School of Engineering

Junior Freshman Course year Handbook 2021-2022
Contents

1 Introduction

2 Covid 19

2.1 Important information on COVID-19 restrictions and modes of teaching and learning
2.2 COVID-19 contingency plans

3 Contacts

3.1 Coordinator
3.2 Administrative contacts
3.3 Academic contacts

4 Key Dates

4.1 Academic year calendar
4.2 Teaching weeks
4.3 Exam dates
4.4 Project submission dates
4.5 Coursework submission dates

5 Key Locations

6 Timetable

7 Programme Overview

7.1 Engineering course structure
7.2 Award routes
7.3 Eligibility for MAI
7.4 Eligibility for Internship and Study Abroad
7.5 School of Engineering Examination Regulations

8 Programme Learning Outcomes

9 Graduate Attributes

10 General Programme Information
10.1 Modules and module descriptors
10.2 Laboratories
10.3 Coursework requirements

11 Prizes and Scholarship
   11.1 Foundation Scholarship
   11.2 Prizes

12 Health and safety

13 Student Supports
   13.1 Tutors
   13.2 Student Counselling Service
   13.3 College Health Service
   13.4 Chaplaincy
   13.5 Trinity Disability Service
   13.6 Niteline
   13.7 Students’ Union Welfare Officer
   13.8 Maths Help Room
   13.9 Undergraduate Programming Centre
   13.10 Student Learning Development
   13.11 Student 2 Student (S2S)
   13.12 Trinity Careers Service
   13.13 Co-curricular activities
   13.14 Trinity College Students’ Union

14 General Regulations
   14.1 Attendance requirements
   14.2 Absence from examinations
   14.3 Plagiarism
   14.4 University regulations, policies and procedures
   14.5 Data protection
15 General Information

15.1 Feedback and evaluation

15.2 European Credit Transfer System (ECTS)

15.3 Guidelines on grades

15.4 Emergency procedure

Note:

Alternative formats of the handbook can be made available on request.

All students are encouraged to fully familiarise themselves with college rules and general regulations which can be found here:


In the event of any conflict or inconsistency between the General Regulations published in the University Calendar and information contained in programme or local handbooks, the provisions of the General Regulations in the Calendar will prevail.
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 Ingenerialia (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 liveable place and to building economic prosperity. The core philosophy of the B.A.I./M.A.I. degrees is to first establish the basic principles common to all aspects of engineering. Thus, all students follow a common programme for the first two ‘fresh’ years followed by two ‘sophister’ years of specialisation in the different branches of engineering if they wish to take the B.A.I. degree and three years of specialisation if they go on to M.A.I. level. Admission to the M.A.I. level is subject to performance in the Junior Sophister and Senior Sophister years, see the School Examination Regulations. The M.A.I. is a professional degree accredited by Engineers Ireland and is recognised across the world through international agreements.

While there is a strong focus on technical content and problem solving in the syllabus, personal skills such as communication and teamwork are an integral part of your education. These skills are crucial in promoting an approach to lifelong learning, and this is particularly important in the dynamic context of engineering. The curriculum is revised on an ongoing basis and we hope that you will find it stimulating and intellectually rewarding. You will be given the opportunity to provide us with considered feedback of your experience during each year of your studies.
The College, of course, has a great deal to offer besides the formal academic programme, including the cultural, recreational and sporting activities of the many student clubs and societies. You are strongly encouraged to participate in the breadth of College life in a balanced way. It is up to you to make the most of your Trinity experience.

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

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

Professor Henry Rice  Professor Kevin Kelly
Head of School  Director of Undergraduate Teaching & Learning
School of Engineering  School of Engineering
2. COVID-19

2.1 Important information on COVID-19 restrictions and modes of teaching and learning

In order to offer taught programmes in line with government health and safety advice, teaching and learning in Semester 1 will follow a blended model that combines online and in-person elements to be attended on campus. This has been carefully designed to safely maximise the amount of in-person teaching and learning, subject to the prevailing medical advice and guidelines. In general, especially in JF and SF, we have tried to ensure that in-person activities take place on particular days of the week during which no online learning is scheduled and vice-versa. We will update you on plans for Semester 2 closer to the time.

