Entrepreneurship has never been a more visible part of popular culture. Everyone knows of the exploits of Mark Zuckerberg and the creation of Facebook. However, entrepreneurship is more than just something we read about in our newspapers; it is actually the engine that drives our economy.

67% of all new job-creation in Ireland comes from businesses in the first 5 years of existence. Small businesses make up over 99% of businesses in the enterprise economy in Ireland and account for 70% of people employed.

The most successful entrepreneurs are those who are passionate about what they do and bring that passion to their venture. You do not have to be a business graduate to develop a winning business. Success is based on the quality of the idea; the strength of the team and the energy committed to developing the innovative idea from concept to product. Entrepreneurship is a viable future pathway for our students and graduates. They will establish the household name companies of the future.

Tangent is about enabling this ambition through education, entrepreneurship and innovative programming. Partner with us to imagine, collaborate and take action. We are now open for business.
TANGENT, TRINITY’S IDEAS WORKSPACE IS A PLACE IN WHICH TO IMAGINE, COLLABORATE AND PUT INTO ACTION IDEAS THAT CAN CHANGE THE WORLD.

Trinity College Dublin, the University of Dublin is committed to providing a transformative learning environment that fosters innovation and entrepreneurship at all levels across the university. The opportunities opening up today are infinite. They are invisible to some, impossible to others. Identifying these opportunities to students requires new tools and methods. Realising them requires imagination.

Tangent is a new unit in Trinity offering students, staff, and the wider innovation ecosystem programmes and events in innovation, creative thinking, and entrepreneurship. Through our masterclasses, innovation challenges, certificate programmes, hackathons, meetups, fireside chats, incubation space, and startup accelerator programmes – Tangent provides countless opportunities to innovate and imagine. All of which will be held in a newly developed bespoke innovation space on Trinity’s main campus.

IMAGINATION
We inspire, challenge and provoke a creative mindset among our student population. Through effective education and supports, Tangent helps to spark our students’ imagination. We encourage curiosity and ideation. This is what helps us to create real impact.

COLLABORATION
We embrace the creative fusion that happens when arts meet science, and education meets enterprise. Through collaboration we believe that when we come together with an open mind and embrace alternative ways of thinking, no challenge is too complex, no opportunity out of reach.

ACTION
We do not stop at ideas. We create impact, disruption, and enterprises. Tangent values action. We encourage our students to try to create new possibilities. We deliver economic, cultural and social value through entrepreneurship. Our students’ perseverance enables their ideas to come alive.

Find out more at www.tcd.ie/tangent, follow us on social media, and sign up to the Tangent mailing list (www.tcd.ie/tangent/signup) to receive our newsletter and stay up to date on all things Tangent.
LaunchBox, Tangent’s Student Accelerator, is a Trinity summer programme open to teams of students with an early-stage business or social enterprise. The programme provides funding for teams to work for themselves for the duration, mentorship, access to alumni and investor networks, and the ideal collaborative environment to launch a new startup venture.

Trinity prides itself on its students’ innovation, enterprise, courage, and creativity, and LaunchBox is a perfect example of these qualities. We aim to empower students to forge and follow their own path through entrepreneurship, and this is made possible through the support for such projects both within Trinity and within the startup ecosystem.

Iseult was a Business student at Trinity when she met Aoibheann at an event about food waste in Ireland. They were united by their disbelief at the huge amount of food the country wasted, while simultaneously 1 in 10 people were going hungry. Their efforts to unite local charities and businesses with excess food eventually evolved into FoodCloud. With the support they received as part of their involvement in LaunchBox 2013, the FoodCloud app was built to streamline the connection process. This resulted in Tesco signing up to FoodCloud in July 2014, allowing for further expansion of the business. In the same year, Iseult was listed as one of Time magazine’s “next generation leaders”.

To date, FoodCloud has successfully provided over 35 million meals, using food that would otherwise have been wasted. Iseult has been involved in subsequent LaunchBox programmes as a guest speaker and mentor.

KEY DATES
- Info Evenings with LaunchBox Alums: 5 Nov; 26 Nov; 22 Jan; 29 Jan
- Find Your Founder Matchmaking: 4 Dec
- Application Drop-in Sessions with Alison: 4 - 6 Feb
- Closing Date for Applications: 8 Feb
- Pitch for Your Place on LaunchBox: 28 Feb
- Founders’ Agreements: w/c 18 Mar
- Programme Begins: May 2019
DIGITAL HEALTH VALIDATORS

Validator is a two-month digital health incubator hosted at Trinity in collaboration with our partner EIT Health. It is a full-time intensive incubator to enable early stage Digital Health startups to validate their business idea and find their product/market fit in Europe.

www.tcd.ie/tangent/accelerators/digital-health/

CLIMATE – GREENHOUSE

Greenhouse is Climate-KIC’s European incubator for green startups, hosted at Trinity as well as other sites across the Climate-KIC network. It is a 6-month programme designed to transform early stage climate innovation ideas into sustainable business models and marketable products or services. All that is required is an idea and the motivation to make it happen.

www.tcd.ie/tangent/accelerators/climate/

SMART AGEING

Smart Ageing Bootcamp is an eight week programme for those who would like to introduce into the market products or services that are dedicated to the elderly, to help Europe age in a smart way. It is aimed at startups developing solutions that target customers aged 50 or more, and should be intended to improve the lives of seniors. The solutions can be in the areas of medtech, biotech, or digital health.

