

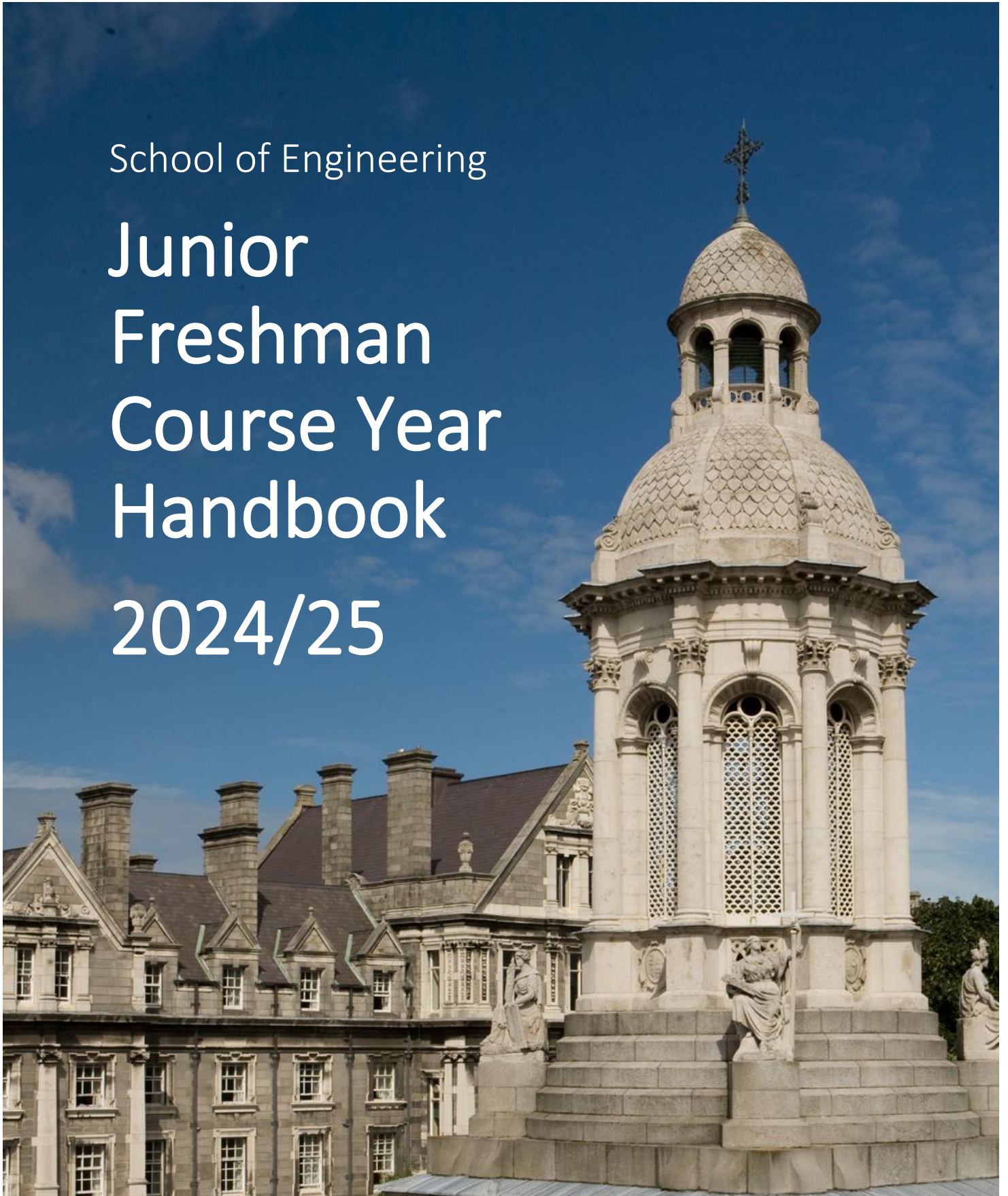


Coláiste na Tríonóide, Baile Átha Cliath
Trinity College Dublin

Ollscoil Átha Cliath | The University of Dublin

School of Engineering

Junior Freshman Course Year Handbook 2024/25



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Alternative formats of the Handbook can be made on request.