Registered students are expected to be available to attend in-person teaching activities. Any request not to attend in person for exceptional reasons (such as travel restrictions or underlying health conditions) will be considered on a case-by-case basis by the relevant Head of School in consultation with College Health and there is no guarantee that these requests can be facilitated. It will depend on whether the programme learning outcomes and modes of assessment can be met through remote attendance.

For those students not currently in Ireland or planning to undertake travel before the start of term, if they are returning from a country that requires mandatory hotel quarantining or self-quarantining/isolating on arrival in Ireland, they are expected to allow for the period of restricted movement after arrival and prior to commencement of their studies, and therefore should factor this into their travel plans.

We would ask all students to adhere to the safety protocols when on campus for in-person teaching activities or student club and society events, i.e., mask wearing,
hand washing, cough etiquette and to maintain social distancing. Please do not congregate outside lecture or tutorial rooms after your classes; we would ask you to exit the building immediately after your event has finished. When term starts on 13 September (or 27 September for first years), students will be permitted on campus for any in-person events that they are involved in. Access to campus will be via a valid student ID card.

2.2 COVID-19 teaching plans

The course delivery method will be of a hybrid nature, adopting a combination of face to face classroom and online learning which will be reviewed and updated based on the evolving COVID-19 situation. Specified slots in the timetable will be allocated for labs, tutorials and other activities taking place face-to-face, while the rest of the content will be delivered online.

All programmes have been developed so that they may be delivered online if it is necessary. The health and safety of students and staff will be paramount.

Students will be divided into “pods” to accommodate the social distancing constraints and the consequent reduction in the capacity of lecture rooms and laboratories. Full details can be found in your timetable.

Senior Freshman students attend face-to-face sessions on a weekly basis on Tuesdays and Thursdays.

The School of Engineering expects you to physically attend whatever face-to-face teaching is provided, as you would be under normal circumstances. If you wish to request to study remotely for the semester, you should contact your Tutor or the Senior Tutor’s Office. Such requests will be considered on a case-by-case basis and granted only in exceptional circumstances (financial hardship, underlying documented medical condition (including students who are immunocompromised) and/or disability). The School of Engineering will provide a remote alternative for face-to-face activities if you have received permission to study remotely for the semester.
3. Contacts

3.1 Coordinator
Director of Undergraduate Teaching and Learning Professor Kevin Kelly
Phone: +353 1 896 4898
E-mail: kekelly@tcd.ie

3.2 Administrative contacts
School of Engineering, First Floor, Museum Building

Executive Officer/General Enquiries
Ms Sarah O’Brien
Phone: +353 1 896 1142
E-mail: obries57@tcd.ie

Undergraduate/Postgraduate Enquiries
Mr Donncha Millane
Phone: +353 1 896 1746
E-mail: millaned@tcd.ie

School Manager
Ms Patricia Hughes
Phone: +353 1 896 1796
E-mail: pahughes@tcd.ie

Finance Officer
Ms Sara Doherty
Phone: +353 1 896 3792
E-mail: sdoherty@tcd.ie

Global Officer
Phone: +353 1 896
E-mail: InternationalEng@tcd.ie

Postgraduate Officer
Mr Daniel Wearen
E-mail: wearend@tcd.ie
Department of Civil, Structural and Environmental Engineering, First Floor, Museum Building

Senior Executive Officer
Mr. George Oatridge
Phone: +353 1 896 2217
Email: oatridgg@tcd.ie

Executive Officer
Ms. Mary Curley
Phone: +353 1 896 1457
Email: curleyma@tcd.ie

Department of Mechanical and Manufacturing Engineering, Ground Floor, Parsons Building

Senior Executive Officer
Ms. Judith Lee
Phone: +353 1 896 1383
Email: julee@tcd.ie

Executive Officers
Ms. Nicole Byrne
Phone: +353 1 896 1837
Email: nbyrne3@tcd.ie

Ms. Melissa Caffrey
Phone: +353 1 896 3667
Email: caffrem@tcd.ie

Department of Electronic and Electrical Engineering, Aras an Phiarsaigh

Executive Officers
Mr. Michael O’Riordan
Phone: +353 1 896 1558
Email: oriordmi@tcd.ie

Ms. Caroline Murphy
Phone: +353 1 896 1580
Email: caroline.murphy@tcd.ie
School of Computer Science and Statistics, O’Reilly Institute

