |
| 27   | 23/02/2026 | Teaching and Learning                                         |
| 28   | 02/03/2026 | <b>Study/Review</b>                                           |
| 29   | 09/03/2026 | Teaching and Learning                                         |
| 30   | 16/03/2026 | Teaching and Learning ( <i>Tuesday, Public Holiday</i> )      |
| 31   | 23/03/2026 | Teaching and Learning                                         |
| 32   | 30/03/2026 | Teaching and Learning ( <i>Friday, Good Friday</i> )          |
| 33   | 06/04/2026 | Teaching and Learning ( <i>Monday, Easter Monday</i> )        |
| 34   | 13/04/2026 | <b>Revision</b>                                               |
| 35   | 20/04/2026 | <b>Trinity Week (Monday, Trinity Monday)<br/>/ Assessment</b> |
| 36   | 27/04/2026 | <b>Assessment</b>                                             |
| 37   | 04/05/2026 | <b>Marking/Results (Monday, Public Holiday)</b>               |
| 38   | 11/05/2026 | <b>Marking/Results</b>                                        |
| 39   | 18/05/2026 |                                                               |

Reference/Source: [Academic Year Structure](#)

## 1.5 Timetable

Laboratory timetables will be forwarded to students via email and posted on the noticeboards in Parsons Building

[My TCD](#)

[Undergraduate - Year two](#)

## 1.6 Study Abroad/Erasmus and Internships/Placements for Credit

In order to be eligible to apply for an international exchange in the Senior Sophister year or to apply for the 4E4 Industrial Partnership/Internship module in the second semester of the Senior Sophister year, students must have a minimum grade of II.1 (60 – 69%) at the first sitting of the Junior Sophister Engineering examinations.

Those required to sit supplemental Junior Sophister Engineering examinations will be deemed ineligible to apply. No exceptions to this rule will be considered.

Students proposing to take an internship in Semester 2 of the SS year, should be aware that they are committed to the MAI track, and will therefore require a II.1 average in their 'BAI grade'. This BAI grade is calculated as a 70:30 weighted average of the JS (annual) and SS (annual) performance. Students who are eligible for the internship based on their JS results, may still be advised against taking the internship if their Semester 1 performance in SS is not sufficiently strong). Specifically, students whose internship is assessed on a pass/fail basis (i.e. currently all streams with the exception of civil) may be required to withdraw from the internship if their BAI grade does not qualify them at that point – instead they will be required to complete the SS year by module.

Study abroad opportunities can be viewed here:

<https://www.tcd.ie/engineering/courses/international/study-abroad/>

Information on taking an internship can be viewed here:

<https://www.tcd.ie/engineering/industry/internship-programme/>

## 2. SCHOLARSHIPS AND PRIZES

### 2.1 Foundation Scholarships

Details on the College regulations for achievement, as well as the structure and duration of the examinations for the programme. Foundation Scholarship is a College institution with a long history and high prestige.

The objective of the Foundation Scholarship examination is to identify students who, at a level of evaluation appropriate to the Senior Freshman year, can consistently demonstrate exceptional knowledge and understanding of their subjects. The questions that are asked in the engineering scholarship exams are very challenging. They test a student's ability to think laterally, to solve unfamiliar problems and to tackle problems from first principles. Although the syllabi for the scholarship exams and the end of year exams are the same, the nature of the questions in the scholarship exams is more challenging.

A good scholarship question will require a creative leap or a deep insight of the fundamental principles. The most important skill that is developed in an engineering education is problem solving. The most difficult problems to solve are those that are unfamiliar, that require a fundamental understanding of the basic principles and that require the student to make a creative or innovative leap.

Senior Freshman Engineering students take the following three-hour exams:

- Engineering Science I: General mathematics and computer science
- Engineering Science II: General mechanics and materials
- Engineering Science III: General electronics, electricity and instrumentation

**Reference/Source:**

[Calendar Part II, D 10: Foundation and Non-Foundation Scholarships](#)

## 2.2 Prizes, Medals and Other Scholarships

### **BOOK PRIZES**

A prize of a book token to the value of €13 is awarded to candidates who obtain a standard equivalent to an overall first class honors grade (70% and above) at the first attempt of the semester 1 and semester 2 assessment. Book Prizes will be available for collection in November of the following academic year from the Academic Registry. These prizes are issued in the form of book tokens and can be redeemed at Hodges Figgis and Co. Ltd.

