Running order
Wednesday 21st October 2020

09.30  Professor Jürgen Barkhoff  
        MC & Vice-Provost/Chief Academic Officer

09.40  EU Commissioner Mariya Gabriel  
        Commissioner for Innovation, Research, Culture, 
        Education and Youth

09.50  Mr Simon Harris, TD  
        Minister for Further and Higher Education, Research, 
        Innovation and Science

09.55  Ms Niamh McKay  
        4th Year Undergraduate Student in Political Science and 
        Geography and former Students’ Union Education Officer

10.05  Dr Patrick Prendergast  
        Provost & President

10.15  Ends
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Students should leave this university educated in their chosen discipline but also motivated to use their talents to be active, reflective participants in society.
In May 2013 the Trinity Education Project was first mentioned at the University Council. It was in the context of renewing the undergraduate curriculum in the next strategic plan. Many questions were asked: Does it make sense to talk of Trinity’s ‘undergraduate curriculum’? What, if any, are the common objectives of undergraduate programmes?

When this university was founded there was one BA course. Over the years many new specialisms have been created, and many professional courses added. We set out to identify the common objectives of the university’s current programmes – all 176 of them.

The University Calendar had a section on ‘The educational objectives of the moderatorship’, and this gave us the foundations to build on. There was considerable interest in our discussion when we took it around to the school committees. Professor Kevin O’Kelly (the then Dean of Students) and I had perhaps 40 meetings across the college, with the aim of coming up with the Trinity Graduate Attributes. This was an essential first step because the project could not set out its workplan until there was a consensus about what we were trying to achieve.

We agreed that there would be four attributes

1. To think
2. To communicate
3. To grow
4. To act

and that each would be made more specific by adding an adverb. I recall that ‘to think critically’ had many advocates but, in the end, ‘to think independently’ won out because it reflects the independence of mind we hope for in our graduates. ‘To communicate effectively’ encountered no opposition, but it was emphasised that it includes writing and oral skills, as well as visual skills and abilities in electronic media. ‘To grow’ became ‘To develop’ because growing was seen as organic and inevitable and not emphasising sufficiently the individual student’s agency; in the end ‘To develop continuously’ was agreed.

How to act? Morally? Ethically? With resilience? I enjoyed the debate around this, particularly that you could be wrong and resilient at the same time. ‘To act responsibly’ was agreed. Although ‘responsibly’ may be thought of as somewhat dull I am ever more sure that it is exactly the right word.
We set the goal that every programme would imbue students with these attributes. Students should leave this university educated in their chosen discipline but also motivated to use their talents to be active, reflective participants in society.

As work progressed on the Trinity Education Project – or TEP as it became known – it soon became clear that the need for change was pressing. Certain legacy structures were impeding student learning and only a major project could create the change we wanted. It was necessary to re-emphasise what is important in a Trinity education, to restate the values, and to remodel the overall curriculum to achieve them.

The project was taken up enthusiastically by many faculty members and professional staff, supported every step of the way by the student representatives. A wave of creativity ensued. The Project Sponsors since the beginning have been the Vice-Provosts/Chief Academic Officers, starting with Professor Linda Hogan from 2013 to 2016, followed by Professor Chris Morash from 2016 to 2019, and finally Professor Jürgen Barkhoff who completed the project this year. The Project Managers did a fantastic job: Fedelma McNamara and Sheena Brown. It would be impossible to mention by name all the others who contributed, but I would like to single out the three Senior Lecturers/Deans of Undergraduate Studies, Professors Patrick Geoghegan, Gillian Martin, and Kevin Mitchell. Their roles were critical at various stages in resolving the many thorny issues that bedevil reform of undergraduate education; from harmonization of assessment schemes across departments/schools without which flexible pathways could not function, to the introduction of a fixed timetable which enables the Open Modules and Trinity Electives. I thank them and all who contributed on behalf of current and future students.
Trinity Joint Honours, our new two subject offering introduced in 2019, is the second cornerstone of curriculum renewal undertaken over the last few years. It is complementary to the Trinity Education Project, builds on its many innovative features and maximises the opportunities they offer. It makes optimal use of the flexibility of the new Curriculum Architecture and its various pathways. Choice and freedom is its defining hallmark.

Joint Honours courses are especially attractive to students with a broad intellectual appetite. Choosing two subjects gives them the opportunity to combine different perspectives and ways of understanding the world. But interests develop and the journey of learning and discovery can lead into unexpected directions. To think independently and to grow continuously, two of the graduate attributes at the heart of a Trinity Education, encourage and foster precisely the inquisitive and flexible mindset that the structures of Trinity Joint Honours respond to. During their four years of study, students can continue on the Joint Honours pathway they initially chose and study both of their subjects equally. They can also shift
emphasis more to one subject and graduate with a Major or Minor combination, or indeed focus on only one subject and graduate with a Single Honours degree. This flexibility and freedom also extends to a study abroad period, which has become a lot easier for many subjects and combinations. And students of Trinity Joint Honours can make maximum use of the opportunities Trinity Electives and Open Modules offer.

When Trinity Joint Honours was launched in 2019, it included 22 subjects, mainly from the Arts & Humanities, with some also from the Social Sciences and the Sciences. On offer currently is a total of 109 combinations. Modern languages feature prominently, reflecting their growing importance in an ever more interconnected world, and many attractive combinations are available for the first time: Film Studies & History, Middle Eastern, Jewish and Islamic Civilisations & Music, Mathematics & Irish or Ancient History and Archaeology & Geography are just a few examples of these new possibilities.

From the outset Trinity Joint Honours was designed to be open to expansion, and earlier this year we decided to increase greatly the participating subjects and the number of combinations available. From 2021 onwards, new subjects such as Linguistics, Law, Business, Political Science, Social Policy and Computer Science will become part of the Trinity Joint Honours programme, considerably expanding the range of exciting new combinations and bringing their overall number to well over 160.