School Administrative Manager
Ms. Olivia Lombard
Phone: 353 1 896 1097
Email: olivia.lombard@scss.tcd.ie

Administrative Officer
Ms. Lynn Daly
Phone: +353 1 8961524
Email: lynn.daly@scss.tcd.ie

Administrative Officer
Ms. Hannah Archbold
Phone: + 353 1 896 1768
Email: Hannah.archbold@tcd.ie

Academic Registry
All enquiries regarding forms, letters, student fees, examinations, registration etc. to be directed to the Academic Registry:

Log an enquiry via ASK AR on the my.tcd.ie portal

· Via email at academic.registry@tcd.ie
· Via phone at 4500 [for students] or 4501 [for staff]
## 3.3 Academic contacts

<table>
<thead>
<tr>
<th>Staff name</th>
<th>Email</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of School</td>
<td><a href="mailto:hrice@tcd.ie">hrice@tcd.ie</a></td>
<td>Parsons Building</td>
</tr>
<tr>
<td>Professor Henry Rice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director of Undergraduate Teaching and Learning</td>
<td><a href="mailto:kekelley@tcd.ie">kekelley@tcd.ie</a></td>
<td>Parsons Building</td>
</tr>
<tr>
<td>Professor Kevin Kelly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Civil Structural and Environmental Engineering</td>
<td><a href="mailto:Brian.Caulfield@tcd.ie">Brian.Caulfield@tcd.ie</a></td>
<td>Museum Building</td>
</tr>
<tr>
<td>Professor Brian Caulfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stream Coordinator of Mechanical and Manufacturing Engineering</td>
<td><a href="mailto:Tim.persoons@tcd.ie">Tim.persoons@tcd.ie</a></td>
<td>Parsons Building</td>
</tr>
<tr>
<td>Professor Tim Persoons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Electronic and Electrical Engineering</td>
<td><a href="mailto:Anil.kokaram@tcd.ie">Anil.kokaram@tcd.ie</a></td>
<td>Aras an Phíarsaigh</td>
</tr>
<tr>
<td>Professor Anil Kokaram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stream Coordinator of Biomedical Engineering</td>
<td><a href="mailto:dahoey@tcd.ie">dahoey@tcd.ie</a></td>
<td>Parsons Building</td>
</tr>
<tr>
<td>Professor David Hoey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Engineering BAI/MAI Coordinator</td>
<td><a href="mailto:Michael.brady@tcd.ie">Michael.brady@tcd.ie</a></td>
<td>O’Reilly Institute</td>
</tr>
<tr>
<td>Professor Mike Brady</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Key dates