### **VICTOR W. GRAHAM PRIZES**

These prizes, founded in 1986 from funds subscribed by friends and pupils to mark Mr V.W. Graham's retirement, are awarded to the first year engineering student who obtains the highest marks in engineering mathematics (modules 1E1 and 1E2) at the annual class examination and to the second year engineering student who obtains the highest mark in engineering mathematics (modules 2E1 and 2E2) at the regular annual class examination.

#### **Value:**

First year prize - €750,

Second year prize - €1,000.

### **ANITA NEWELL SCHOLARSHIPS**

These prizes were founded in 2007 by a bequest from Ms Anita Newell, a former employee of the School of Engineering. They are awarded annually in the first and second years of the Bachelor in Engineering course to the best and second best female engineering student i.e. those achieving the highest and second-highest average of marks at the annual examinations (foundation scholarship candidates are eligible for these scholarships).

#### **Value:**

First year engineering – First place €3,000, Second place €2,000;

Second year engineering – First place €6,000, Second place €4,000.

### **FRANCIS SPRING PRIZE**

This prize was founded in 1935 by a bequest from Sir Francis Spring. It is awarded annually on the results of the annual examination of the second year of the engineering course. The prize is currently awarded in three parts.

#### **Value:**

First part €200

Second part €150

Third part €100

### 3. ACADEMIC WRITING

#### 3.1 Academic Integrity and Referencing Guide

At Trinity College Dublin, we commit ourselves as staff and students to acting responsibly and ethically, embracing integrity in all our actions and interactions as members of the College community. Understanding that integrity requires honesty, transparency and accountability, we agree to:

- Strive to do what we say we will, ensuring that we are aware of our commitments and responsibilities in order to fulfil them, and abiding by College and other relevant policies and the highest standards of conduct.
- Give credit where credit is due, recognizing and acknowledging the contributions and achievements of others in scholarship, teaching, research and service.
- Tell the truth, as a community and as individuals, speaking out and listening even when it is difficult, naming problems and honestly acknowledging mistakes.
- Hold ourselves and others to account for the things for which we are each responsible.
- Use resources for the purposes for which they are intended and be above reproach in financial dealings.
- Deal fairly, consistently and transparently with others.

Academic Integrity, in the context of undergraduate studies, means upholding the expected standards of academic behavior and behaving ethically. Issues such as cheating and plagiarism are covered, amongst other things, in the college policy. Specifically in relation to generative AI, the engineering school policy is that its use is forbidden unless its use has been specifically authorized by a module coordinator for any specific assignment or piece of coursework. Breaches of this rule will come under the remit of the college Academic Integrity Policy and Procedures.

#### **Reference/Source**

[Calendar Part II, B: General Regulations & Information, 'Academic Integrity'](#)

[Statement of Principles on Integrity](#)

[Academic Integrity Policy](#)

[Library Guides - Academic Integrity](#)

[Coversheet Declaration](#)

## 3.2 Research Ethics

The quest for knowledge and the betterment of society through research are central to the mission of Trinity College. It is essential that all of our research is conducted with integrity and that it adheres to the highest standards of ethical oversight. Research excellence in College is guided by the principles described in the Policy on Good Research Practice document (2002; updated in 2009) and these principles apply to all research conducted by staff and students under the auspices of Trinity College. In order to ensure that we continue to operate at the highest levels of excellence all policies in this area are continuously reviewed by the Research Ethics Policy Committee (REPC).

All research with impact has an ethical dimension and all researchers should reflect on the implications of their work, not just in terms of human (and animal) welfare and dignity, but also the social and cultural impact of their research. Funding agencies are placing increasing importance on ethics approval procedures and the scope of research areas requiring ethical review is growing.