The bootcamp commenced in Trinity in September with a week long series of workshops, before the participants visited a number of European partner organisations for additional product validation before finishing back in Trinity for a final week of workshops at the end of October.

www.tcd.ie/tangent/accelerators/

Contact Gavan Drohan

Gavan.Drohan@tcd.ie
(01) 896 2342
BLACKSTONE LAUNCHPAD
AT TRINITY

EXPERIENTIAL ENTREPRENEURSHIP

Blackstone LaunchPad is a campus-based entrepreneurship program, accessible by over 500,000 students globally, designed to support and mentor students, staff, and alumni—regardless of experience or discipline.

At Tangent, we focus on entrepreneurs not ideas. Our mission is to introduce Trinity students to entrepreneurship, help them develop entrepreneurial skills, and enable them to independently achieve success in whatever venture they pursue. We want everyone in the Trinity community to feel supported and empowered to solve global problems, pursue their own business and startup ideas, and have a real impact on society and the world.

Throughout the academic year, the Blackstone Launchpad team run a series of events including innovation challenges, hackathons, and individual mentoring sessions. Regardless of what stage your idea is at or in what sector, the team are available to help you progress your idea to the next stage.

www.tcd.ie/tangent/mentoring/launchpad/

BLACKSTONE LAUNCHPAD AT TRINITY

1-2-1 MENTORING

At Blackstone LaunchPad at Trinity we offer year round support and guidance for individuals interested in initiating ideas, innovation and entrepreneurship. You can book an appointment with a dedicated mentor for confidential advice on a business idea, social enterprise endeavour, or any initiative you wish to be realised. To book a 1-2-1 chat on your idea, please visit our website.

www.tcd.ie/tangent/mentoring/launchpad/
INNOVATION CHALLENGES & HACKATHONS

An innovation challenge is a focused period of time spent on the creation and elaboration of the best and sustainable ideas to address a defined problem or theme. Multidisciplinary teams are formed around a proposed solution and facilitated ideation and solution development is supported. The challenge ends with a pitch event and the most compelling presentation deemed the winner.

A hackathon is a timebound design sprint in which participants collaborate intensively on a challenge to develop an innovative software based solution. Teams of software developers, graphic designers, interface designers, project managers, subject matter experts and others collaborate intensively for a few days ending in pitch presentation and a selected winner.

UPCOMING EVENTS:

Climathon
Theme: Water Management
In collaboration with EIT Climate-KIC, Teagasc, and Dublin City Council.
Register: www.tcd.ie/tangent/events/

Huawei Innovation Challenge 2018
Machine Learning and Computer Vision
In collaboration with Huawei.
Register: www.tcd.ie/tangent/events/

26th October 2018,
3-4 Foster Place,
College Green

2nd – 4th November 2018,
Regent House,
Trinity College Dublin

BLACKSTONE LAUNCHPAD SPRINTS

The LaunchPad Sprints programme consists of four entrepreneurship sessions run over two weeks during and outside of term. The purpose of the programme is to introduce entrepreneurship and startup practices to individuals and teams who are interested in entrepreneurship, social enterprise, and other startup initiatives.

The Blackstone LaunchPad Sprints programme was set up to give budding student entrepreneurs a crash course in real life entrepreneurship and idea initiation. The programme is open to individual participants from Trinity (at both the undergraduate and postgraduate level).

Contact
Gavan Drohan
To find out more about Blackstone LaunchPad, contact Gavan.
Gavan.Drohan@tcd.ie
(01) 896 2342
Entrepreneurship in the Arts is a new mentorship programme that aims to activate students from the Faculty of Arts & Humanities to explore innovation and the world of start-ups.

At Tangent, we believe in empowering our students to make a real impact. We want to engage creative and independent thinkers, who have yet to explore the start-up world, or have never thought of themselves as an entrepreneur.

If you would like more details about Entrepreneurship in the Arts, contact Alison.

Contact
Alison Treacy
Alison.Treacy@tcd.ie
(01) 896 8543

www.tcd.ie/tangent/mentoring/arts/
WOMEN WHO WOW

MENTORSHIP PROGRAMME TARGETING THE UNDER REPRESENTATION OF WOMEN STARTING THEIR OWN BUSINESSES

We strongly believe that our entrepreneurship programmes are better with a better gender ratio. We are actively encouraging more female students with an interest in innovation, business, or social enterprise to apply for and participate in Tangent’s innovation and entrepreneurship activities.

Statistically, startups with a gender-diverse Board or founding team are more successful than startups without gender diversity, yet despite this we don’t receive applications from nearly as many gender-diverse or all-female teams as we do all-male.

Building on the success of the first two years of this programme, we are running Women Who Wow again this academic year. Women Who Wow is a mentorship programme aimed at female students who are interested in setting up their own business or social venture. If you’d be interested in taking part as a mentor, please visit our website.

www.tcd.ie/tangent/mentoring/women/

Catherine Coffey
Philosophy and French, Trinity

“It is a unique opportunity to get chatting to like-minded women that have become so successful and also willing to share their experiences and knowledge.

The variety of backgrounds that all the mentors had was really encouraging, especially as someone with a degree that doesn’t point towards a specific career path. I felt for students in a similar situation that it is the perfect confidence builder!”

KEY DATES

Launch Event 22 Nov 2018
Networking Event 12 Mar 2019
Closing Event 09 Apr 2019

Contact Alison Treacy

If you would like more details on Women Who Wow, contact Alison:

Alison.Treacy@tcd.ie
(01) 896 8543
EIT KNOWLEDGE & INNOVATION COMMUNITIES (KICs)

Created in 2008, the European Institute of Innovation and Technology (EIT) is a unique EU initiative that boosts innovation and entrepreneurship across Europe with one simple idea: through diversity, there is strength. It supports the development of dynamic pan-European partnerships between leading universities, research labs and companies. These partnerships are known as EIT Knowledge & Innovation Communities (KICs).