1. GENERAL COURSE INFORMATION

1.1 Introduction

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

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

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

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

Finally, be aware that College offers a wide range of support services. If you are experiencing problems or need to seek advice (personal, financial, health, career or academic), there are a number of sources of help available: these are listed in Section 15 of this booklet. Do not hesitate to call on these services should the need arise. Each of you has been allocated a tutor, and he/she is an excellent resource to help you with identifying relevant support services.

We wish you a successful and enjoyable first year at University.

Professor Alan O'Connor
Head of School
School of Engineering

Professor Kevin Kelly
Acting Director of Undergraduate Teaching & Learning
School of Engineering

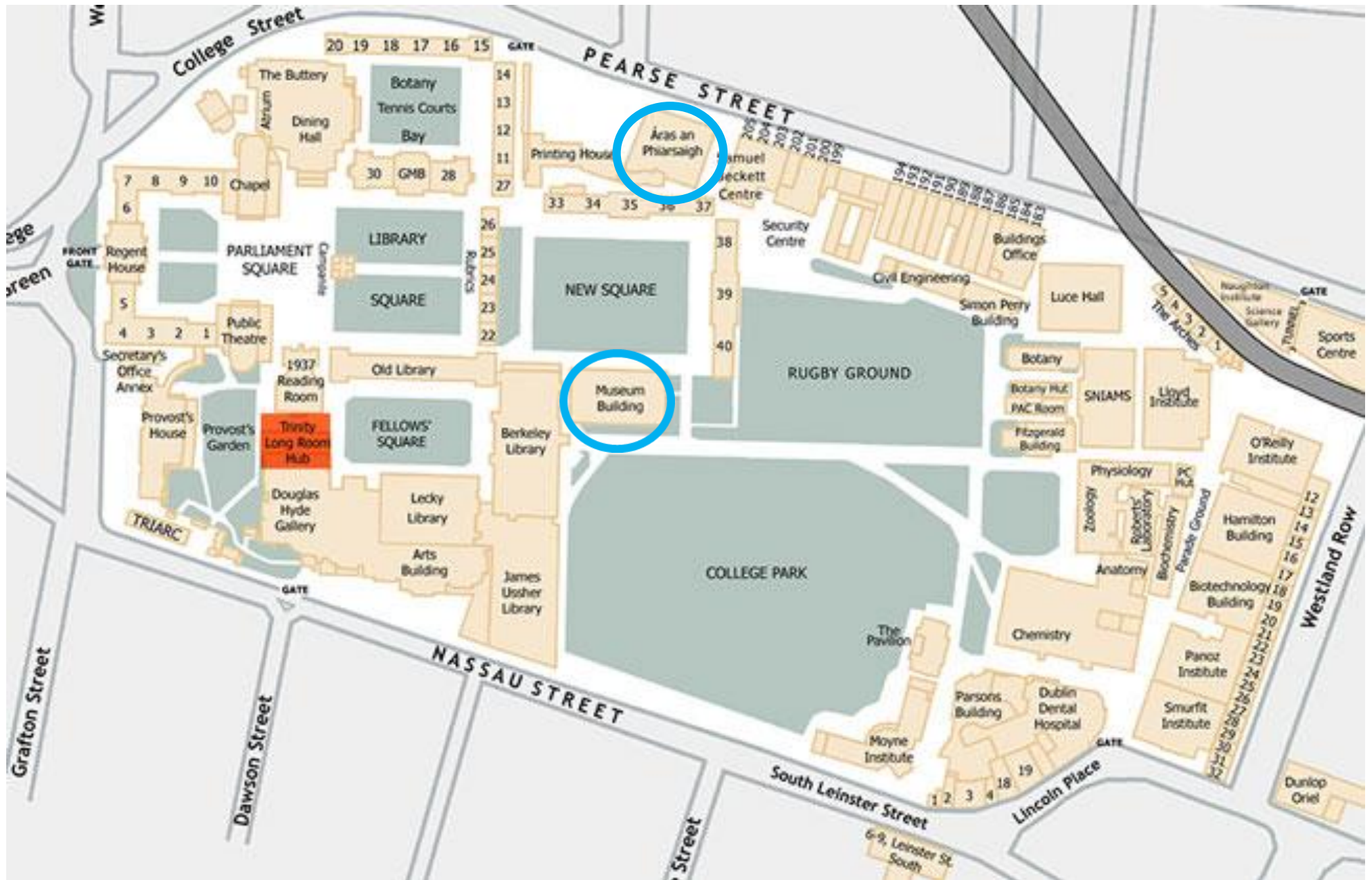
1.2 Contact Details

Staff Name	Role/Title	Contact 1	Contact 2
Alan O'Connor	Head of School	<i>Simon Perry Building</i>	EngineeringHOS@tcd.ie
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Academic Registry			
All enquiries regarding forms, letters, student fees, examinations, registration etc. to be directed to the Academic Registry.		Via phone at 4500 [for students] or 4501 [for staff]	academic.registry@tcd.ie

1.3 Key Locations



References/Sources:

[Interactive College Map](#)

[Blackboard](#)

[Academic Registry](#)



1.4 Key Dates

Important Dates		
WEEK	DATE	MICHAELMAS TERM (2024)
3	09/Sep/2024	- Michaelmas teaching term begins