Trinity Joint Honours is well set up to be our innovative and adaptable flagship programme in the Arts & Humanities and beyond for many years to come. It offers our students exciting journeys of discovery which combine depth with breadth and prepare them for successful and fulfilling lives and careers as responsible citizens of the world.
The Trinity Education Project journey began with the articulation of the Trinity Graduate Attributes: to think independently, to communicate effectively, to develop continuously and to act responsibly. Core to their development was a recognition that these attributes should not just be aspirational or ‘nice to have’; rather students in all programmes of study across the university, from Engineering to Science to History to Law to Modern Languages, should be provided with opportunities to develop the knowledge, skills and competencies underlying the attributes both through the curriculum and their co-curricular activities. From this starting point emerged a set of shared curriculum principles underpinning undergraduate education across the University: the Trinity Curriculum would provide structured, but flexible pathways through a degree; it would be programme-focused and research-centred; it would employ a range of teaching, learning and assessment strategies, supported by appropriate technology-enhanced approaches.

So, what does it mean to have structured, but flexible pathways and why are they important to a Trinity Education?

TEP has designed a suite of programme architectures, each tailored to the requirements and distinctiveness of particular types of undergraduate programme and each defining clear and coherent study pathways for students from admission to graduation. Thus, there is the ‘Common Architecture’,
encompassing degree programmes in Arts, Humanities and Social Sciences, the ‘Science Architecture’, the ‘Professional Architecture’ (for professionally accredited programmes), and the ‘Clinical Architecture’. Where appropriate, the principle of flexibility in pathway choice enables students to change pathway during their degree programme within clearly defined parameters. This has been achieved by decoupling entry and exit routes in programmes across the Arts, Humanities and Social Sciences, meaning that a student who enters Trinity to study a two-subject combination may exit with a Joint Honours, Single Honours, or Major with Minor degree, depending on the number of credits accumulated in the subject/s at the appropriate academic level. This type of flexibility offers something new to Trinity students by recognising that their expectations, academic interests and strengths can evolve as they progress through a programme of study and are exposed to different subjects and types of learning. It also devolves more choice and, critically, more responsibility to students in terms of navigating their study trajectory towards their final degree.

Whilst each of the programme architectures and the pathways within these architectures remain distinctive, all ensure an appropriate balance between depth and breadth within the subject and enable students to experience some breadth outside their core subject/s, particularly in the Freshman years, through taking Open Modules, Trinity Electives, embarking on a new minor subject, or engaging in interprofessional learning. Programmes are structured on the principle that first and second years provide a broad foundation for more specialist, in-depth study of a subject or subjects in the third and fourth years. This approach maintains disciplinary integrity and coherence, whilst exposing students to the different ways of thinking, learning and communicating within other disciplines, ultimately enriching how they engage with their home discipline/s and how they grow intellectually. Students can also draw on this depth and breadth and showcase the knowledge and skills which they have developed within their programme of study, when writing their final-year capstone project.

The fact that each architecture is underpinned by a shared internal structure and that all architectures are linked by shared progression regulations means that it is easier to add new subjects and subject combinations to the suite of undergraduate programmes. In this way, the Trinity Curriculum will develop continuously, offering new and innovative study opportunities to its students in the context of an ever evolving educational landscape.
Every university is different. At Trinity College Dublin, our distinctive ethos, environment and educational approach are characterised by the seven features that collectively describe the uniqueness of the Trinity Education.

When students choose to attend Trinity, they embark on a new educational journey with us. They may be school leavers, international students, mature students returning to education or students who require additional supports to meet the challenges of higher education. We help them to make the transition to their new environment by being Partners in Learning. At Trinity, students develop a teaching and learning relationship with academics during their degree through innovative teaching methods and creative assessment methods, and have the flexibility to navigate through different potential degree pathways to meet their personal academic goals.

Learning within the lecture theatre, laboratory or library is complemented and enhanced by student involvement in societies, sports, internships and volunteering. Through the Co-Curriculum Reflection feature, we have developed a tool that students can use to identify how these activities shape their personal and academic development.

While studying at Trinity gives students the opportunity to develop a depth of expertise in their chosen subject area, we acknowledge the importance of placing an academic discipline within a wider context and thus the value of breadth within our education.
within our education. **Open Modules** allow students to explore topics outside of their core discipline but aligned to and complementary to it. **Trinity Electives**, on the other hand, give students a free choice of a wide range of exciting topics encompassing diverse languages and cultures, Trinity’s ground-breaking research, and key societal challenges, exposing students from different disciplines across the College to the latest developments in each other’s fields.

The breadth in our curriculum produces graduates with an informed and wide-ranging outlook that is enhanced by opportunities for **Global Mobility**. Students can enjoy the rich personal and academic development that comes from the experience of studying abroad or, when in Trinity, by studying alongside students from a variety of backgrounds and cultures. Looking to the future, our students are supported in developing research and leadership skills that enhance their **Employability**, preparing them for life after their degree and for a variety of possible careers.

The **Capstone Project** undertaken in the final year is the crowning achievement of a student’s Trinity Education, supported by the other features and by a student’s prior learning. It gives each undergraduate student the opportunity to contribute meaningfully to the development of their subject by undertaking a substantial piece of independent research alongside Trinity’s world-leading academics.

By embedding these features within the curriculum of every student, we enable each of them to develop Trinity’s Graduate Attributes: to think independently; to communicate effectively; to develop continuously; and to act responsibly. The distinctiveness of the Trinity Education means that our graduates are equipped to face whatever their future holds and to play their part in addressing the challenges of our changing world.
Trinity students learn much outside the lecture theatre or lab as part of their University experience. The Trinity Education Project shone a light on the importance of the learnings that take place during co and extra-curricular activities and to augment those learnings it developed a simple tool to help students reflect on the experience, and to capture and articulate the learnings: the Trinity Guided Reflection.

At Trinity there is a long history of student participation in clubs and societies from debating, music, politics, all sorts of sports and arts and culture, as well as clubs related to the student’s academic interests. Students also express their voices in activism and bring their passion and talent to volunteering activities, making connections, honing their abilities, taking leadership roles and finding their voice to contribute to our society in many ways. Former Taoiseach, Leo Varadkar is a good example; while studying medicine he was very active in debating and political societies which he has credited in formation of the future politician, as well as medical practitioner. Many students are currently active advocates for climate action and a more sustainable world, working with the College to generate a better understanding, develop better behaviours and spread the message for action. Internships in a student’s chosen field bring experience in practical application of their learnings. Even part-time or summer jobs unrelated to their studies can bring experiences that resonate with the skills being developed through studies and college life and the attainment of the graduate attributes of independent thinking, effective communication, responsible action and the ability and readiness to constantly develop.