Together, they develop innovative products and services, start new companies, and train a new generation of entrepreneurs. They bring ideas to market, turn students into entrepreneurs and, most importantly, they innovate. KICs bring together the three sides of the knowledge triangle: Research, Education and Business, to empower innovators and entrepreneurs to develop world-class solutions to societal challenges.

www.tcd.ie/tangent/eit-kics/

TRINITY IS A MEMBER OF THREE KICS:
EIT HEALTH
EIT CLIMATE-KIC
EIT RAW MATERIALS

Tangent co-ordinates Trinity’s KIC engagement and leads several KIC-funded education and business creation programmes such as Digital Health Validators, Greenhouse, and Ideation 2 Activation.

Contact
Dr. Barbara Harvey Carroll

If you would like more details on EIT KICs, contact Barbara.
Barbara.Harvey.Carroll@tcd.ie
(01) 896 4366
EIT HEALTH

EIT Health partners work to give EU citizens greater opportunities to enjoy a healthier and active life for longer, and to postpone dependency on others, by leveraging big data and new technologies, identifying and removing barriers to innovation, and building on education and talent creation.

EIT Health has three impact goals:

**Promote Healthy Living**

**Improve Healthcare**

**Support Active Ageing**

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**Health 2020 Proposal Call**


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Assistant Professor John Dinsmore is the lead PI for EIT Health activities at Trinity

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**CROÍVALVE**

CroíValve is an early stage medical device company focused on developing a minimally invasive device for the treatment of the heart condition tricuspid regurgitation.

CroíValve, a Trinity spin-out has teamed up with Erasmus MC Rotterdam and Medtronic to collaborate in an EIT Health-funded innovation project. The project funds long-term safety and durability assessment and optimisation of the CroíValve device. Additionally, the EIT Health support will help optimise the business plan, strategy and pitch. CroíValve were also winners of EIT Health’s HeadStart award, receiving €50,000 in funding

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**EIT CLIMATE-KIC**

EIT Climate-KIC works to accelerate the transition to a zero-carbon economy by identifying and supporting innovation that helps society mitigate and adapt to climate change. Climate-KIC believes that a decarbonised, sustainable economy is not only necessary to prevent catastrophic climate change, but presents a wealth of opportunities for business and society.

Climate-KIC’s activities address four themes:

**Urban Transitions**

**Sustainable Land Use**

**Decision Metrics & Finance**

**Sustainable Production systems**

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**Climate-KIC Proposal Calls**

Climate 2019 / Call 1 – Closing 31st Oct 2018
Climate 2019 / Call 2 – Closing 30th Apr 2019
Climate 2020 / Call 1 – Closing 31st Oct 2019

Each call is announced 8 weeks prior to the closing date.

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Assistant Professor Quentin Crowley and Professor Jennifer McElwain are the lead PIs for Trinity’s activities in Climate-KIC.
EIT RAWMATERIALS

EIT RawMaterials is the largest and strongest consortium in the raw materials sector worldwide. Its vision is to develop raw materials into a major strength for Europe. Its mission is to boost competitiveness, growth and attractiveness of the European raw materials sector via radical innovation, new educational approaches and guided entrepreneurship. EIT RawMaterials has three strategic objectives:

- Securing Raw Materials Supply
- Designing solutions across the whole life cycle
- Closing Materials Loops

**CASE STUDY**

**RAWMATERIALS**

IDEATION 2 ACTIVATION

The Ideation 2 Activation (I2A) programme provides a theoretically-informed and practice-based programme for researchers, industry and academic professionals working in raw materials to develop an innovation mindset at individual, team and organisational level. Representative teams from the top mining companies in Europe, along with leading industry academics, are invited to apply for this fast-paced, experiential programme where they learn the key skills of creativity, collaboration, critical thinking and emotional intelligence over the course of two days. The third day will consist of an industry challenge on safety in the mining industry, led by academics in Trinity, and industry partners from Ireland and Finland.

Developed by two of Europe’s leading entrepreneurship universities Trinity College Dublin and Aalto University Executive Education, Finland, I2A is also supported by global industry partners Aughinish Alumina and Outotec. Over two programmes, up to 40+ ideas and innovations in the raw materials space will be progressed on the various stages of new venture creation and industry ideation. Support, industry coaching and potential investment will surround this exciting wave of potential products, services and processes.

**CASE STUDY**

**CLIMATE-KIC**

**JOURNEY - AN EDUCATION PROGRAMME**

The Journey by EIT Climate-KIC is Europe’s largest summer school for innovation and entrepreneurship to address climate change. It offers a unique combination of climate knowledge and hands-on business experience. Students and professionals from all over the world come together for an intensive innovation and entrepreneurship programme hosted by top European universities. After a full time three or five week summer programme, participants emerge with the tools to become innovative entrepreneurs and the drive to take bold steps in the fight against climate change. Trinity has proudly hosted two weeks of the Journey programme over the last two years with over 80 students coming to Trinity to engage on the climate innovation and entrepreneurship challenge. Trinity is looking forward to participating in the 2019 Journey.