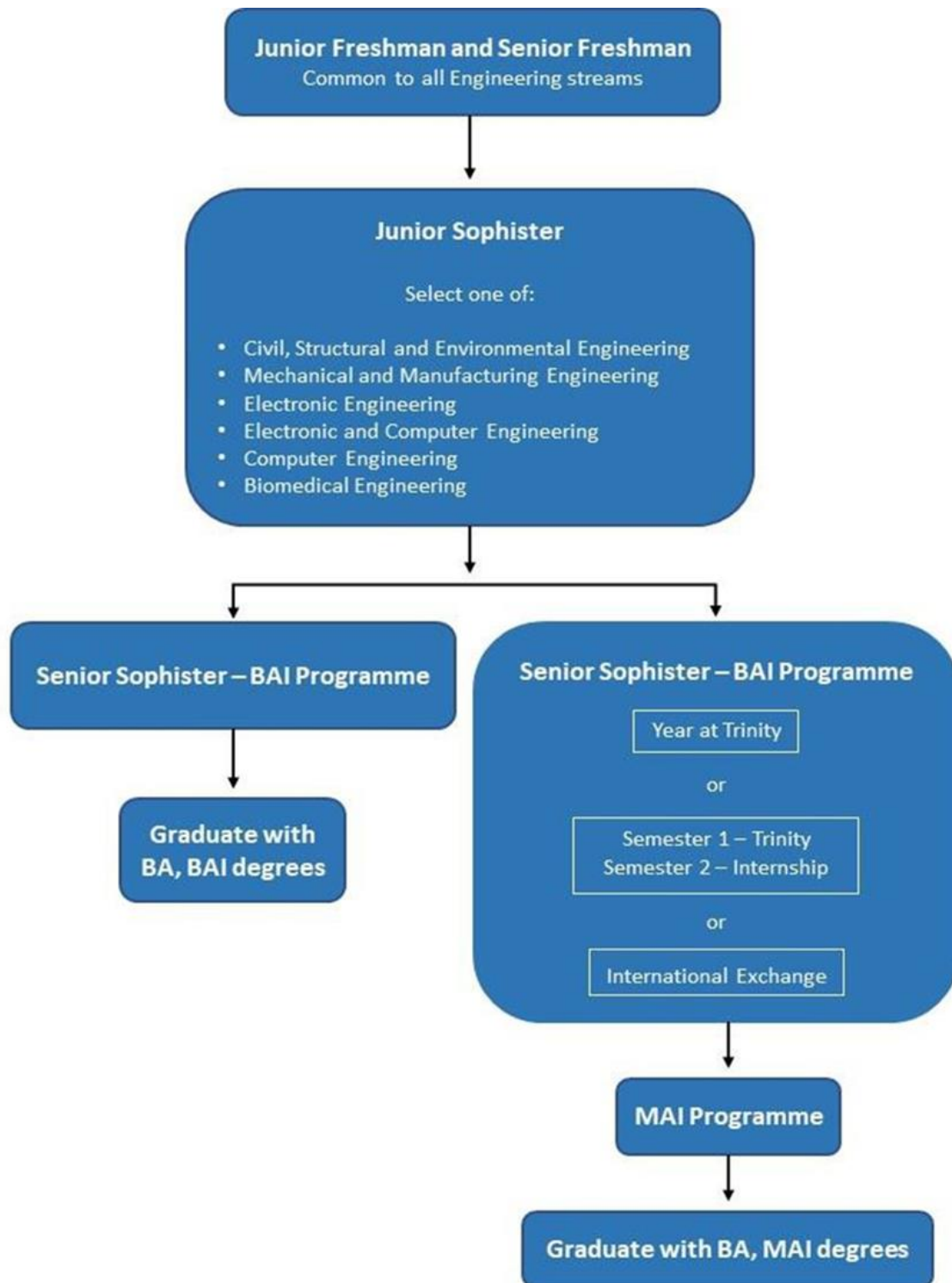
### Reference/Source

[Good Research Ethics & Ethic Policy](#)

[Policy on Good Research Practice](#)

## 4. TEACHING AND LEARNING

### 4.1 Programme Architecture



The integrated BAI/MAI degree programme is professionally accredited by Engineers Ireland and meets the educational requirements for corporate membership of this professional institution and registration as a chartered engineer.