The Trinity Guided Reflection Tool is designed to help students through a reflection on an experience; reflecting on how that experience or activity helped development of each of the graduate attributes.
It is very simple to use, downloaded as an interactive pdf from a supportive webpage, saved to the student’s own files. It is readily accessible to all students, taking them through a series of prompt questions to help identify how the activity developed each of the attributes and then through the stages of a reflection: description, feelings, analysis and further action. Lastly, and importantly, it helps them reflect on the exercise, which in turn helps them capture and articulate the learnings from the experience. This is so important in building confidence, resilience and the ability to incorporate the experiences into their personal profile.

Reflection is an important part of the learning process and the more students become familiar with practicing reflection, the better also for course work; the Guided Reflection can therefore also act as a primer for student engagement with reflection more generally.

The benefits to the student include:
- Helping to realise, capture and articulate what they have learned from any experience, and what they have gained on a personal level.
- Developing the skill of critical thinking, so valuable for personal development during their time at University, and through their life, building resilience and confidence.
- Helpful in CV building and preparation for interview.
- Using the completed reflections to apply for one of Trinity’s awards for co- or extra-curricular activity.
- Students can obtain a Certificate of Completion once a number of reflections have been completed as a demonstration of their reflective practice.

The tool is presented in a series of web pages with links to resources, information on how to receive feedback, how to apply for scholarships and awards, sample reflections and how to obtain a certificate of completion (see https://www.tcd.ie/students/reflection/).

The Trinity Guided Reflection was developed with input from, and consultation with, academic practitioners in reflection, student groups who gave excellent feedback, and those from across College involved in mentoring, volunteering activities, careers, sports and other clubs and societies. A very important part of the work has yet to happen; it is very important that more students explore the guided reflection and benefit from it. With the supports that have been established and a plan to evolve the tool in line with student needs, it will continue to evolve and bring benefit to individuals and to the whole community.
Underpinning the Trinity Education is a renewed focus on the student-academic relationship, as well as the active role that will be played by the student in shaping their own education while at Trinity. At the core of Partners in Learning is that students are active, independent agents in their own education. It places responsibility on students to own their educational experience, which is starkly different to their secondary educational experience, and manifests itself in multiple ways: through the increased flexibility in the programme pathways that students can choose when they enter the University and the wide choice of modules that students can take outside of their own disciplines (Trinity Electives and Open Modules), culminating in the Capstone Project where they have the opportunity to become active agents of their own discipline, pushing the frontiers of knowledge.

In terms of the pathways, we have made some changes, to the programmes in the Arts and Humanities in particular. Students who enter in a Single Honours pathway will now have the chance to take up a new subject in second year. If they choose, this subject can be continued through years three and four, so that the students can graduate with a minor award in that new subject and a major award in their primary discipline. In their first year, students will learn more about the variety of subjects available to them, enabling them to make an informed choice, even for subject areas that might have been obscure to them as school leavers. Students on a Joint Honours pathway have a choice that can lead them to various exit routes and degrees. They could continue to study both of their two subjects and they get a chance to explore Open Modules and Trinity Electives and see some perspectives from other disciplines. They could just continue their two subjects but concentrate more on one than the other; or they could concentrate exclusively on
one of those subjects, take some Open Modules and Trinity Electives and then graduate with a Single Honours degree. Through these choices, students are taking control of their own pathway through the University depending on what their interests are – they are choosing not just particular modules but to concentrate on one subject or another or even to take up an entirely new subject.

One of the underpinning aspects of the whole Trinity Education is the idea of balancing breadth and depth. At Trinity we value and have always espoused a research-led education. Students are taught by faculty who are active researchers in their fields, and they are not just exposed to the corpus of knowledge in the field but trained in the methods used to acquire and evaluate it.

The objective is to go beyond just teaching students about the subject matter of, say, economics, history, or genetics: to also teach them how to work and think like an economist, a historian, or a geneticist. Even if the student does not go on to a career in that field, the exposure to the deep workings of a given domain and the requirement to engage at that level of intellectual rigour cultivate the transferable skills of critical thinking that are so valuable in any enterprise.

This can come at a cost, however. Thinking like an economist, a historian, or a geneticist is fine – those are hugely powerful and successful approaches to their respective domains. But they are not the only ways to think about the subjects that concern each discipline. The danger in a highly specialised education is that students will develop too narrow and blinkered a perspective, that their ways of thinking will be worn into certain tracks or ruts – the same tracks and ruts that each discipline has been in for decades.

One of the real benefits of the breadth elements introduced by the Trinity Education is the exposure to a different way of thinking, giving them a chance to emerge and look around, explore new subject areas, pull together ideas in their own minds, and see connections that might otherwise go unnoticed. But beyond the specific facts and ideas that they may learn about, a deeper pay-off is exposure to a range of intellectual perspectives.

Intellectual travel can be such a consciousness-raiser. The new features of the Trinity Education will foster a mindset of curiosity and confidence and help to cultivate the attributes of truly independent thinking, ethical awareness, effective communication, and continuous intellectual development that are core to a Trinity undergraduate education.
Trinity Electives and Open Modules are new modules introduced as part of the curriculum to broaden the perspective of our students. These features will provide a balance of breadth to the depth of knowledge they will acquire through their chosen discipline, culminating in the Capstone Project.

At Trinity, our educational ethos is centred on research-led teaching. We want to make our diverse range of world-leading research and scholarship available and accessible to all students. That is why we have developed the Trinity Electives.

Trinity Electives
Studying at Trinity College Dublin gives students the opportunity to develop a depth of expertise in their chosen subject area; a university environment should also encourage them to branch out from their core discipline to broaden their knowledge, and their perspective. At Trinity, our educational ethos is centred on research-led teaching. We want to make our diverse range of world-leading research and scholarship available and accessible to all students. That is why we have developed the Trinity Electives.

Trinity Electives are stand-alone modules, with no pre-requisites, which may be taken by undergraduate students from across the University in their 2nd and 3rd years. They are weighted at 5 ECTS, and are taught and assessed within one semester.