4	16/Sep/2024	Orientation – Junior Freshman Undergraduate
5	23/Sep/2024	Teaching and Learning
6	30/Sep/2024	Teaching and Learning
7	07/Oct/2024	Teaching and Learning
8	14/Oct/2024	Teaching and Learning
9	21/Oct/2024	Study/Review
10	28/Oct/2024	Teaching and Learning (Monday, Bank Holiday)
11	04/Nov/2024	Teaching and Learning
12	11/Nov/2024	Teaching and Learning
13	18/Nov/2024	Teaching and Learning
14	25/Nov/2024	Teaching and Learning
15	02/Dec/2024	Revision
16	09/Dec/2024	Assessments
17	16/Dec/2024	<p>Michaelmas term ends Sunday 15 December 2024/Semester 1 ends</p> <p>Christmas Period - College closed. 24 December 2024 to 1 January 2025 inclusive</p>
18	23/Dec/2024	
19	30/Dec/2024	
20	06/Jan/2025	Foundation Scholarship Examinations

WEEK	DATE	HILARY TERM (2025)
21	13/Jan/2025	Marking/Results - Hilary term begins/Semester 2 begins
22	20/Jan/2025	Teaching and Learning - Hilary teaching term begins
23	27/Jan/2025	Teaching and Learning
24	03/Feb/2025	Teaching and Learning (Monday, Bank Holiday)
25	10/Feb/2025	Teaching and Learning
26	17/Feb/2025	Teaching and Learning
27	24/Feb/2025	Teaching and Learning
28	03/Mar/2025	Study/Review
29	10/Mar/2025	Teaching and Learning
30	17/Mar/2025	Teaching and Learning (Monday, Bank Holiday)
31	24/Mar/2025	Teaching and Learning
32	31/Mar/2025	Teaching and Learning
33	07/Apr/2025	Teaching and Learning
34	14/Apr/2025	Revision - Hilary Term ends Sunday 20 April 2025
35	21/Apr/2025	Assessment (Monday, Bank Holiday)
36	28/Apr/2025	Trinity Week
37	05/May/2025	Marking/Results (Monday, Bank Holiday)
38	12/May/2025	Marking/Results
39	19/May/2025	Marking/Results

Note: Please be aware that some Junior Freshman Semester 1 exams will start in the month of January.