**Professor Mike Lyons is the lead PI for EIT RawMaterials activities at Trinity**
TRINITY CAMPUS COMPANY
ACCELERATOR PROGRAMME

Launching in 2019, this programme is being developed in conjunction with Trinity Research & Innovation to support Trinity academics who have developed a technology that has potential viable commercial application and are looking to realise the commercialisation of the technology through a Trinity Campus Company.

The programme is designed specifically for founders who are building a high potential startup who will look for investment to build and/or scale the company to realise the full potential of the innovation.

Recognising opportunity by understanding the market’s problem is key to the success of a new venture. The programme will provide the tools to fine tune the business idea, and assist in further research to identify commercial potential. During this programme academics move from thinking of their innovation as a project and start communicating the problem and their solution in commercial terms.

Business plans are the most effective tool for documenting and communicating a company’s plan both internally for agreement and sign off by a company’s management team, and externally to potential investors. The programme supports potential campus companies to develop an investor ready business plan that increases the chances of successfully achieving investment in their company.

Running a company brings risks and rewards. The programme also addresses best practice and legal compliance to mitigate risk and increase potential rewards and chances of success. It will ensure the founders and management teams of Trinity’s Campus Companies are fully aware of their responsibilities as directors and founders of a company.

For more information, please contact Declan Weldon in Trinity Research & Innovation at declan.weldon@tcd.ie or on (01) 896 3233.
Tangent Pioneers, powered by Bank of Ireland, is a new programme which will take our startups international offering the valuable opportunity to learn how to operate in a different (more competitive) market. For one week, Trinity startups will network, learn, pivot, pitch and grow in a new market with new challenges and opportunities.

The programme will showcase Tangent, Trinity’s Ideas Workspace, and our innovation partnership with Bank of Ireland to a diverse audience including New York-based startups, Enterprise Ireland, alumni, and the US startup ecosystem. It will raise the profile of Trinity internationally and allow us to engage with our US-based alumni in a meaningful way.

The four-day programme is scheduled to take place during the first semester reading week (commencing 22nd October). Bank of Ireland’s Innovation Lab New York will host the programme. Sections of the week are reserved for our startups to organise and setup their own engagements and meetings within the ecosystem.

www.tcd.ie/tangent/pioneers/
Tangent Laureates is an immersive, high-intensity structured programme for exceptional graduates of Trinity who are either working on their own company or social enterprise; or currently working in an innovation capacity.

The programme aims to enhance participants’ leadership & strategic capability, ambition, and confidence. Made up of sessions delivered by world-renowned thought leaders, the themes of leadership and strategy will be complimented by networking events and peer learning.

Following on from the programme, the cohort will be invited to continue their momentum from the programme with supplementary meetups throughout the following year.

www.tcd.ie/tangent/laureates/
ACCELERATED 91 COMPANIES THROUGH OUR PROGRAMMES

70 STUDENT STARTUPS

RAISING OVER €6.5m IN INVESTMENTS

Tanger

1ST IN EURO FOR PRODUCING ENTREPRENEURS

722 STUDENTS ON OUR EDUCATION PROGRAMMES

OFFERS IRELAND’S FIRST UNDERGRADUATE CERTIFICATE IN INNOVATION & ENTREPRENEURSHIP
TRINITY SUCCESSES

1 IN 5 SPINOUTS IN IRELAND ORIGINATE IN TRINITY

€60 MILLION UNIVERSITY BRIDGE FUND

31 ACTIVE SPINOUTS

300 PRODUCTS COMMERCIALISED FROM TRINITY RESEARCH

OVER 100 NEW VENTURES CREATED FROM TRINITY RESEARCH

€1.3b IN EXPORTS

TRINITY IS 1 OF 9 OF THE TOP 50 UNIVERSITIES IN EUROPE WHO PARTICIPATE IN THREE EIT KICs

Trinity’s Ideas Workspace

1 IN 5 SPINOUTS IN IRELAND ORIGINATE IN TRINITY

€60 MILLION UNIVERSITY BRIDGE FUND

31 ACTIVE SPINOUTS

300 PRODUCTS COMMERCIALISED FROM TRINITY RESEARCH

OVER 100 NEW VENTURES CREATED FROM TRINITY RESEARCH

€1.3b IN EXPORTS

TRINITY IS 1 OF 9 OF THE TOP 50 UNIVERSITIES IN EUROPE WHO PARTICIPATE IN THREE EIT KICs
UNDERGRADUATE CERTIFICATE
IN INNOVATION, &
ENTREPRENEURSHIP

The Undergraduate Certificate in Innovation and Entrepreneurship is a Level 7 (10 ECTS) programme available to Senior Fresh and Junior Sophister Trinity students from any discipline. This course aims to develop the core skills of innovation and entrepreneurship in the Trinity undergraduate student population. It is practically oriented with a specific emphasis on project work and problem based learning.

When combined, innovation and entrepreneurship gives rise new ideas, products, processes, and services. Student entrepreneurs participating in this programme will learn how to think creatively, identify prospective business opportunities, and develop business models to support their development.

This programme will enable undergraduate students to be innovative and entrepreneurial in their approach to problem solving and addressing national, international and societal issues related to their discipline and beyond. Delivered by academics and industry experts, the programme aims to combine theoretical concepts underpinning innovation and entrepreneurship with practical application.

The delivery method is blended (70% online, 30% in person), the course schedule has been adapted to suit the undergraduate timetable.

www.tcd.ie/tangent/education/undergraduate
Dominick Robinson  
TSM Geography & History, Trinity

“If you’re in any way considering it you should just go for it, you have nothing to lose. In computer science especially, design thinking plays a big role. We wouldn’t cover it in our course, but a lot of what we do in terms of reiterating and recompiling so to speak revolves around design thinking.”