These standalone, institution-wide modules will enable students to learn with students from disciplines from across the University, providing them with an opportunity to collaborate with each other and benefit from their
different perspectives. For example, an Arts student will be learning side by side with Science and Engineering students, each bringing their own personal experiences and discipline perspectives. As there are no pre-requisites for these modules, each student will be learning at the same pace.

The availability of a large set of Trinity Elective modules allows students to choose from a range of modules that engages them with Trinity’s ground-breaking research, enables them to experience diverse languages and cultures, and encourages them to consider how we can address key societal challenges. Some examples from the Trinity Electives set that illustrate this range of choice are:

- Vaccines: Friends or Foe?
- Ancient Culture Lab: Homer’s Experience and the Greek Language
- Toolkit for a Smart and Sustainable World.

The modules are run using a blend of traditional and online approaches to give students the experience of a variety of teaching, learning and assessment methods.

Each Elective has been designed to help students develop the Trinity Graduate Attributes: to think independently, to communicate effectively, to develop continuously, and to act responsibly. To find out more, go to our Trinity Electives website (www.tcd.ie/trinity-electives).

Open Modules
Knowledge does not fit neatly into one discipline – Open Modules recognise this.

Open Modules are modules that are taught as part of other programmes but are complementary and related to a student’s own programme of study. Taking Open Modules will allow students to broaden their perspective on their core discipline(s) through exposure to knowledge, skills and ways of thinking associated with related fields.

Open Modules are deliberately chosen by the Programme Coordinator, to complement the subject area and to advance the core learning for students on their programme. The modules in the Open Modules set that are made available for a programme are existing modules from another programme, or bespoke modules from a complementary discipline that have been designed to offer an accessible introduction or overview of a subject area for non-specialists.
Each programme has its own set of Open Modules that a student can choose from. A student’s choice of Open Modules is from this set of modules selected for their programme rather than the free choice available to them as part of the Trinity Electives.

For example, a student of English could choose to take the “Introduction to Film Analysis” module offered by the School of Creative Arts. Or a student of Theoretical Physics could choose to take “Introduction to Programming” from the School of Computer Science and Statistics.

Modules are weighted at 5 or 10 ECTS. 5 credit modules are taught and assessed within one semester; 10 credit modules may be taught and assessed over one or two semesters. The number of Open Modules a student may take varies according to their programme.

Open Modules will provide students with a wealth of opportunities to enrich the study of their core curriculum and to develop the Trinity Graduate Attributes.

Through both Trinity Electives and Open Modules, our students will be provided with opportunities to take modules from other disciplines and to follow their own interests and be exposed to a range of intellectual perspectives. Our staff will have the chance to present their research to a wider audience and to interact with staff from other disciplines. Through these features, Trinity has committed to balancing depth with breadth in a meaningful way of lasting benefit to both students and staff.
Global Mobility is defined as any international experience that is closely aligned to a student’s programme of study, approved as a formal mobility programme by the relevant School and normally at least four weeks in duration. Over the past number of years, Trinity has established collaborations with some of the world’s leading universities. For Trinity students, this means access to a network of more than 300 exchange partners and the option to spend all or part of their third year abroad. Trinity students can study across Europe under the Erasmus Programme or further afield to the US, China, Australia, India, Africa, the Middle East and elsewhere as part of the international exchange programme. An increasing number of overseas internships and short programmes as well as clinical and research placements are also available. Students do not pay additional tuition fees and can compete for Global Mobility Bursaries to off-set the costs of travel. Students undertaking a mobility programme in Asia or Africa are also eligible for the Provost’s Asian and African Travel Bursaries.

The number of students at Trinity studying abroad has significantly increased in recent years, with now just over 39% of the graduating cohort of students undertaking an international experience during their degree programme. This is an increase of 10% over the past 5 years and demonstrates the strong progress towards the strategic objective to ensure that 50% of the graduating undergraduate cohort will have had an international experience while studying at Trinity by the end of the current Global Relations Strategy in 2023/24. Our new Global Relations Strategy, launched in February 2019, puts a renewed emphasis on outbound global experiences.
mobility. In a world where our graduates will need to address many global challenges, it is important that their university education equips them with the ability to work with other cultures and countries. The Global Relations Office continues to develop new student mobility opportunities and strives to work with academic coordinators to remove barriers and offer an increasing number of bursaries. In addition, the changes brought about by the Trinity Education, in particular the move to a semester-based system and changes to the grade point average (GPA) requirement, will facilitate and enhance student mobility.

The coming academic year will be challenging with many Erasmus and international exchange arrangements impacted by Covid-19. We remain hopeful that a larger cohort of students will have the opportunity to have an international experience in the second semester but empathise with those whose programme has been cancelled or time-limited. Studying abroad is an important part of a Trinity Education and students who undertake global mobility programmes have the opportunity to develop sought after skills and attributes such as linguistic skills, intercultural competencies and global citizenship. These demanding times require us to be as flexible and innovative in our approach as possible, and we continue to explore new ways of facilitating mobility.
Skills such as digital and learning agility, a capacity to work with ambiguity, flexibility and resilience are becoming essential for the new world of work.

The world of work is changing. Globalisation, digitalisation, changing lifestyles and new consumer preferences mean jobs and careers are being transformed with the pace of change rapidly accelerating due to the COVID-19 global pandemic. While this brings uncertainty and many challenges and risks, it also brings great opportunities, all of which demand a new approach to work.

It is now more important than ever to focus on employability and to adopt a lifelong approach to learning so we are prepared to meet the needs of the workplaces of the future. Skills such as digital and learning agility, a capacity to work with ambiguity, flexibility and resilience are becoming essential for the new world of work.

Trinity graduates are among the most employable in the world according to the QS World University Rankings for Graduate Employability 2020, which rank Trinity first in Ireland for employer reputation and alumni outcomes. Trinity is ranked 32nd highest in the world for producing highly successful, creative and world-changing graduates, attributes that are fostered throughout the Trinity education.