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

1.5 Timetable

Laboratory timetables will be forwarded to students via email and posted on the School of Engineering website.

[My TCD](#)

[Undergraduate - Year one](#)

1.6 Study Abroad/Erasmus and Internships/Placements for Credit

In order to be eligible to apply for an international exchange in the Senior Sophister year or to apply for the 4E4 Industrial Partnership/Internship module in the second semester of the Senior Sophister year, students must have a minimum grade of II.1 (60 – 69%) at the first sitting of the Junior Sophister Engineering examinations. Those required to sit supplemental Junior Sophister Engineering examinations will be deemed ineligible to apply. No exceptions to this rule will be considered.

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

Study abroad opportunities can be viewed here:

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

Information on taking an internship can be viewed here:

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

2. SCHOLARSHIPS AND PRIZES

2.1 Foundation Scholarships

Foundation Scholarship is a College institution with a long history and high prestige.

The objective of the Foundation Scholarship examination is to identify students who, at a level of evaluation appropriate to the Senior Freshman year, can consistently demonstrate exceptional knowledge and understanding of their subjects.

The questions that are asked in the engineering scholarship exams are very challenging.

They test a student's ability to think laterally, to solve unfamiliar problems and to tackle problems from first principles.

Although the syllabi for the scholarship exams and the end of year exams are the same, the nature of the questions in the scholarship exams is more challenging. A good scholarship question will require a creative leap or a deep insight of the fundamental principles.

The most important skill that is developed in an engineering education is problem solving.

The most difficult problems to solve are those that are unfamiliar, that require a fundamental understanding of the basic principles and that require the student to make a creative or innovative leap.

Reference/Source:

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

2.2 Prizes, Medals and Other Scholarships

BOOK PRIZES

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

MARMADUKE BACKHOUSE PRIZES

These prizes were founded in 1937 by a bequest from Mrs Alice Backhouse. They are awarded annually after the annual examination of the first year of the B.A.I. degree examination to students with the highest aggregate of marks. No mark below a pass mark being counted in computing the total. The prizes are paid in two equal instalments, the first in July following the award, and the second at the end of Hilary term of the following year. Payment of the second instalment is dependent on the Dean of the Faculty being satisfied as to the student's progress

in the second year of the course. Not more than three prizes will be awarded annually. Value, first prize €2,500, second prize €1,500, third prize €500.

E.R. STUART PRIZE IN ENGINEERING

This prize, established in 1982 from funds subscribed by colleagues to mark Mr E. R. Stuart's retirement, is awarded to the first year engineering student who is judged by the School of Chemistry to have given the best performance in the first year engineering chemistry module of that year. Value, €200.

VICTOR W. GRAHAM PRIZES

These prizes, founded in 1986 from funds subscribed by friends and pupils to mark Mr V.W. Graham's retirement, are awarded to the first year engineering student who obtains the highest marks in engineering mathematics (modules 1E1 and 1E2) at the annual class examination and to the second year engineering student who obtains the highest mark in engineering mathematics (modules 2E1 and 2E2) at the regular annual class examination. Value, first year prize €750, second year prize €1,000.

ANITA NEWELL SCHOLARSHIPS

These prizes were founded in 2007 by a bequest from Ms Anita Newell, a former employee of the School of Engineering. They are awarded annually in the first and second years of the bachelors in engineering course to the best and second best female engineering student i.e. those achieving the highest and second-highest average of marks at the annual examinations (foundation scholarship candidates are eligible for these scholarships). Value: first year engineering – first place €3,000, second place €2,000; second year engineering – first place €6,000, second place €4,000.

3. ACADEMIC WRITING

3.1 Academic Integrity and Referencing Guide

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

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

- Deal fairly, consistently and transparently with others.