Further information can be found at: <http://www.engineersireland.ie/Membership.aspx>

## 4.2 Programme Structure and Workload

List of modules identified by title and code, their ECTS weightings, and a general statement on the learning workload to include approximate hours of self-directed learning or research.

| Module Code      | Module Title                            | ECTS Weighting | Module Descriptors   |
|------------------|-----------------------------------------|----------------|----------------------|
| CEU22E04         | Solids and Structures                   | 5              | <a href="#">Link</a> |
| CEU22E07         | Engineering and the Environment         | 5              | <a href="#">Link</a> |
| CEU22E09         | Engineering Design III                  | 5              | <a href="#">Link</a> |
| CSU22E03         | Computer Engineering                    | 5              | <a href="#">Link</a> |
| EEU22E06         | Electronics                             | 5              | <a href="#">Link</a> |
| MAU22E01         | Engineering Mathematics III             | 5              | <a href="#">Link</a> |
| <b>EEU22E10</b>  | Engineering Design IV Project           | 10             | <a href="#">Link</a> |
| EEU22E12         | Computational Science and Engineering 1 | 5              | <a href="#">Link</a> |
| MAU22E02         | Engineering Mathematics IV              | 5              | <a href="#">Link</a> |
| MEU22E05         | Thermo-fluids                           | 5              | <a href="#">Link</a> |
| Trinity Elective |                                         | 5              | <a href="#">Link</a> |

In your studies you should aim to work a minimum of 50 hours per week. With a timetabled schedule of about 25 hours per week, this means you should be planning independent study of at least 25 hours per week. This includes reading course material prior to lectures – you should not expect to be given all the module material in the lectures and tutorials.

Students are expected to keep a log book recording the details of every experiment performed and to write a technical report about each experiment. Each student is required to submit her/his report neatly presented and by the date specified to avoid penalty. Guidelines as to the required length and format of each report will be specified by the lecturer concerned.

Laboratory groups and timetable will be published at the beginning of the semester.

Please note that you must attend the particular laboratory sessions to which you have been assigned. Students cannot swap sessions because of the complexity of the timetable, the large numbers in the year and the limited accommodation available.

A no show at a lab results in a zero mark even if a report is submitted. No report submitted means a zero mark even if the lab was attended. Labs cannot be taken in the summer/autumn periods if missed during the year.

## 4.3 Learning Outcomes

The programme learning outcomes for the Engineering and Engineering with Management programmes have been developed to ensure that all the attributes required of a professional engineering degree programme are achieved. Every five years our programmes are reviewed for accreditation by Engineers Ireland. This process ensures that each of the approximately fifty required programme outcomes is achieved. These learning outcomes vary from general outcomes in mathematics and science to communications, design, professional ethics, research and group work. As a student progresses through the programme the learning outcomes become more demanding until final year students are capable of undertaking independent research and dealing with ill-defined complex problems.

## 4.4 Examination Regulations

Please read through the course examination regulations, paying close attention to the sections on academic progress, eligibility for Internship/Study Abroad/MAI.

### Reference/Source:

[Exam Regulations](#)

## 4.5 Coursework Requirements

### **8.3.1** *Submission guidelines*

*Please pay attention to the guidelines for submission. These may vary from module to module. Ensure that you submit on time and, where appropriate, that your submission has been logged. It is good practice to keep a digital copy of your submissions.*

*The work you submit must be your own. College has very strict guidelines concerning plagiarism. Please ensure you read Section 13.3 of this handbook.*

### **8.3.2** *Policy on late submission*

*Coursework and assessment is an essential part of a student's learning to reinforce aspects of module content. You are enrolled on an accredited professional programme and are expected to submit work on time. Submitting work late is a habit you should avoid. It is never too early in your career to start to plan your work so you meet your deadlines. Late submissions delay feedback and in group work you risk incurring a penalty on the other members of your group.*

*Late submissions may be penalized or not accepted. Submission dates may be extended in exceptional and extenuating circumstances. In such circumstances, students must apply directly (via email) to the module coordinator requesting an extension and provide an explanation and/or evidence for such (e.g. medical cert). Please note that the module coordinator reserves the right to refuse granting of an extension.*

### **8.3.3 Policy on participation in continuous assessment-based modules**

*Students who are absent from a third of their lectures, tutorials, or labs of a continuous assessment-based module or who fail to submit a third of the required coursework will be deemed non-satisfactory.*

*Students reported as non-satisfactory for both semesters of a given year may be refused permission to take their examinations and may be required by the Senior Lecturer to repeat the year.*

#### **Reference/Source:**

[Student Learning Development](#)  
[Accessible Information Policy](#)

## **4.6 Capstone Project**

The Capstone project is a significant level of independent research that you will carry out that will result in significant piece of original work in your final year. It will provide you with the opportunity to showcase the skills and knowledge which you have developed across a range of subject areas and across your years of study. The BAI capstone project is taken in 4<sup>th</sup> year by those students on the 'BAI track', while the MAI project is taken in 5<sup>th</sup> year by those on the 'MAI track'. Please note that the internship project will NOT in any circumstances be deemed equivalent to a capstone project. College regulations require that all students must complete a capstone project to be eligible to graduate.