Trinity’s distinctive approach to employability has been recognised as one of the key features of a Trinity Education. During their time at Trinity, students get the opportunity to develop skills and attributes that will allow them to succeed not just in their careers but in their future lives as individuals and members of a global society. We are constantly developing unique and innovative ways for our students to develop their skills and enhance their employability. An example of this is the Trinity Employability Award, run in partnership with key employers, which combines industry-led training in specific transferable skills with university-led workshops to enhance student career knowledge and career readiness.
The creation of a connected environment at Trinity involving our Careers Service, Academic Schools, professional services teams and external partners (industry, government, SMEs) has helped to advance employability as an integrated feature of the Trinity curriculum. Engagement with industry allows our students to connect with potential employers and to get exposure to modern and developing work practices through internships and work-based learning. Through engagement with academics they learn how to connect research and education to inspire creativity, collaboration and innovation. Through Tangent, Trinity’s Ideas Workspace, students can avail of a range of programmes and accelerator opportunities to enhance their employability through innovation or entrepreneurial activity. Trinity has ranked 1st in Europe for producing entrepreneurs for the past five years (Pitchbook, The Universities Report, Sept 2019).

Students are supported by the Careers Service to identify and articulate how their learning experiences, both in the classroom (through their programme) and outside (through their co- and extra-curricular activities), contribute to their career readiness and their intellectual and personal development. This is done through careers education, information, advice and guidance with a focus on optimising the use of digital technology to enhance student employability.

The Trinity Education extends beyond the classroom so it is important to reflect on how co- and extra-curricular activities enhance student development and employability. These include participation in awards and scholarship programmes, in Trinity’s 120+ student societies, and 50+ sports clubs, community engagement, volunteering and part-time work.

While no-one can give a definite answer about what the future of work will look like, Trinity’s focus on employability will be vital in ensuring that our students are prepared to make the most of opportunities when they arise allowing them to create the career they have always wanted.
Research is an essential part of what we do in Trinity, and is one of the main factors that makes Trinity the leading university in Ireland and a university of international standing. We are driven by a passion for research and scholarship and this has a fundamental influence on our teaching. Thus, a key feature of a Trinity Education is that every undergraduate student will have the opportunity to undertake research through completing a Capstone Project.

The Capstone Project is the common element across all courses, normally undertaken in final year, and is weighted at 20 ECTS (a third of final year marks). It involves a significant level of independent research by the student. It is an integrative exercise that allows students to showcase skills and knowledge which they have developed across a range of subject areas during their four years of study. It should result in the production of a significant piece of original work by the student. It provides them with the opportunity to demonstrate their attainment of the graduate attributes. Although the Capstone is a common element across all programmes, for some accredited professional courses such as in the Health Sciences where there may be some constraints on course content the expectation is still that students will undertake some independent research.

The exact nature of the Capstone Project will be determined by the specific course being undertaken, since the definition of ‘independent research’ and ‘original work’ will vary between different disciplines. Where possible, students will have input into the choice of the specific topic of their Capstone Project. Depending on the subject area, the Capstone Project could be a research-informed dissertation, a lab-based research project, a recital or composition, a case study, field work with analysis, or the production of a new product or a new piece of software.

The Capstone Project will enable students to showcase their ability to research, to think critically, to analyse and synthesise material, to work in a self-directed way and to engage with methodologies and modes of enquiries. Importantly, through the Capstone Project students have the opportunity to contribute meaningfully to their subject and also to engage in exciting research alongside Trinity academic staff.

Overall, the Capstone Project provides a platform for students to demonstrate their achievement of the Trinity Graduate Attributes. Furthermore, students who have completed substantial independent work as part of their degree tend to be more employable, as well as more prepared for further advanced study.
Research is an essential part of what we do in Trinity, and is one of the main factors that makes Trinity the leading university in Ireland and a university of international standing.
5.0 Trinity Electives Showcase

**Ancient Culture Lab: Homer’s Experience and the Greek Language**

Ahuvia Kahane, School of Histories and Humanities

Have you ever wondered what is the point of studying the past? Is it all Greek to you? What is the use of ancient texts and ‘dead’ languages?

In this module, ‘Ancient Culture Lab’, we look closely at one point in the very distant past and at the early origins of Western civilization, at Homer and the Greeks, at ancient Greek language and culture, at its strange and yet (as we shall see!) familiar words, its structure and its thought.

Love Homer and the ancient Greeks or hate them, they are part of our world, our language, our thought and our lives.

**The Art of the Megacity**

Nicholas Johnson, School of Creative Arts

This elective explores how works of art — including literature, drama, music, film, visual art, and online/digital media — can inform us about the world’s megacities, which are defined as urban areas with over 10 million people. We will also ask whether megacities themselves can be considered works of art, and how experiences of a city can be read as a type of performance. We are reaching across disciplines and faculties to widen students’ horizons in both global and artistic dimensions, using this opportunity to think about how we might contribute ourselves to the city of the future. Cities include Moscow, Tokyo, Cairo, Mexico City, Lagos, New York, Shanghai, and Mumbai.
If you’re reading these words, we have something in common: we’re both human. But what exactly does being human really mean? Are there things that make us uniquely different to the other animals we share this planet with? Can we ever hope to catalogue what these differences are, or discover when, where and why we acquired them? This module explores how 21st century science is seeking to answer the big questions about our origins and about our relationships with each other and the rest of the natural world.

Most of us have some personal experience with cancer – be it ourselves, family, a friend. By 2020, 1 in 2 of us will get cancer in our lifetime. Cancer is the biggest killer in Ireland, with approximately 1 in 3 people dying of cancer-related illness. Despite this, many of us don’t know that much about cancer. This module is for students who would like to know more about cancer: How and why we get cancer? Why is cancer increasing in society, and what can I do to alter my risk? How is cancer detected and diagnosed? Who will make decisions about my treatment? Why are there so many treatment types, and what will work for me? Will I be cured? What if my cancer can’t be cured? What will happen afterwards? Knowledge is our greatest weapon against cancer.
The Chemistry of Periodic Elements

Aidan McDonald, School of Chemistry

This elective will provide an accessible education in the chemical sciences for all. The course will cover the history of the discovery and identification of the elements that make up the modern periodic table, students will explore the elements in a literary context (through Levi’s Periodic Table), and they will dive into the modern roles of the elements and chemistry in society. The elective will also introduce students to the practical aspects of the sciences through hands on experimentation, observation, analysis, and reporting.