Andriy Babiy  
Business, Economics, & Social Sciences, Trinity

“Being that it was cross-discipline you could see how the different courses work, you could see what different people with different skill sets and strengths do, what they value. It showed that everyone does have different strengths.”

Vahe Sasunts  
Computer Science, Trinity

“If you’re in any way considering it you should just go for it, you have nothing to lose. In computer science especially, design thinking plays a big role. We wouldn’t cover it in our course, but a lot of what we do in terms of reiterating and recompiling so to speak revolves around design thinking.”

Contact  
Dr Daniel Rogers

If you would like more details on the Undergraduate Certificate, contact Dan.

Daniel.Rogers@tcd.ie

(01) 896 4830

MODULE DATES

One: Creative Thinking (Michaelmas)  
10th September – 26th November 2018  
7 Online, 3 in-class Sessions  
1 session per week over the 10 week teaching term

Two: Entrepreneurial Action (Hilary)  
29th January – 9th April 2019  
7 Online, 3 in-class Sessions  
1 session per week over the 10 week teaching term
POSTGRADUATE CERTIFICATE
IN CREATIVE THINKING, INNOVATION, & ENTREPRENEURSHIP

PROGRAMME FOR ENTREPRENEURS, PEOPLE RETURNING TO WORK, HOMEMAKERS, & JOBSEEKERS

This programme focuses on the continuing professional development of individuals who are seeking a return to the workplace, have an idea for a business, or are considering a new direction. The programme will provide students with a unique combination of transferable skills involving confidence building and overcoming the psychological barriers of returning to work or starting a business.

Students gain creative confidence through acquiring a range of problem solving and lateral thinking skills. They experience and engage in the innovation process through interacting with entrepreneurs, business leaders, and industry mentors in an informal learning environment. Additionally, students take on project hosted by private or public enterprise. Students also learn to communicate with industry collaborators, and begin to appreciate the process involved in bringing an idea to application.

Modules include Career Pathways and Returning to Work; Opportunity Generation and Recognition; Planning Your Venture; Managing your Intellectual Property; Creative Capital.

www.tcd.ie/tangent/education/postgraduate/

Contact
Louise Andrews

If you would like more details on the programme, contact Louise.

Louise.Andrews@tcd.ie
(01) 896 4367

Cohort One
Dates 24th Sept 2018 – 16th April 2019
Days Mon & Tues (9am – 5pm)

Cohort Two
Dates 17th Jan 2019 – 23rd May 2019
Days Thurs & Fri (9am – 5pm)

Eugene Bent
2018 Participant

“ I would strongly recommend Trinity’s Postgraduate course in Creative Thinking, Innovation and Entrepreneurship. It combines excellent guest lecturers and committed course leaders with in-depth peer-to-peer learning in an immersive and stimulating programme that has both academic and practical benefit. ”
POSTGRADUATE CERTIFICATE
IN INNOVATION &
ENTREPRENEURSHIP

This programme seeks to transform some of the brightest scholars into energetic, resourceful and entrepreneurial thinkers. A typical PhD student performs independent research, aiming to achieve academic excellence by making a contribution to knowledge in his or her chosen discipline.

This course offers training in innovation and entrepreneurship not currently available in many PhD programmes and in demand by most employers. The programme links higher education and innovation capacity to the needs of the public and private sectors. Students are encouraged to uncover and exploit potential opportunities latent within their thesis research. In doing this, they collaborate with industry partners on a variety of projects gaining invaluable public and private sector experience.

This course is complementary to PhD programmes across both institutions (Trinity & QUB). It provides a platform for research missions across disciplines and across multiple research fields and innovation activities, including knowledge transfer and commercialisation.

The primary goal of the programme is to develop a new kind of researcher, expert in their discipline but with a range of transferrable skills which they can use to develop their research in new and innovative ways. Students work in teams which are inter-disciplinary and inter-institutional. The experience is conducive to creativity, innovation, communication and the development of entrepreneurial ideas.

Students graduate with a thorough understanding of how knowledge, creativity and innovation can translate ideas and information into products, services and policies for economic and social benefit.

www.tcd.ie/tangent/education/postgraduate/

Ayokunmi Ajetunmobi
Molecular Medicine, Trinity

“I actually spun out my own company with another [Tangent programme] alumnus, and to be able to do that and have that capacity is unbelievable. It's really a worthwhile endeavour.”

Contact
Dr Daniel Rogers
Daniel.Rogers@tcd.ie
(01) 896 4830
POSTGRADUATE CERTIFICATE
IN INNOVATION &
ENTREPRENEURSHIP

REGIONALLY DELIVERED PROGRAMME FOR ENTREPRENEURS

New to 2018/19, the regional postgraduate certificate in creative thinking, innovation, and entrepreneurship is a blended programme delivered 70% online and 30% in classrooms. Delivered in collaboration with Bank of Ireland, Local Enterprise Offices, and local Business Innovation Centres, students will take classes online and in their local Bank of Ireland Workbench with guest speakers and projects from their local innovation and enterprise ecosystem.

On this programme, students will learn the fundamentals of creative thinking, idea development, opportunity generation/recognition and venture planning in order to bring innovative products and services to market. Students will learn to be innovative and entrepreneurial in their approach to problem solving and acquire a range of problem solving and lateral thinking skills. They experience and engage in the innovation process through interacting with entrepreneurs, business leaders and industry mentors in an informal learning environment.