4.1 Academic year calendar

<table>
<thead>
<tr>
<th>Academic Calendar Week</th>
<th>Week beginning</th>
<th>2021/22 Academic Year Calendar</th>
<th>Term / Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>03-Aug-21</td>
<td>Assessment - Semesters 1 &amp; 2</td>
<td>-5th January term begins/Semester 1 begins</td>
</tr>
<tr>
<td>2</td>
<td>01-Sep-21</td>
<td>Orientation (undergraduate); Marking/Results</td>
<td>-5th January teaching term begins</td>
</tr>
<tr>
<td>3</td>
<td>19-Sep-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>20-Sep-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>27-Sep-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>04-Oct-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>11-Oct-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>18-Oct-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>25-Oct-21</td>
<td>Study/Review (Monday, Public Holiday)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>01-Nov-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>08-Nov-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>15-Nov-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>22-Nov-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>29-Nov-21</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>06-Dec-21</td>
<td>Revision</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>13-Dec-21</td>
<td>Assessment*</td>
<td>+5th December term ends Sunday 25 December 2021/Semester 1 ends</td>
</tr>
<tr>
<td>17</td>
<td>20-Dec-21</td>
<td>Christmas Period - College closed</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>27-Dec-21</td>
<td>24 December 2021 to 3 January 2022 inclusive</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>03-Jan-22</td>
<td>24 December 2021 to 3 January 2022 inclusive</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>10-Jan-22</td>
<td>Foundation Scholarship Examinations*</td>
<td>+5th January term begins/Semester 2 begins</td>
</tr>
<tr>
<td>21</td>
<td>17-Jan-22</td>
<td>Marking/Results</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>24-Jan-22</td>
<td>Teaching and Learning</td>
<td>+5th January teaching term begins</td>
</tr>
<tr>
<td>23</td>
<td>31-Jan-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>07-Feb-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>14-Feb-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>21-Feb-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>28-Feb-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>07-Mar-22</td>
<td>Study/Review</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>14-Mar-22</td>
<td>Teaching and Learning (Thursday, Public Holiday)</td>
<td>+5th March term begins</td>
</tr>
<tr>
<td>30</td>
<td>21-Mar-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>28-Mar-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>04-Apr-22</td>
<td>Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>11-Apr-22</td>
<td>Teaching and Learning (Friday, Good Friday)</td>
<td>+5th April term ends Sunday 24 April 2022</td>
</tr>
<tr>
<td>34</td>
<td>18-Apr-22</td>
<td>Revision (Monday, Easter Monday)</td>
<td>+5th April term begins</td>
</tr>
<tr>
<td>35</td>
<td>25-Apr-22</td>
<td>Trinity Week (Monday, Trinity Monday)</td>
<td>+5th April term begins</td>
</tr>
<tr>
<td>36</td>
<td>02-May-22</td>
<td>Assessment* (Monday, Public Holiday)</td>
<td>+5th May term begins</td>
</tr>
<tr>
<td>37</td>
<td>09-May-22</td>
<td>Marking/Results</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>16-May-22</td>
<td>Marking/Results</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>23-May-22</td>
<td>Marking/Results</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>30-May-22</td>
<td>Research</td>
<td>+5th May term ends Sunday 1 June 2022/Semester 2 ends</td>
</tr>
<tr>
<td>41</td>
<td>06-Jun-22</td>
<td>Research (Monday, Public Holiday)</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>13-Jun-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>20-Jun-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>27-Jun-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>04-Jul-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>11-Jul-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>18-Jul-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>25-Jul-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>01-Aug-22</td>
<td>Research (Monday, Public Holiday)</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>08-Aug-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>15-Aug-22</td>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>22-Aug-22</td>
<td>Research</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Additional contingent days may be required outside of the formal assessment/assessment weeks.

Note: It may be necessary to add in some examinations/assessments in the preceding week.

**Dates subject to change according to prevailing national government and health guidelines and restrictions**

Approved by Dean, 21/04/2021

Page 1 of 1

Last updated by CTU, 30 June 2022
4.2 Teaching weeks

Semester 1: 27th September – 3rd December 2021

Semester 2: 24th January 2022 – 14th April 2022

4.3 Exam dates

Semester 1 examinations: 13th December – 17th December 2021*

Semester 2 examinations: 3rd May – 7th May 2022

Reassessment – Semesters 1 & 2:

*Note: extra contingency days may be required outside of the formal assessment/reassessment weeks
5. Key locations

6. Timetable

Semester 1

Timetables for web.xlsx (tcd.ie)
7. Programme overview

7.1 Engineering course structure

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
7.2 Award routes

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.).

7.3 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.

7.4 Eligibility for Internship and study abroad

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.

Study abroad opportunities can be viewed here: https://www.tcd.ie/Engineering/international/study-abroad/outgoing/

Information on taking an internship can be viewed here: https://www.tcd.ie/Engineering/assets/module-descriptors/ss/4E4.pdf
8. Programme learning outcomes

The programme learning outcomes for the Engineering programme 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.

9. Graduate Attributes

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.
10. General programme information