The type of research that you will do will depend on your programme of study.

The Capstone project — though defined differently by different subjects — is the common element across all degree exit routes. It requires a significant level of independent research by the student.

The Capstone should:

- be an integrative exercise that allows students to showcase skills and knowledge which they have developed across a range of subject areas and across the four years of study
- result in the production of a significant piece of original work by the student
- provide students with the opportunity to demonstrate their attainment of the four graduate attributes: to think independently, to communicate effectively, to develop continuously and to act responsibly.

Students should refer to School and College policies and procedures with regards to research guidelines and ethical practices.

## 4.7 Marking Scale

The following Descriptors are given as a guide to the qualities that assessors are seeking in relation to the grades usually awarded. A grade is the anticipated degree class based on consistent performance at the level indicated by an individual answer. In addition to the criteria listed examiners will also give credit for evidence of critical discussion of facts or evidence.

## Guidelines on Grades for Essays and Examination Answers

| Mark Range | Criteria                                                                                                                                                                                                                                                                                                   |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 90 - 100%  | <b>IDEAL ANSWER;</b> showing insight and originality and wide knowledge. Logical, accurate and concise presentation. Evidence of reading and thought beyond course content. Contains particularly apt examples. Links materials from lectures, practicals and seminars where appropriate.                  |
| 80 - 89%   | <b>OUTSTANDING ANSWER;</b> falls short of the 'ideal' answer either on aspects of presentation or on evidence of reading and thought beyond the course. Examples, layout and details are all sound.                                                                                                        |
| 70 - 79%   | <b>MAINLY OUTSTANDING ANSWER;</b> falls short on presentation and reading or thought beyond the course but retains insight and originality typical of first class work.                                                                                                                                    |
| 65 - 69%   | <b>VERY COMPREHENSIVE ANSWER;</b> good understanding of concepts supported by broad knowledge of subject. Notable for synthesis of information rather than originality. Sometimes with evidence of outside reading. Mostly accurate and logical with appropriate examples. Occasionally a lapse in detail. |
| 60 - 64%   | <b>LESS COMPREHENSIVE ANSWER;</b> mostly confined to good recall of coursework. Some synthesis of information or ideas. Accurate and logical within a limited scope. Some lapses in detail tolerated.                                                                                                      |
| 55 - 59%   | <b>SOUND BUT INCOMPLETE ANSWER;</b> based on coursework alone but suffers from a significant omission, error or misunderstanding. Usually lacks synthesis of information or ideas. Mainly logical and accurate within its limited scope and with lapses in detail.                                         |
| 50 - 54%   | <b>INCOMPLETE ANSWER;</b> suffers from significant omissions, errors and misunderstandings, but still with understanding of main concepts and showing sound knowledge. Several lapses in detail.                                                                                                           |
| 45 - 49%   | <b>WEAK ANSWER;</b> limited understanding and knowledge of subject. Serious omissions, errors and misunderstandings, so that answer is no more than adequate.                                                                                                                                              |
| 40 - 44%   | <b>VERY WEAK ANSWER;</b> a poor answer, lacking substance but giving some relevant information. Information given may not be in context or well explained but will contain passages and words which indicate a marginally adequate understanding.                                                          |
| 35 - 39%   | <b>MARGINAL FAIL;</b> inadequate answer, with no substance or understanding, but with a vague knowledge relevant to the question.                                                                                                                                                                          |
| 30 - 34%   | <b>CLEAR FAILURE;</b> some attempt made to write something relevant to the question. Errors serious but not absurd. Could also be a sound answer to the misinterpretation of a question.                                                                                                                   |
| 0 - 29%    | <b>UTTER FAILURE;</b> with little hint of knowledge. Errors serious and absurd. Could also be a trivial response to the misinterpretation of a question.                                                                                                                                                   |