Modules include Creative Thinking & Innovation; Opportunity Generation and Recognition; Planning Your Venture; Managing your Intellectual Property; Creative Capital; Leadership.

For more information on our regional programme, please contact Allyson.

Contact
Allyson Lambert

Allyson.Lambert@tcd.ie
(01) 896 4811

www.tcd.ie/tangent/education/postgraduate/
Preparation for entrepreneurship has become a key strategic objective in the knowledge-based economy to ensure the sustained growth of successful startups and SMEs – ensuring that they can keep pace with the ever-increasing innovation speed and pressure. As ideas are the origin of every successful innovation, students have to be trained in systematically opening their mindsets to generate and structure ideas with high innovation potential. They also have to learn to implement them in a way that the results facilitate their entry into entrepreneurial activities. The systematic approach of our postdoc training programme can be considered as a key facilitator towards helping researchers to generate, structure, and assess ideas related to technology-based product/service solutions. Our goal is to recognise the playful mindsets that underlie successful innovation in academic research and explore how design thinking can improve the research process to make you more innovative scientists.

**DAY 1: DESIGN YOUR RESEARCH CAREER**
This introduction to design thinking methods will help you identify where in your research process you are getting stuck. You will explore a variety of design techniques, but focus especially on how being mindful of your own research process, work styles, emotional state, and sometimes-hidden assumptions can help you get “unstuck” when you face research bumps in the road.

**DAY 2: POSTDOC TOOLKIT**
We work rapidly through the essential survival toolkit for postdocs – writing successful proposals, developing IP, leadership skills and the most powerful tool of all – developing a growth mindset – enabling postdocs to successfully navigate the challenges ahead.

**DAY 3: THE ACADEMIC ENTREPRENEUR**
Day 3 looks at the possibilities beyond the lab, either in a startup capacity, or working with industry. We meet some postdocs who talk about their own journeys as an entrepreneur or in industry and witness it in action with a site visit. We also look at the personal challenges postdocs face and some self-care techniques to manage them.

Who should attend: Postdoctoral researchers who are seeking new tools to infuse creativity into their research, and who wish to explore the career opportunities available to them, by applying the innovation principles of design thinking to the “wicked problem” of finding and achieving a meaningful, fulfilling career.

**Cost:** €1,000 euro pp for 3 day programme. Trinity postdocs - €750

**Certification:** A Certificate of Completion is issued to participants.

Contact Joan Connolly
Joan.Connolly@tcd.ie
(01) 896 2498

www.tcd.ie/tangent/education/shortcourses/
PROFESSIONAL COURSES

PROGRAMMES FOR CONTINUED PROFESSIONAL DEVELOPMENT

Innovations in computing, robotics, artificial intelligence (AI) and digitisation are disrupting our economy and labour market like never before. In addition, changing models for work and work structure are surfacing - the disappearing “job for life”, the war for talent, the rise of the portfolio career, fissured work and an increasingly mobile workforce.

Combined, both forces mean organisations, individuals and educators have a responsibility to ensure the workforce is adequately prepared, by equipping them with the “essentially human” skills of critical thinking, communication, creativity, design skills, collaboration and emotional intelligence – skills cited as most desired by employers in 2020, by the World Economic Forum (WEF) 2016 report, the future of jobs.

Our workforce needs responsive, flexible and agile education interventions, allowing individuals and organisations to upskill quickly and efficiently to deliver competitive advantage in a business landscape where change is the only constant.

www.tcd.ie/tangent/education/shortcourses/

Our short courses will reflect the changing needs of work and enterprise, by offering professional development in the areas of creativity, innovation, design skills and entrepreneurship.

Applying the design thinking process, we work collaboratively with individuals and organisations to deliver the skills employers need. Our programmes are designed using modular learning blocks that can be combined in new and interesting ways to assemble innovative, customer-centred, dynamic programmes - whether driven by strategic focus, market demand or societal needs.

Professional education offerings include open training, boot camps, masterclasses and events for individuals, and tailored in-company programmes for organisations, with on-demand delivery options from CPD masterclasses and bootcamps to more intensive certificate programmes.

Contact
Joan Connolly

To discuss your individual or organisational needs, or our short courses, contact Joan.

Joan.Connolly@tcd.ie
(01) 896 2498
OUR PROFESSIONAL PROGRAMMES INCLUDE:

- Research Innovators Programme
- Building the Organisation of the Future
- Humans, Technology & the Future of Work
- Digital Disruption – Leading for Change
- Creative Thinking – Innovation Solutions to Complex Problems
- Business Model Innovation
- Embedding Innovation as Strategy
- Developing a Growth Mindset Organisation
- Adopting a Startup Mentality
- Building Innovative Teams
- Change Management – Innovate or Die
- Employee Engagement and Motivation
- Leading Innovation – Developing an Innovation Culture
- Design your Future
- Corporate Entrepreneurs – A Complete Toolkit
- Critical Thinking
- Creative Problem Solving
- Customer Discovery – A Human-Centred Approach
- Storytelling for Stakeholder Engagement
NEW FLOOR
TANGENT, TRINITY’S IDEAS WORKSPACE

Opening in May 2019 Tangent, Trinity’s Ideas Workspace is a new space on Trinity’s main campus for the exploration of innovation and workshopping of entrepreneurial ambitions.

RECEPTION AND HOTDESKS
Welcome to our Workspace! Our Community and Events Manager will welcome you to our space and can show you around. Our reception area is a welcoming area for events with hotdesking tables for our visitors to check-in on emails and recharge devices, you can also read about Tangent programmes, activities, and impact.