10.1 Modules and module descriptors

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. The table below details the modules, credit value and coordinator.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Module Title</th>
<th>ECTS</th>
<th>Semester</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAU11E01</td>
<td>Engineering Mathematics I</td>
<td>5</td>
<td>Semester 1</td>
<td>Patrick Fritzsach</td>
</tr>
<tr>
<td>MAU11E02</td>
<td>Engineering Mathematics II</td>
<td>5</td>
<td>Semester 2</td>
<td>Anthony Brown</td>
</tr>
<tr>
<td>CSU11E03</td>
<td>Computer Engineering I</td>
<td>5</td>
<td>Semester 2</td>
<td>Lucy Hederman</td>
</tr>
<tr>
<td>PYU11E04</td>
<td>Physics</td>
<td>5</td>
<td>Semester 2</td>
<td>Stefan Hutzler</td>
</tr>
<tr>
<td>CHU11E05</td>
<td>Chemistry</td>
<td>5</td>
<td>Semester 1</td>
<td>Richard Hobbs</td>
</tr>
<tr>
<td>EEU11E06</td>
<td>Electrical Engineering</td>
<td>5</td>
<td>Semester 2</td>
<td>Naomi Harte</td>
</tr>
<tr>
<td>CEU11E07</td>
<td>Mechanics</td>
<td>5</td>
<td>Semester 2</td>
<td>Dermot O'Dwyer</td>
</tr>
<tr>
<td>MEU11E08</td>
<td>Introduction to Engineering</td>
<td>5</td>
<td>Semester 1</td>
<td>David Taylor</td>
</tr>
<tr>
<td>CEU11E09</td>
<td>Engineering Design I: Graphics and CAE</td>
<td></td>
<td>Semester 2</td>
<td>Bidisha Ghosh</td>
</tr>
<tr>
<td>MEU11E11</td>
<td>Experimental Methods</td>
<td>5</td>
<td>Semester 1</td>
<td>John Kennedy</td>
</tr>
<tr>
<td>MEU11E12</td>
<td>Engineering Materials and Their Applications</td>
<td>10</td>
<td>Semester 1</td>
<td>David Taylor</td>
</tr>
</tbody>
</table>

Module descriptors are available at the following link:

https://www.tcd.ie/Engineering/undergraduate/bai/year-1/
10.2 Laboratories

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

10.3 Coursework requirements

10.3.1 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.
10.3.2 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 penalised 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.

10.3.3 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.

Further details of the procedure for reporting a student as non-satisfactory can be viewed on the College Undergraduate Studies website.
11 Prizes and Scholarships

11.1 Foundation Scholarship

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.

11.2 Prizes

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 Bachelor in Engineering course to the best and second best female engineering student i.e. those achieving the highest and second-highest average of marks at the annual examinations (foundation scholarship candidates are eligible for these
scholarships). Value: first year engineering – first place €3,000, second place €2,000; second year engineering – first place €6,000, second place €4,000.

12. Health and Safety

We operate a ‘safe working environment’ policy and we take all practical precautions to ensure that hazards or accidents do not occur. We maintain safety whilst giving you the student very open access to facilities. Thus safety is also your personal responsibility and it is your duty to work in a safe manner. By adopting safe practices you ensure both your own safety and the safety of others.

Please read the following Safety Documents for working practices in the Departments of Mechanical and Manufacturing Engineering: (https://www.tcd.ie/mecheng/assets/pdf/Safety_Statement.pdf)

and in the Department of Electronic and Electrical Engineering: (http://www.mee.tcd.ie/safety/SS2012.pdf)

If you are working in Trinity Centre for Bioengineering Laboratories in Trinity Biomedical Sciences Institute, please contact Mr Simon Carroll, Senior Technical Officer at scarrol6@tcd.ie to complete necessary Health and Safety paperwork prior to completing any laboratory work.

Please ensure you comply with the instructions given in these important documents. Failure to behave in a safe manner may result in you being refused the use of departmental facilities.

13. Student Supports

Trinity College provides a wide range of personal and academic supports for its students.
13.1 Tutors

A tutor is a member of the academic staff who is appointed to look after the general welfare and development of the students in his or her care. Whilst your tutor may be one of your lecturers, the role of tutor is quite separate from the teaching role. Tutors are a first point of contact and a source of support, both on arrival in college and at any time during your time in college. They provide confidential help and advice on personal as well as academic issues or on anything that has an impact on your life. They will also, if necessary, support and defend your point of view in your relations with the college. If you cannot find your own tutor, you can contact the Senior Tutor (tel: 01 896 2551). Senior Tutor’s website: https://www.tcd.ie/seniortutor/

13.2 Student Counselling Service

The Student Counselling Service, 3rd Floor, 7-9 South Leinster Street, College. Opening hours: 9:15 am to 5:10 pm Monday to Friday during lecture term.
Tel: 01 896 1407
Email: student-counselling@tcd.ie
Web: http://www.tcd.ie/Student_Counselling.