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

Reference/Source

[Calendar Part II, B: General Regulations & Information, 'Academic Integrity' Statement of Principles on Integrity Academic Integrity Policy \(currently in development\)](#)
[Library Guides - Academic Integrity](#)
[Coversheet Declaration](#)

3.2 Research Ethics

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

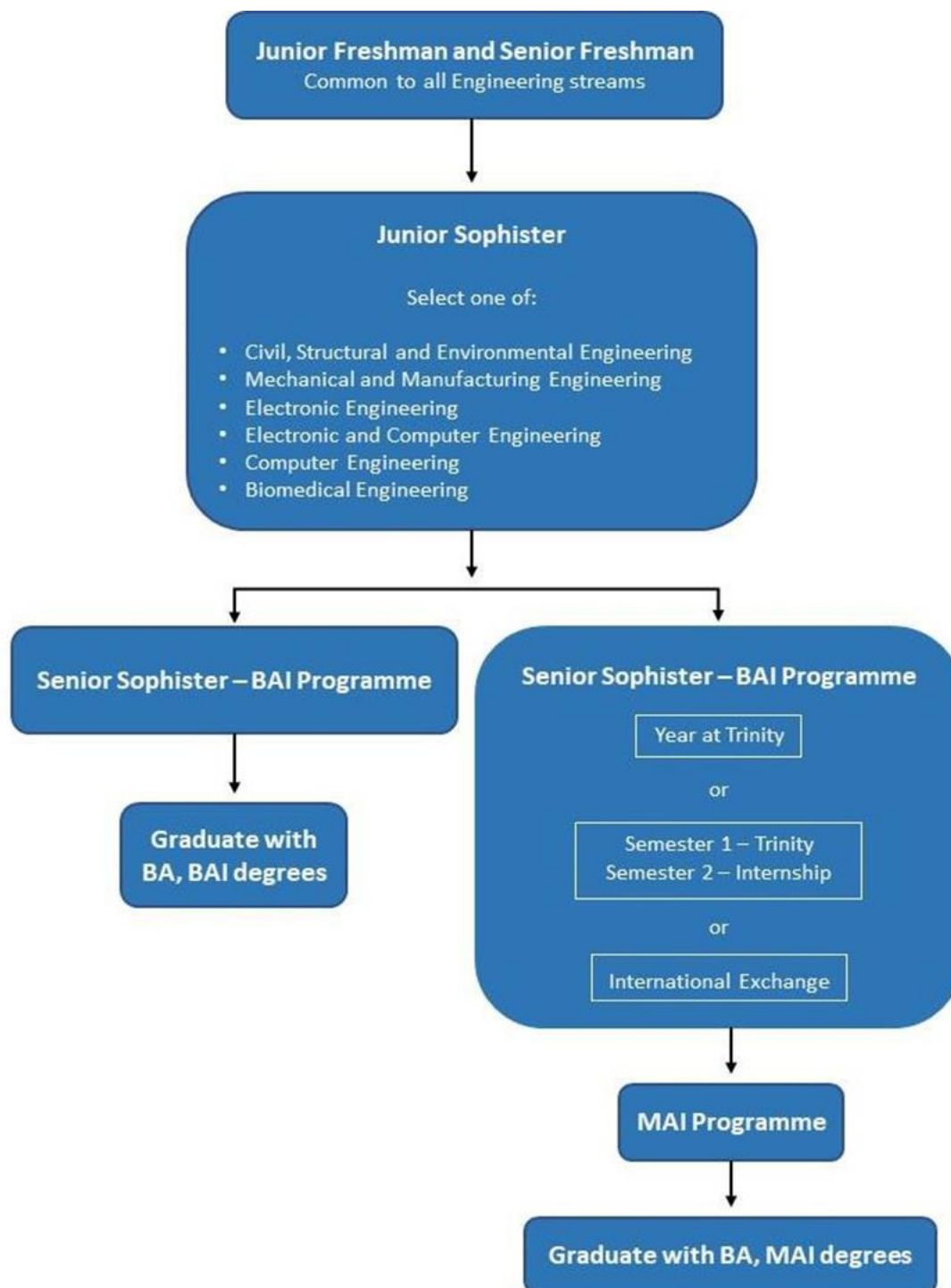
All research with impact has an ethical dimension and all researchers should reflect on the implications of their work, not just in terms of human (and animal) welfare and dignity, but also the social and cultural impact of their research. Funding agencies are placing increasing importance on ethics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