STUDENT SPACE
As part of our reception area we have a dedicated space for students to hold small student managed innovation and entrepreneurship meetings. Tangent are working with TES and Enactus to design a space that will support Trinity’s entrepreneurial student societies.

TANGENT TEAM OFFICE & TANGENT LIBRARY
Where the Tangent team imagine, collaborate, and action programmes and activities to deliver on the Tangent mission. The Tangent Library is a quiet space on the floor for Tangent staff to have confidential conversations with our community members and innovation partners.

CLASSROOMS & MULTI-PURPOSE ROOMS
Our dynamic learning spaces can be configured in multiple ways to enable different environments that enable and enhance the educational experience. These rooms can be classrooms, meeting rooms, ideation spaces, group work, showrooms, presentation spaces, and many other options.

COFFEE DOCK
The Tangent coffee dock is a place to refresh and meet with people – both prearranged and serendipitous!

Our Floor will officially open on May 27th 2019. Join Us – www.tcd.ie/tangent/events
The Tangent Floor will be co-located in the new Trinity Business School on Pearse St.

Contact Alan Weldon
Alan.Weldon@tcd.ie
(01) 896 4480

If you would like more details on the Tangent Floor, contact Alan.

MAKER SPACES
Tangent maker spaces are collaborative workspaces for prototyping, making, learning, exploring and utilising high tech tools (including 3D printers, heatpresses) and no tech materials (cardboard, pipe cleaners, building blocks). Our maker spaces are community operated and enable people with common interests in software, machining, engineering, technology, education, science, art, electronics, fabrication, or craft to socialise and collaborate on projects.

MEDIA ROOM
Tangent’s media room is a green room for the production and editing of video content, online course material, remote deliver, podcasting, interview recording, and all things media related. Its available to anyone in the Tangent community to reserve and create content.

LARGE SCALE EVENT SPACE
Holding up to 250 people, Tangent’s event area is a unique space in Trinity to support events and activities that reinforce Dublin’s position as a thriving startup ecosystem. It is open to all events that support an innovation and entrepreneurship agenda. The space can be configured for a drinks reception, networking, show-case, meetups, fireside chats, theatre, gala, lounge, any many more. Contact Tangent’s Community and Event manager to find out more.

HANGOUT AREA
The hangout area is somewhere for people to meet for a casual sitdown. The space is setup for chats where you can then work through ideas by stepping into the co-located ideation space.

IDEATION SPACE
Whiteboards, building blocks, sticky notes, huddle spaces – anything to spark ideas and work through to a plan. This space is not bookable and is open to anyone and everyone who just needs a place to bring an idea to life.

CO-WORKING SPACE
Our co-working space is available to book through our Community and Events manager and is somewhere for startup companies to base themselves for anything from an hour to a few weeks. This space will also hold our accelerator teams and alumni startups.
In January 2018, Trinity announced its foundation innovation partnership with Bank of Ireland enabling collaboration to create a distinct entrepreneurship culture among Trinity’s students and create an innovation powerhouse.

The partnership has supported the development of the new undergraduate certificate, as well as the expansion of existing programmes such as LaunchBox and new programmes such as Tangent Pioneers.

The collaboration with Bank of Ireland has been a partnership in its truest form and Bank of Ireland continues to contribute to our programmes through mentorship, guest speaking slots, panel participation, judging of programmes, and programme development.

The partnership with Bank of Ireland has inspired new programmes that would not have been possible without the support of the Bank. Moving into the Tangent Workspace will provide further opportunities with Bank of Ireland and we look forward to collaborating across the coming academic year.
Tangent Innovation Partners also include;

BLACKSTONE LAUNCHPAD
Blackstone LaunchPad is a campus-based experiential entrepreneurship programme open to students, alumni, staff and faculty offering coaching, ideation and venture creation support. It is modelled on a successful programme originated at the University of Miami and was further developed and expanded by the Blackstone Charitable Foundation. Our goal is to introduce students to entrepreneurship, help them develop entrepreneurial skills and enable them to independently achieve success in whatever venture they pursue.

The Trinity – Blackstone LaunchPad partnership has empowered students while they are in university to build on their ideas; gain skills that will be useful to them in employment, and contribute meaningfully to the economy.

HUAWEI
Tangent is collaborating with Huawei on Machine Learning and Computer Vision.

ALLERGAN
In 2019, two Trinity research students will be awarded the Allergan Innovation Award including seats on the Postgraduate Certificate in Innovation and Entrepreneurship and research funding to apply learnings from the programme.

THE WALTON CLUB
In 2018 Tangent collaborated with Trinity’s Walton Club, Bank of Ireland, Fighting Words and the HEA, to run STEAM&ICE, the secondary school summer camp teaching STEM concepts and creative viewpoints to explore innovation, creative thinking, and entrepreneurship.

Find out more about connecting with Tangent’s Programmes. We’re looking to partner and collaborate on:

- Themed Innovation Challenges & Hackathons;
- Mentoring; Guest Lecturers and Panellists; Industry Accelerators; Meetups & Fireside Chats; Breakfast Briefings; Professor of Practice Programme.

Our Innovation Partnership programme includes:

- Annual Tangent Innovation Partners Lunch;
- Free corporate hire of Tangent’s flexible innovation event space which holds up to 250 people;
- Invitations to key events and launches at Tangent;
- Discounted masterclasses, bootcamps, and company specific innovation challenges that upskill in areas of innovation, intrapreneurship, change management, and leadership;
- And many more.