Contemporary Art Angles

Philip Napier, Head of Fine Art, National College of Art and Design (NCAD)

This elective will introduce students to the way artists think, construct knowledge, and communicate, verbally and through their work. The idea of creative thinking and action has become so familiar a refrain in our contemporary language that it can seem rhetorical, so it may be of interest to students to understand how in artists’ hands, engagement with different forces and themes are self-generated and often overlap with personal interests. The label of the artist has come to be applied in increasingly generic ways. Is the future for artists’ work under threat now in an increasingly instrumentalized world - does this matter?
Cultures and Societies of the Middle East and North Africa

Anne Fitzpatrick, School of Languages, Literatures and Cultural Studies

A global world needs global citizens, individuals who are well-informed about the cultures and societies of regions of the world which until recently have been regarded as only of indirect relevance to European and Western societies. This module examines Western perspectives on the Middle East and North Africa (MENA). What are the origins, presuppositions and theoretical foundations of these? Having examined Western perspectives, students are given the opportunity to hear the views of undergraduates in universities throughout the MENA region. How do Western interventions and perspectives look from their point of view?

Decoding Genetics: The Building Blocks of Life

Jane Farrar, School of Genetics and Microbiology
Aiden Corvin, School of Medicine

Each human comprises about 40 trillion cells with 3 billion letters of coded information (DNA) in each cell (the human genome) that is essential for our health and which, when defective, causes many disorders. This elective will take students from the basic principles of genetics to the latest revolutionary advances in genomics. New methods of genome sequencing and gene editing are transforming our understanding of biology leading to advances in medicine, drug development, forensic science, bioethics and even our perspective on human evolution. This will have enormous ramifications for society. This elective will inform students on the human genome, the current state of knowledge and likely future developments allowing them to contribute to a wider societal debate.
Design Thinking

Jake Byrne, School of Education/ Tangent
Daniel Rogers, Tangent, Trinity’s Ideas workspace

Sometimes we try to solve problems without understanding them from the perspective of those experiencing them. Thinking like a designer can transform the way in which we approach complex societal challenges. Design Thinking is a methodology to solve complex problems and find creative, innovative and desirable solutions.

It is an iterative process in which we seek to understand the user, challenge any assumptions, and redefine problems in an attempt to identify innovative solutions to complex problems that might not be apparent or obvious.

Displacement: Exploring the Human Experience of Forced Migration

Rachel Hoare, School of Languages, Literatures and Cultural Studies

Recognising that forced migration represents one of the key societal challenges of our times, with an average of one person being displaced every two seconds, this elective uses a multidisciplinary approach to provide a theoretical, practical and experiential understanding of the different causes and impacts of forced migration globally and a comprehensive and up to date analysis of historical and contemporary issues in the field. Students will learn about these issues from researchers and practitioners in the field, those working in the creative arts to bring the individuals behind the statistics into focus, the agencies and individuals who support those who have been displaced and, most importantly, displaced people themselves.
The elective will explore how technologies work, why they emerge and how they will affect our future. This elective is suitable for all students. It will give them a new and interesting perspective on how humanity has developed in the past and what the future is likely to bring. The only prerequisites are a sense of curiosity and the willingness to change the way students interpret the world.

In 2016 over half of all global electricity generation was based on fossil fuel. Approximately 5% used wind and solar. But that’s up from less than 1% in 2004. It is not clear that the trend towards low carbon power generation is inexorable. There are many questions which are hotly contested, which need to be considered through critical thinking, rather than sound bites. For example: what are the practical limits of low-carbon energy technologies? How much energy do we need? How expensive is renewable power and is it a price that people can afford? What happens when the wind doesn’t blow, or at night when solar cells don’t work? In this Trinity elective students will address the question of how the global community, and we in Ireland, should generate power for our sophisticated, comfortable, liberal civilization.
Engaging in the Digital World: Today and Tomorrow

Vincent Wade & Rachel McDonnell, ADAPT Centre, School of Computer Science and Statistics

You engage with digital media every day – whether through mobile phones, smart assistants like Alexa, website interaction, games, virtual reality, or smart devices, etc. With or without your knowledge, you are providing information about who you are, what you are doing, and how you are living to these systems, and AI-based algorithms are using your data to make predictions about your behaviour. The future is expected to be increasingly multimodal, where we will use natural modes of communication to interact - speech, gesture, touch, etc. This module will give students a deeper understanding of what lies beneath these digital engagements today and in the future, and will empower them to understand these interactive digital media experiences and to critically evaluate their capabilities.

The EthicsLab: Responsible Action in the Real World

Linda Hogan, School of Religion

We are constantly challenged by ethical dilemmas: about the future use of technology and artificial intelligence; about the possibilities of genetic and biomedical engineering; about the culture and behaviour of global financial institutions; about who decides who should pay for what; about the environment, about migration, about political leadership. Citizens of a democratic society need to make ethically informed decisions about these issues. The EthicsLab is an innovative way to explore ethical issues, where students will learn from professors in different subjects across the university and engage with leading thinkers about how the major global challenges can be addressed. We will debate the importance of values and their prioritization, ethical biases and blind-spots, intentions and consequences, and we will do this in a lab-environment where everyone will be involved in designing solutions for the ethical issues of the day.
From Planets to the Cosmos

Neale Gibson, School of Physics

This module will expose students to key events in the development of modern Astronomy and allow them to recognize that science is an evolving body of knowledge. Students will be able to reflect on how our view of the Universe has changed, especially in the last few decades, and be able to critically evaluate the current ideas, particularly in the light of incomplete data or assumptions. Students will learn about the discovery of thousands of worlds around other stars and the expanding Universe, among others. Finally, this Trinity Elective will address the potential of Astronomy to address problems of the contemporary world.

Hacking Your Health: The Science of Exercise and Fitness

Áine Kelly, Physiology, School of Medicine

Exercise training enables the human body to do incredible things like run 100m in under 10 seconds or finish a marathon in under 2 hours. But exercise science is not just about breaking records - it has the potential to change the health of the world. Research shows that regular exercise can significantly reduce risk of cancer, heart and metabolic disease and improve mental health. Students taking this elective will learn about the science of exercise – from the physiology of elite athletes to how physical activity guidelines shape the health of the general population.
How to Live Long and Prosper: A Lifespan Approach

Nollaig Bourke, School of Medicine

By 2050, over two billion people on earth will be over 60 years old. This increased longevity is one of the major achievements of modern humans, however this increase in lifespan does not necessarily equate with an increase in healthy, disease-free years for everyone. This demographic explosion is pertinent to every person and sector of our society. We will need input from experts across many sectors including medicine, economics, science, technology, engineering, legal, business and humanities to tackle the challenges ahead. Students will learn about some of the key challenges and opportunities associated with our expanding ageing population.