Reference/Source

[Research Ethics](#)
[Policy on Good Research Practice](#)
[Ethics Policy](#)

4. TEACHING AND LEARNING

4.1 Programme Architecture



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

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

4.2 Programme Structure, Module Descriptors and Workload

Module Title	Module Code	ECTS Weighting	Learning Workload
Chemistry	CHU11E05	5	Link
Engineering Mathematics I	MAU11E01	5	Link
Introduction to Professional Engineering	MEU11E08	5	Link
Engineering Materials and their Applications	MEU11E12	10	Link
Experimental Methods and Data Centric Engineering	MEU11E14	5	Link
Mechanics	CEU11E07	5	Link
Engineering Design I	CEU11E09	5	Link
Computer Engineering I	CSU11E03	5	Link
Electrical Engineering	EEU11E06	5	Link
Engineering Mathematics II	MAU11E02	5	Link
Physics	PYU11E04	5	Link

In your studies you should aim to work a minimum of 50 hours per week.

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

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

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

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

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

Reference/Source:

[My TCD](#)

4.3 Learning Outcomes

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

4.4 Coursework Requirements

8.3.1 *Submission guidelines*

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

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

8.3.2 *Policy on late submission*

Coursework and assessment is an essential part of a student's learning to reinforce aspects of module content. You are enrolled on an accredited professional programme and are expected to

submit work on time. Submitting work late is a habit you should avoid. It is never too early in your career to start to plan your work so you meet your deadlines. Late submissions delay feedback and in group work you risk incurring a penalty on the other members of your group.

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

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

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

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

Reference/Source:

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

4.5 Capstone Project

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

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

The Capstone should:

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

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

4.6 Marking Scale

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

Guidelines on Grades for Essays and Examination Answers

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

Guidelines on Marking Projects/Dissertation Assessment

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

4.7 Attendance Requirements

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

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

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

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

12.1.4 *Students who in any term have been unable, through illness or other unavoidable cause, to attend the prescribed lectures satisfactorily, may be granted credit for the term by the Senior Lecturer and must perform such supplementary exercises as the Senior Lecturer may require. The onus for informing the Senior Lecturer of illness rests with individual students who should make themselves familiar with the general and more detailed school or course regulations regarding absence from lectures or examinations through illness. In addition, issues with students may arise from time to time, which in the opinion of the Senior Lecturer affect a student's ability or suitability to participate in his or her course. If required by the Senior Lecturer, students (other than those subject to §28 below) are obliged to undergo a medical examination or assessment by a doctor or specialist nominated by the Senior Lecturer at the expense of the College for the purpose of obtaining an opinion as to the student's medical fitness to continue with his/her studies or as to his/her ability or suitability to participate in his/her course to the standards required by the College.*

Students found to be unfit following such a medical examination or assessment may be required to withdraw until such times as they are deemed fit to resume their studies. Students who fail to attend such a medical examination or assessment within a reasonable period may be required by the Senior Lecturer to withdraw until such time as they attend the aforementioned medical examination or assessment and are deemed fit to resume their studies.