13.3 College Health Service

The Health Centre is situated on Trinity Campus in House 47, a residential block adjacent to the rugby pitch.
Opening hours: 09.00 - 16.40 with emergency clinics from 09.00 - 10.00.
Tel: 01 896 1591 or 01 896 1556
Web: https://www.tcd.ie/collegehealth/

13.4 Chaplaincy

The Chaplains are representatives of the main Christian Churches in Ireland who work together as a team, sharing both the college chapel and the chaplaincy in House 27 for their work and worship.
Steve Brunn (Anglican Chaplain): brunns@tcd.ie; tel: 01 896 1402
Julian Hamilton (Methodist Chaplain): julian.hamilton@tcd.ie; tel: 01 896 1901
Alan O’Sullivan (Catholic Chaplain): aeosulli@tcd.ie; tel: 01 896 1260
Peter Sexton (Catholic Chaplain): sextonpe@tcd.ie; tel: 01 896 1260
Web: https://www.tcd.ie/Chaplaincy/

13.5 Trinity Disability Service
Declan Treanor, Disability Services Coordinator
Room 3055, Arts Building
Email: mdtreanor@tcd.ie
Tel: 01 896 3475
Web: https://www.tcd.ie/disability/

13.6 Niteline
A confidential student support line run by students for students which is open every night of term from 9pm to 2.30am.
Tel: 1800 793 793
Web: https://niteline.ie/

13.7 Students’ Union Welfare Officer
House 6, College
Email: welfare@tcdsu.org
Web: https://www.tcdsu.org/welfare

13.8 Maths Help Room
The Maths Help Room offers free assistance to students who are having difficulty with Mathematics, Statistics or related courses. It runs every week of term and at certain times out of term. The Maths help-room is a drop in centre, where you can bring in a maths or stats question and get some help.
The Helproom is located in the New Seminar Room in House 20 in the School of Mathematics in the Hamilton Building.
13.9 Undergraduate Programming Centre

The Programming Centre is available to all Computer Engineering students free of charge. The centre operates as a drop-in service where you can get help with any problems you might have with programming in your courses. For further information, please visit http://www.scss.tcd.ie/ugpc/.

13.10 Student Learning Development

Student Learning Development provides learning support to help students reach their academic potential. They run workshops, have extensive online resources and provide individual consultations. To find out more, visit their website at https://student-learning.tcd.ie/.

13.11 Student 2 Student (S2S)

S2S offers trained Peer Supporters for any student in the College who would like to talk confidentially with another student, or just to meet a friendly face for a chat. This service is free and available to everyone. To contact a Peer Supporter you can email student2student@tcd.ie. Web: https://student2student.tcd.ie/peer-support/.

13.13 Trinity Careers Service

As a Trinity College Dublin student you have access to information, support and guidance from the professional team of expert Careers Consultants throughout your time at Trinity. The support offered includes ‘next step’ career guidance appointments, CV and LinkedIn profile clinics and practice interviews. The Trinity Careers Service and the School of Engineering also hold an annual Careers Fair in October which gives students the opportunity to find out about career prospects in
over fifty companies.

Web: https://www.tcd.ie/Careers/

13.14 Co-curricular activities

Trinity College has a significant number of diverse student societies which are governed by the Central Societies Committee. They provide information on the societies including how to get involved and even how to start your own society. See http://trinitysocieties.ie/ for more details. Students are encouraged to get involved.

Trinity College also has a huge range of sports clubs which are governed by the Dublin University Athletic Club (DUCAC). See http://www.tcd.ie/Sport/student-sport/ducac/?nodeId=94&title=Sports_Clubs for more details.

13.15 Trinity College Students’ Union

The Trinity College Students' Union (TCDSU) is run for students by students. TCDSU represent students at college level, fight for students' rights, look after students’ needs, and are here for students to have a shoulder to cry on or as a friend to chat with over a cup of tea. Students of Trinity College are automatically members of TCDSU. It has information on accommodation, jobs, campaigns, as well as information pertaining to education and welfare. For more information see https://www.tcdsu.org/.
14. General Regulations

14.1 Attendance requirements

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

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

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

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

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

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

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

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

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

14.2 Absence from examinations

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

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

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

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

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

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

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

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

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

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

14.3 Plagiarism

In the academic world, the principal currency is ideas. As a consequence, you can see that plagiarism – i.e. passing off other people’s ideas as your own – is tantamount to theft. It is important to be aware the plagiarism can occur knowingly or unknowingly, and the offence is in the action not the intent.