Idea Translation Lab

Mairéad Hurley, Science Gallery Dublin

Our world is in a state of flux: it is the dawn of the information age, the brink of the sixth mass extinction, and we are living in the era of fake-news, trash islands, AI pets and Humans 2.0. How do we solve the problems of a future we cannot yet imagine? In the transdisciplinary Idea Translation Lab, offered by Trinity College’s Science Gallery, students will have the opportunity to get outside their specialist subject area, and work collaboratively at the boundaries of art, science, design and engineering, to develop original ideas and projects where these disciplines meet. This elective is designed to stimulate the development of entrepreneurial, creative and critical thinking skills through collaborative group projects, which may have impact along different axes: social, scientific, cultural and commercial. The module will encourage students to reflect critically on the broader perspectives around the cultural, ethical and economic role of science in society including science policy and the commercialisation of new ideas.
Irish Landscapes: Interdisciplinary Perspectives

Mark Hennessy, School of Natural Sciences

Landscape has a profound impact on our lived experience and quality of life. This module will introduce students to the critical reading of landscape through an interdisciplinary approach. The Irish landscape is the product of a complex and historically dynamic interaction between environment, society, culture and ideology. This elective will provide students with insights and tools to enable them to have a more critical and nuanced understanding of Irish landscapes.

Irish Sign Language

John Bosco Conama, Centre for Deaf Studies, School of Linguistic, Speech and Communication Sciences

Did you know that Irish Sign Language is Ireland’s third official language, after Irish and English? Irish Sign Language is the indigenous language of the Deaf community in Ireland. It is a language like any other language, but it happens to use signs rather than sounds. There are many different sign languages in the world in the same way as there are different spoken languages. Sign languages are fully-fledged natural languages with their own grammar and vocabulary. This Trinity Elective will allow students to develop some communication skills in Irish Sign Language, and explore a range of educational, social, cultural, linguistic, and psychological issues.
Language and Culture (Chinese, French, German, Irish, Italian, Japanese, Korean, Spanish)

Lorna Carson, School of Linguistic, Speech and Communication Sciences

Less than a quarter of the world speaks English. Learning languages opens doors to the other three-quarters – and a world of hidden opportunities. Whatever goals you have in life, personal and professional, being able to communicate in more than one language has many benefits. Developing language skills expands your understanding of other cultures, develops your critical thinking and memory skills, and transforms you into a global citizen who is comfortable and confident wherever you are. For these reasons, learning another language not only helps your university studies, it also gives you transferable skills that are highly valued by employers. As well as learning the spoken and written language, students will also engage with cultural topics relevant to the countries of the languages they are studying.

Language and Communication in the Digital Age

Neasa Ní Chiaráin, Centre for Language and Communication Studies, School of Linguistic, Speech and Communication Sciences

Language determines how we relate to each other. It creates the culture within which we exist and has a major role in determining our self identity. Language is much more than words or sentences – it can be verbal or non-verbal, interpersonal or with a machine. We need to understand how language ‘works’ and how meaningful communication is constructed. This knowledge can in turn be incorporated into human-computer interaction systems. This Trinity Elective will consider how technology may influence the transmission of languages and the implications this may have for minority or endangered languages.
Latin: One Language, Many Cultures
Anna Chahoud, Classics, School of Histories and Humanities

Latin was a living language, and the leading one in Western Europe, for over a millennium: it was a language of power, but also the language in which ordinary people expressed themselves. Latin was also the main form of communication of ideas in the Humanities and Sciences until the early modern period. Acquiring the foundations of Latin empowers you to access a wider English vocabulary, which is significantly Latin based; to enhance your understanding of concepts you encounter in your subjects and in your cultures; to detect the connections between English and modern European languages and the differences between them; to make sense of monumental and private inscriptions everywhere to be seen in urban and rural landscapes across Europe; to encapsulate a personal sentiment in an effective motto. The module expands the intellectual scope of the study of the language to embrace issues of colonialism and cultural transfer, change and continuity, social diversification and artistic use of shared language, the problematic nature of etymology and its ideological implications, and, most importantly, how language shapes the thought and worldview of individuals and nations.

The Politics of Peace and Conflict in a Globalised World
Carlo Aldrovandi, School of Religion

Addressing the complex and evolving nature of war and peace-making has become one of the key societal challenges of our age. As a scholarly discipline, Peace Studies has a particular concern for developing an understanding of the origins of violent conflicts (locally, regionally and internationally) and possibilities for their resolution and transformation, as well as the conditions for building sustainable and just peace. The primary purpose of this module is to introduce relevant concepts and theories and discuss the processes and dynamics of peacebuilding. Our focus will be strongly cross- and interdisciplinary: we will examine the debates taking place within history, political science, international relations, conflict resolution, gender studies and other relevant scholarly fields. The module will also facilitate stimulating conversations between theory and reality, grounding class discussions in detailed case studies.
"We need a whole new way of thinking." Greta Thunberg, 21 February 2019

Whether you want to change the world, or help make your neighbourhood a better place to live, your desire to make a difference needs to be matched with knowledge and skills. Social innovation is the process of developing and implementing effective solutions to social and environmental issues. Students who take this elective will get an understanding of how processes of social innovation work and to develop themselves to play a role.

In 2015, the 2030 Agenda for Sustainable Development set out 17 Sustainable Development Goals (SDGs) which provide a roadmap for addressing the key global challenges that the world is facing including, poverty, inequality, climate, environmental degradation, peace and justice. Combined the SDGs aim to leave no one behind. This elective is aimed at students who are passionate about these global issues, and who want to learn more about what the world is doing to address these complex challenges, and who want to learn how to evaluate the success of these policies in progressing the SDGs.
We use technology every day. But our thrill at seeing science fiction ideas – like 24-7 information access and self-driving cars - become reality is offset by concerns about phenomena like filter bubbles, privacy breaches, and fake news.