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

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

Course work

12.1.7 *Students may be required to perform course work as part of the requirements of their course of study. The assessment of course work may be based on the writing of essays, the sitting of tests and assessments, attendance at practical classes and field trips, the keeping and handing in of practical books, the carrying out of laboratory or field projects, and the satisfactory completion of professional placements. The school, department or course office, whichever is appropriate, publishes its requirements for satisfactory performance of course work on school notice-boards and/or in handbooks and elsewhere, as appropriate.*

Non-satisfactory attendance and course work

12.1.8 *All students must fulfil the course requirements of the school or department, as appropriate, with regard to attendance and course work. Where specific requirements are not stated, students may be deemed non-satisfactory if they miss more than a third of their course of study or fail to submit a third of the required course work in any term.*

12.1.9 *At the end of the teaching term, students who have not satisfied the school or department requirements, as set out in §§19, 24 and 25 above, may be reported as non-satisfactory for that term. Students reported as non-satisfactory for the Michaelmas and Hilary terms of a given year may be refused permission to take their annual examinations and may be required by the Senior Lecturer to repeat their year. Further details of procedures for reporting a student as non-satisfactory are given on the College website at: <https://www.tcd.ie/undergraduate-studies/academic-progress/attendance-course-work.php>*

Reference/Source:

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

4.8 Absence from Examinations

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

35 Students who consider that illness may prevent them from attending an examination (or any part thereof) should consult their medical advisor and request a medical certificate for an appropriate period. If a certificate is granted, it must be presented to the student's tutor within three days of the beginning of the period of absence from the examination. The tutor must immediately forward the certificate to the Senior Lecturer. Medical certificates must state that the student is unfit to sit examinations. Medical certificates will not be accepted in explanation for poor performance.

(a) Where a student becomes ill prior to the commencement of the annual examination, they may seek permission through their tutor from the Senior Lecturer to withdraw and take the supplemental examination in that year.

(b) Where illness prevents a student from completing any part of the annual examination and they withdraw from the examination, permission may be given for a supplemental examination to be taken in that year.

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

Students who consider that other grave cause beyond their control may prevent them from attending an examination (or any part thereof) should consult their tutor who should make representations immediately to the Senior Lecturer that permission be granted for absence from the examination. Regulations (a) and (b) also apply in the case of absence from annual examinations due to other grave cause beyond a student's control.

Regulations (a) and (b) apply only to examinations which are non-final non-degree examinations. However, regulations (a) and (b) apply in all years of those professional courses which permit supplemental examinations in final or degree years.

Reference/Source:

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

[Academic Policies](#)

4.9 Awards

Degree options available to students on the undergraduate programmes, e.g. Single Honours, Joint Honours, Major with Minor, or Multidisciplinary, where Exit Awards (B.A. (Ord.)) exist this information must be included. A statement on the QQI – NFQ Level must be included.

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

Those Engineering students who exit the course having obtained credit for years one to four of the course are entitled to the degrees of B.A. and B.A.I. The B.A.I. degree award is based on an overall average mark calculated by combining the average mark achieved in the Junior Sophister examinations (30% towards overall average) and the Senior Sophister examinations (70% towards overall average).

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

Eligibility for MAI

Note: students must pay a tuition fee for the MAI year: <https://www.tcd.ie/academicregistry/fees-and-payments/>

Students must achieve a minimum overall mark of 60% for the combined Junior Sophister and Senior Sophister years (on a 30:70 basis) at the annual session of the B.A.I. / B.Sc. degree year.

References/Sources:

[National Framework for Qualifications](#)

[Trinity Pathways](#)

[Trinity Courses](#)

4.10 Graduate Attributes

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

Throughout their time at Trinity, our students will be provided with opportunities to develop and evidence achievement of a range of graduate attributes that support their academic growth. Graduate attributes can be achieved in academic and co- and extra- curricular activities. The Engineering School has been to the fore in embracing the Trinity Education Project and our programmes ensure that all our students achieve the Trinity Student Attributes.

4.11 Professional and Statutory Body Accreditation (if applicable)

Where the programme is subject to professional accreditation, include an overview of additional requirements and links to the body and relevant policies.

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

4.12 Student Feedback and Evaluation

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

References/Sources:

[Student Evaluation and Feedback](#)

[Student Partnership Policy](#)

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