## Guidelines on Marking Projects/Dissertation Assessment

| Mark Range       | Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>90 - 100%</b> | Exceptional project report showing broad understanding of the project area and exceptional knowledge of the relevant literature. Exemplary presentation and analysis of results, logical organization and ability to critically evaluate and discuss results coupled with insight and novelty/originality. Overall an exemplary project report of publishable quality (e.g. peer reviewed scientific journal/patent application).                                                                                                                                                      |
| <b>80 - 89%</b>  | An excellent project report clearly showing evidence of wide reading far above that of an average student, with excellent presentation and in-depth analysis of results. Clearly demonstrates an ability to critically evaluate and discuss research findings in the context of relevant literature. Obvious demonstration of insight and novelty/originality. An excellently executed report overall of publishable quality (e.g. short peer reviewed conference paper such as IEEE) with very minor shortcomings in some aspects.                                                    |
| <b>70 - 79%</b>  | A very good project report showing evidence of wide reading, with clear presentation and thorough analysis of results and an ability to critically evaluate and discuss research findings in the context of relevant literature. Clear indication of some insight and novelty/originality. A very competent and well-presented report overall but falling short of excellence in some aspects. Sufficient quality and breadth of work similar to the requirements for an abstract at an international scientific conference.                                                           |
| <b>60 - 69%</b>  | A good project report which shows a reasonably good understanding of the problem and some knowledge of the relevant literature. Mostly sound presentation and analysis of results but with occasional lapses. Some relevant interpretation and critical evaluation of results, though somewhat limited in scope. General standard of presentation and organization                                                                                                                                                                                                                     |
| <b>50 - 59%</b>  | A moderately good project report which shows some understanding of the problem but limited knowledge and appreciation of the relevant literature. Presentation, analysis and interpretation of the results at a basic level and showing little or no novelty/originality or critical evaluation.                                                                                                                                                                                                                                                                                       |
| <b>40 - 49%</b>  | A weak project report showing only limited understanding of the problem and superficial knowledge of the relevant literature. Results presented in a confused or inappropriate manner and incomplete or erroneous analysis. Discussion and interpretation of result severely limited, including some basic misapprehensions, and lacking any novelty/originality or critical evaluation. General standard of presentation poor.                                                                                                                                                        |
| <b>20 - 39%</b>  | An unsatisfactory project containing substantial errors and omissions. Very limited understanding, or in some cases misunderstanding of the problem and very restricted and superficial appreciation of the relevant literature. Very poor, confused and, in some cases, incomplete presentation of the results and limited analysis of the results including some serious errors. Severely limited discussion and interpretation of the results revealing little or no ability to relate experimental results to the existing literature. Very poor overall standard of presentation. |
| <b>0 - 19%</b>   | A very poor project report containing every conceivable error and fault. Showing virtually no understanding or appreciation of the problem and of the literature pertaining to it. Chaotic presentation of results, and in some cases incompletely presented and virtually non-existent or inappropriate or plainly wrong analysis. Discussion and interpretation seriously confused or wholly erroneous revealing basic misapprehensions.                                                                                                                                             |

## 4.8 Attendance Requirements

Please note that attendance at lectures, tutorials and laboratory sessions is mandatory as is the submission of all work subject to continuous assessment. With regard to online teaching, attendance is mandatory at live lectures, tutorial and labs. Pre-recorded lectures should be viewed at the allocated slot on the timetable. Students who prove lacking in any of these elements may be issued with a Non-Satisfactory form and asked for an explanation for their poor attendance or performance. Students who do not provide a satisfactory explanation can be prevented from sitting the annual examinations. The following is an extract from the College Calendar outlining the College policy on attendance and related issues:

*18 Students must attend College during the teaching term. They must take part fully in the academic work of their class throughout the period of their course. Lecture timetables are published through my.tcd.ie and on school or department notice- boards before the beginning of Michaelmas teaching term. The onus lies on students to inform themselves of the dates, times and venues of their lectures and other forms of teaching by consulting these timetables.*