The relationships and tensions between the cultural elements of our lives, like our languages, values and creative practices, and the technological innovations that are now both driving and disrupting them are hard to untangle. To do so requires you not only to be able to understand both technology and culture, but to be able to think both like a humanist and like an engineer.

In this Trinity Elective students will learn how to apply an interdisciplinary approach to understanding the world, one based in an approach known as the digital humanities, which spans the gap between fields focussed on culture and those on technology.
Travel and English Literature

Pádraic Whyte, School of English

We live in a world where issues of travel dominate the headlines - Europe’s refugee crisis on land and sea, US immigration policy and the treatment of migrants, Brexit and the Irish border, and being confined to home during a pandemic. This module is firmly positioned within the cultural context of these societal challenges and, throughout, you will explore the multiple ways in which English literature - past and present - engages with ideas of travel.

This elective is for students who have a passion for all things travel-related; who want to evaluate diverse representations of travel in poetry, novels, and stories; and who want to develop their skills as a critical reader and thinker.

Vaccines - Friend or Foe?

Clair M. Gardiner, School of Biochemistry and Immunology

Everyone in Ireland is currently vaccinated against several infectious pathogens but most people don’t really know what happens within our bodies when this happens. There has also been a social movement of ‘anti-vaxxers’ that decry the need for vaccines but how do we know if these arguments are valid? This elective is for students that want to be informed about how vaccines work and why they don’t always work, that want to know if vaccines are safe and what are some of the key ethical issues about vaccines.
What is the Internet Doing to Me? (Security and Privacy for People in a Connected World)

Stephen Farrell, School of Computer Science and Statistics

You use the Internet all the time. Your actions and data are used by service providers for your benefit, but also for their benefit, and often in ways that are extremely opaque to you as a user. Understanding more about how that works and what you can control will enable you to make better decisions as to what you do or do not want from your interactions with the Internet.

The availability of a large set of Trinity Elective modules allows students to choose from a range of modules that engages them with Trinity’s ground-breaking research, enables them to experience diverse languages and cultures, and encourages them to consider how we can address key societal challenges.
I am honoured to have played a small part in this project, and cannot wait to see what the future brings for our students.
Last year, I was honoured to partake in the final stages of the Trinity Education Project as the Education Officer of the Students’ Union, TCDSU. As I watched it unfold around me, I almost grew envious of the incredible opportunities that would be laid out for future Trinity students: and as I enter my final year, I am excited to see first-hand the benefits of the Trinity Education.

To me, opportunity to shape your own education is one of the most prominent features of the new Trinity Education. Students gain autonomy over their own academic experience, aided by the flexibility introduced within the new pathways. This means that, as daunting as it may be transitioning from secondary level education to third level, students will feel a sense of comfort and empowerment, knowing that they have time to explore their options and find what they really love. By extension, the plethora of Open Modules and Trinity Electives that are now being offered gives students the chance to broaden their academic horizons and explore topics that will enrich their college experience as a whole. I find it particularly amazing that students will be able to learn from Trinity’s top researchers, or delve deeper into a new language or culture, while meeting students from other disciplines and complementing their own degree.
The emphasis on students becoming Partners in Learning means that students will truly have a say in their academic experience, and will be able to work to their full potential.

In their later years, students will continue to reap the benefits of the Trinity Education. There are now many more opportunities for global mobility, opening doors all across the globe for students who want to spend some of their time at another institution. The Capstone Project means that students will be able to tie up their entire academic experience by working alongside some of Trinity’s strongest academics.

The opportunities that they will receive and the experience they will have in Trinity will mean they are then equipped to go into the world, proud of their accomplishments. I know that when I leave Trinity, I will look back with pride at my experience, solidified further by the year I had working alongside the amazing people who made the Trinity Education possible. As the world continues to change, students need to be supported more than ever before to take control of their own journey through College. It is no longer enough to simply finish your degree: when we enter into the real world, the challenges we will face will be defined by our entire College experience.

The Trinity Education means that each and every student will be supported in their goals regardless of where they came from, or where they are going. Attending Trinity is much more than just going to lectures and completing assignments: anyone who studies or works here can tell you that it is a life-changing experience, filled with co- and extra-curricular opportunities, and brimming with brilliant minds. I am honoured to have played a small part in this project, and cannot wait to see what the future brings for our students.

It is no longer enough to simply finish your degree: when we enter into the real world, the challenges we will face will be defined by our entire College experience.
7.0 Biographies

Patrick Prendergast is the 44th Provost and President of Trinity College Dublin.

Jürgen Barkhoff is the Vice-Provost/Chief Academic Officer and Deputy President at Trinity College Dublin, and Professor of German in the School of Languages, Literatures and Cultural Studies.

Gillian Martin is Associate Professor in the Department of Germanic Studies, School of Literatures, Languages and Cultural Studies. She served as Senior Lecturer/Dean of Undergraduate Studies from 2014 to 2018.

Áine Kelly is Associate Dean of Undergraduate Science Education and Professor in the Department of Physiology, School of Medicine.

Paula Murphy is Professor in the School of Natural Sciences (Zoology). She served as Registrar from 2016 to 2020.

Kevin Mitchell is Senior Lecturer/Dean of Undergraduate Studies and Associate Professor in the School of Genetics and Microbiology.

Declan O’Sullivan is a Professor in Computer Science at the School of Computer Science and Statistics.

Juliette Hussey is Vice-President for Global Relations and Professor in Physiotherapy in the School of Medicine.

Orla Bannon is Director of Careers in the Careers Service.

Andrew Bowie is Associate Dean of Research and Professor of Innate Immunology in the School of Biochemistry and Immunology.

Niamh McCay is a 4th Year Undergraduate Student in Political Science and Geography and was the Students’ Union Education Officer in the 2019/20 academic year.
Anyone who studies or works here can tell you that it is a life-changing experience, filled with co- and extra-curricular opportunities, and brimming with brilliant minds.
The Trinity Education Project – or ‘TEP’ as it became known – is the most radical renewal of the undergraduate curriculum in more than a century.
From my perspective, the Trinity Education Project stands out as one of the most important initiatives that the University has achieved this decade. For Trinity to continue to deliver a world-class education and to prepare our graduates for successful careers and active citizenship, our curriculum had to change.

Patrick Prendergast
Provost & President