Plagiarism is a serious offence within College and the College’s policy on plagiarism is set out in a central online repository hosted by the Library which is located at [http://tcd-ie.libguides.com/plagiarism](http://tcd-ie.libguides.com/plagiarism). This repository contains information on what plagiarism is and how to avoid it, the College Calendar entry on plagiarism and a matrix explaining the different levels of plagiarism outlined in the Calendar entry and the sanctions applied.

Undergraduate and postgraduate new entrants and existing students, are required to complete the online tutorial ‘Ready, Steady, Write’. Linked to this requirement, all cover sheets which students must complete when submitting assessed work, must contain the following declaration:

I have read and I understand the plagiarism provisions in the General Regulations of the University Calendar for the current year, found at: [http://www.tcd.ie/calendar](http://www.tcd.ie/calendar)

I have also completed the Online Tutorial on avoiding plagiarism ‘Ready, Steady, Write’, located at [http://tcd-ie.libguides.com/plagiarism/ready-steady-write](http://tcd-ie.libguides.com/plagiarism/ready-steady-write)

Plagiarism detection software such as “Turnitin” and Blackboard’s “SafeAssign” may be used to assist in automatic plagiarism detection. Students are encouraged
to assess their own work for plagiarism prior to submission using this or other software.

14.4 University regulations, policies and procedures

Academic Policies - https://www.tcd.ie/teaching-learning/academic-policies/

Student Complaints Procedure - https://www.tcd.ie/about/policies/160722_Student%20Complaints%20Procedure_PUB.pdf


14.5 Data protection

A short guide on how College handles student data is available here: https://www.tcd.ie/info_compliance/data-protection/student-data/

15. General Information

15.1 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.

15.2 European Credit Transfer System (ECTS)

The European Credit Transfer and Accumulation System (ECTS) is an academic credit system based on the estimated student workload required to achieve the objectives of a module or programme of study. It is designed to enable academic recognition for periods of study, to facilitate student mobility and credit accumulation and transfer. The ECTS is the recommended credit system for higher education in Ireland and across the European Higher Education Area.
The ECTS weighting for a module is a measure of the student effort or workload required for that module, based on factors such as the number of contact hours, the number and length of written or verbally presented assessment exercises, class preparation and private study time, laboratory classes, examinations, clinical attendance, professional training placements, and so on as appropriate. There is no intrinsic relationship between the credit volume of a module and its level of difficulty.

The European norm for full-time study over one academic year is 60 credits. 1 credit represents 20-25 hours estimated student effort, so a 5-credit module will be designed to require 100-125 hours of student effort including class contact time, assessments and examinations.

ECTS credits are awarded to a student only upon successful completion of the programme year. Progression from one year to the next is determined by the programme regulations. Students who fail a year of their programme will not obtain credit for that year even if they have passed certain component. Exceptions to this rule are one-year and part-year visiting students, who are awarded credit for individual modules successfully completed.

**14.3 Guidelines on Grades**

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**

<table>
<thead>
<tr>
<th>Mark Range</th>
<th>Criteria</th>
</tr>
</thead>
</table>

35
<p>| 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. |</p>
<table>
<thead>
<tr>
<th>Mark Range</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>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).</td>
</tr>
<tr>
<td>80-89</td>
<td>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.</td>
</tr>
<tr>
<td>70-79</td>
<td>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.</td>
</tr>
<tr>
<td>Score Range</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>60-69</td>
<td>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.</td>
</tr>
<tr>
<td>50-59</td>
<td>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. Insufficient attention to organisation and presentation of the report.</td>
</tr>
<tr>
<td>40-49</td>
<td>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.</td>
</tr>
<tr>
<td>20-39</td>
<td>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.</td>
</tr>
<tr>
<td>0-19</td>
<td>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.</td>
</tr>
</tbody>
</table>
15.4 Emergency procedure

In the event of an emergency, dial Security Services on extension 1999.

Security Services provide a 24-hour service to the college community, 365 days a year. They are the liaison to the Fire, Garda and Ambulance services and all staff and students are advised to always telephone extension 1999 (+353 1 896 1999) in case of an emergency.

Should you require any emergency or rescue services on campus, you must contact Security Services. This includes chemical spills, personal injury or first aid assistance.

It is recommended that all students save at least one emergency contact in their phone under ICE (in Case of Emergency).