*19 The requirements for attendance at lectures and tutorials vary between the different faculties, schools and departments. Attendance is compulsory for Junior Freshmen in all subjects. The school, department or course office, whichever is relevant, publishes its requirements for attendance at lectures and tutorials on notice-boards, and/or in handbooks and elsewhere, as appropriate. For professional reasons lecture and tutorial attendance in all years is compulsory in the School of Engineering, the School of Dental Science, the School of Medicine, the School of Nursing and Midwifery, the School of Pharmacy and Pharmaceutical Sciences, for the B.S.S. in the School of Social Work and Social Policy, and for the B.Sc. in Clinical Speech and Language Studies. Attendance at practical classes is compulsory for students in all years of the moderatorship in drama and theatre studies and drama studies two-subject moderatorship/Trinity joint honors.*

*20 In special circumstances exemption from attendance at lectures for one or more terms may be granted by the Senior Lecturer; application for such exemption must be made in advance through the tutor. Students granted exemption from attendance at lectures are liable for the same annual fee as they would pay if attending lectures. Students thus exempted must perform such exercises as the Senior Lecturer may require. If these exercises are specially provided, an additional fee is usually charged.*

21 *Students who in any term have been unable, through illness or other unavoidable cause, to attend the prescribed lectures satisfactorily, may be granted credit for the term by the Senior Lecturer and must perform such supplementary exercises as the Senior Lecturer may require. The onus for informing the Senior Lecturer of illness rests with individual students who should make themselves familiar with the general and more detailed school or course regulations regarding absence from lectures or examinations through illness.*

22 *Students who are unable to attend lectures (or other forms of teaching) due to disability should immediately contact the Disability Service to discuss the matter of a reasonable accommodation. Exceptions to attendance requirements for a student, on disability grounds, may be granted by the Senior Lecturer following consultation with the student's school, department or course office, and the Disability Service.*

23 *Students who find themselves incapacitated by illness from attending lectures (or other forms of teaching) should immediately see their medical advisor and request a medical certificate for an appropriate period. Such medical certificates should be copied to the school, department or course office, as appropriate, by the student's tutor.*

### **Non-satisfactory attendance**

24 *All students must fulfil the course requirements of the school or department, as appropriate, with regard to attendance. Where specific requirements are not stated, students may be deemed non-satisfactory if they miss more than a third of their course of study in any term. Calendar 2020-21 33*

25 *At the end of the teaching term, students who have not satisfied the school or department requirements, as set out in §§19 and 24 above, may be reported as non-satisfactory for that term. Students reported as non-satisfactory for the Michaelmas and Hilary terms of a given year may be refused permission to take their semester two assessment/examinations and may be required by the Senior Lecturer to repeat their year. Further details of procedures for reporting a student as non-satisfactory are given on the College website at [www.tcd.ie/academic/registry/studentcases](http://www.tcd.ie/academic/registry/studentcases).*

**Reference/Source:** [Calendar Part II, B: General Regulations and Information, 'Attendance'](#)

## 4.9 Absence from Examinations

The following is an extract from the College Calendar outlining the College policy on absence from Examinations:

51 Students who may be prevented from sitting an examination or examinations (or any part thereof) due to illness should seek, through their tutor, permission from the Senior Lecturer in advance of the assessment session to defer the examination(s) to the reassessment session. Students who have commenced the assessment session, and are prevented from completing the session due to illness should seek, through their tutor, permission to defer the outstanding examination(s)/assessment(s) to the reassessment session. In cases where the assessment session has commenced, requests to defer the outstanding examination(s) on medical grounds, should be submitted by the tutor to the relevant school/departamental/course office. If non-medical grounds are stated, such deferral requests should be made to the Senior Lecturer, as normal.

52 Where such permission is sought, it must be appropriately evidenced:

(a) For illness: medical certificates must state that the student is unfit to sit examinations/complete assessments and specify the date(s) of the illness and the date(s) on which the student is not fit to sit examinations/complete assessments. Medical certificates must be submitted to the student's tutor within three days of the beginning of the period of absence from the assessment/examination.

(b) For other grave cause: appropriate evidence must be submitted to the student's tutor within three days of the beginning of the period of absence from the assessment/examination.

53 Where illness occurs during the writing of an examination paper, it should be reported immediately to the chief invigilator. The student will then be escorted to the College Health Centre. Every effort will be made to assist the student to complete the writing of the examination paper.