Contact Gavan Drohan
If you would like more details on our innovation partnerships, contact Gavan.

Gavan.Drohan@tcd.ie
(01) 896 2342
Gavan is Head of Student Entrepreneurship at Tangent. He has extensive experience working with early stage start-ups having previously run the acceleration programme for Wayra, Telefonica’s Dublin-based accelerator. Gavan’s background includes roles as a founder in the areas of mobile application development, advertising and consulting alongside senior corporate roles. Red Planet, the start-up consultancy he co-founded was acquired by Deloitte on 2017. Gavan holds a BSc in IT and MSc in Internet Systems from DCU.

Gavan Drohan  
Head of Student Entrepreneurship  
gavan.drohan@tcd.ie  
(01) 896 2342

Alison is the programme manager for LaunchBox, Tangent’s Student Accelerator, and is always keen to hear the next great idea. Alison leads mentorship programmes, Women Who Wow, and is involved with a number of other innovation and entrepreneurship projects. A graduate of Trinity, she also has an MSc. in English Literature from the University of Edinburgh.

Alison Treacy  
Student Accelerator Programme Manager  
alison.treacy@tcd.ie  
(01) 896 8543

Joe manages Tangent’s student entrepreneurship activities and the Blackstone LaunchPad programme, which involves hackathons, sprints, & workshops. As a LaunchBox alumnus with a fresh understanding of the student entrepreneurial experience in Dublin, his focus is on empowering innovative and entrepreneurially minded Trinity students from all disciplines through mentorship and focused programs.

Joseph Lanzillotta  
Student Entrepreneurship Programme Manager  
joseph.lanzilotta@tcd.ie  
(01) 896 2342

As Academic Director Jake oversees the undergraduate and postgraduate programmes at Tangent. This involves aligning the innovative teaching and learning practices at Tangent with college policy and accreditation processes. In addition, this post provides the opportunity for him to pursue his passions for innovation, technology, design thinking and educational reform.

Dr. Jake Rowan Byrne  
Academic Director  
jake.byrne@tcd.ie  
(01) 896 4480

Mick, as the Marketing & Communications Manager, brings an in-depth knowledge and a powerful blend of traditional and digital marketing expertise. He graduated from DCU with a MSc. in Digital Marketing and is a former graduate of DIT with a MSc. in Marketing Management. He is a regular speaker at national and international conferences on Marketing, Digital Marketing, Business Strategy, and Supply Chain Management.

Michael Lynham  
Marketing & Communications Manager  
michael.lynham@tcd.ie  
(01) 896 2342

Joan leads on Tangent’s short courses and professional development programmes. Joan helps organisations develop a future-ready workforce, by offering customised and open professional development programmes in areas such as creativity, growth-mindset, innovation, critical thinking, collaboration and communication.

Joan Connolly  
Lead, Professional Development Programmes  
joan.connolly@tcd.ie  
(01) 896 2498
**Dr. Daniel Rogers**  
Lead, Tangent Education Programmes  

Dan leads on certified education programmes for Tangent. He designs transformative learning experiences that empower multidisciplinary teams to achieve creative and innovative outcomes. He holds an M.Ed in Teaching and Learning in Higher Education, and a PhD in Experimental Psychology.

✉️ daniel.rogers@tcd.ie  
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**Dr. Barbara Harvey Carroll**  
EIT Innovation Communities Manager  

Barbara is the EIT Innovation Communities Manager. She supports Trinity’s staff, students, startups, and industry partners to engage with the three KICs that Trinity is involved with; EIT Health, EIT RawMaterials and EIT Climate-KIC. Barbara has a PhD in Biological Chemistry from University of Cambridge and an MBA from INSEAD.

✉️ barbara.harvey.carroll@tcd.ie  
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**Allyson Lambert**  
Springboard Programme Coordinator  

Allyson is Tangent’s Springboard Programme Coordinator. She has worked in Training Delivery and Design for a decade along with a successful career in mentoring and coaching. She was a member on the Council of Gaisce, The President’s Award, for a 3 year term for her work with marginalised youth. As Gaisce Gold Award Holder, she is always looking for the next challenge, and climbed to Everest Base Camp in September 2017. She holds B.A. Hons in Humanities majoring in Psychology from DCU.

✉️ allyson.lambert@tcd.ie  
📞 (01) 896 4811

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**Louise Andrews**  
Education Programme Manager  

Louise designs, manages and delivers innovative and engaging learning experiences on postgraduate programmes in Tangent. She facilitates business model generation and value proposition design for new venture creation and customer discovery. Louise is also the programme manager for the Postgraduate Certificate in Creative Thinking, Innovation and Entrepreneurship, which includes Tangent’s unique Return to Work programme.

✉️ louise.andrews@tcd.ie  
📞 (01) 896 4367

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**David Corish**  
In-House Designer  

David is the graphic designer for Tangent, and is responsible for all of the print and digital collateral across the unit, as well as its overall visual identity. A History & Economics graduate of Trinity, he also has an MSc. in Design & Digital Media from the University of Edinburgh.

✉️ david.corish@tcd.ie  
📞 (01) 896 2342

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**Alan Weldon**  
Operations Coordinator  

Alan is the Operations Coordinator at Tangent. He is the first point of contact for many enquiries and can usually be found in the background assisting with the day-to-day needs of the unit and its clientele. Alan is an alumni of our Springboard Postgraduate Certificate Programme.

✉️ alan.weldon@tcd.ie  
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Tangent, Trinity’s Ideas
Workspace is supported by

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Bank of Ireland

Blackstone
LaunchPad