54 Where an examination/assessment has been completed, retrospective withdrawal will not be granted by the Senior Lecturer nor will medical certificates be accepted in explanation for poor performance.

55 If protracted illness prevents a student from taking the prescribed assessment components, so that they cannot rise into the next class, they may withdraw from College for a period of convalescence, provided that appropriate medical certificates are submitted to the Senior Lecturer. If the student returns to College in the succeeding academic year they must normally register for the year in full in order to fulfil the requirements of their class. See §26 on fitness to study and §28 fitness to practise, if relevant.

56 Where the effects of a disability prevent a student from taking the prescribed assessment components, so that they cannot rise into the next class, the Senior Lecturer may permit the student to withdraw from College for a period of time provided that appropriate evidence has been submitted to the Disability Service. If they return to College in the succeeding academic year they must normally register for the year in full in order to fulfil the requirements of their class.

57 The nature of non-standard examination accommodations, and their appropriateness for individual students, will be approved by the Senior Lecturer in line with the Council- approved policy on reasonable accommodations. Any reports provided by the College's Disability Service, Health Service or Student Counselling Service will be strictly confidential.

**Reference/Source:**

[Calendar Part II, B: General Regulations and Information, 'Absence'](#)  
[Academic Policies](#)

## 4.10 Awards

Students who complete the third year by examination and who choose not to proceed to or fail to complete satisfactorily the fourth year of the Engineering or Engineering with Management course may elect to be conferred with the ordinary degree of B.A. (this is NOT a B.A. in Mathematics).

Those Engineering students who exit the course having obtained credit for years one to four of the course are entitled to the degrees of B.A. and B.A.I.

The B.A.I. degree award is based on an overall average mark calculated by combining the average mark achieved in the Junior Sophister examinations (30% towards overall average) and the Senior Sophister examinations (70% towards overall average).

Students who have obtained credit for all five years of the course are entitled to the degrees of B.A. and M.A.I. (St.).

### **Eligibility for MAI**

- Students must pay a tuition fee for the MAI year:  
<https://www.tcd.ie/academicregistry/fees-and-payments/>
- Students must achieve a minimum overall mark of 60% for the combined Junior Sophister and Senior Sophister years (on a 30:70 basis) at the annual session of the B.A.I. / B.Sc. degree year.

## 4.11 Graduate Attributes

The programme learning outcomes for the Engineering and Engineering with Management programmes have been developed to ensure that all the attributes required of a professional engineering degree programme are achieved.

Every five years our programmes are reviewed for accreditation by Engineers Ireland. This process ensures that each of the approximately fifty required programme outcomes is achieved. These learning outcomes vary from general outcomes in mathematics and science to communications, design, professional ethics, research and group work. As a student progresses through the programme the learning outcomes become more demanding until final year students are capable of undertaking independent research and dealing with ill-defined complex problems.

Throughout their time at Trinity, our students will be provided with opportunities to develop and evidence achievement of a range of graduate attributes that support their academic growth. Graduate attributes can be achieved in academic and co- and extra- curricular activities.

The Engineering School has been to the fore in embracing the Trinity Education Project and our programmes ensure that all our students achieve the Trinity Student Attributes.

## 4.12 Professional and Statutory Body Accreditation (if applicable)

Trinity offers outstanding teaching by engineers who are at the forefront of their field worldwide. It has a strong philosophy of research-led teaching and continuously benchmarks itself against the top international engineering schools. The Engineering course offers the opportunity to carry out research as part of your course with the aim of producing graduates capable of participating to research projects at the highest national and international levels. There are opportunities for work placements in Ireland and abroad as well as study abroad opportunities as part of the degree. The Engineering programme is fully accredited by Engineers Ireland up to Masters level (M.A.I) and offers excellent career prospects in Ireland and abroad.

#### 4.13 Student Feedback and Evaluation

The Staff/Student Liaison Committee meets once a semester to discuss matters of interest and concern to students and staff. It comprises class representatives from each year. A programme level survey is issued online to students towards the end of semester 2.

##### **References/Sources:**

[Student Evaluation and Feedback](#)

[Student Partnership Policy](#)

[Procedure for the Conduct of Focus Groups for Student Feedback on Modules and Programmes](#)