BEng (Hons) Engineering with Specialisms

Welcome

Apart from this section, all of the material described in this handbook is generic and is applicable to any course in the School of Electrical & Mechanical Engineering. This section is specific to your course - the BEng Engineering with Specialisms. It explains some of the features of the way in which the course is organised, taught, and examined and consequently is intended to assist you in deciding on the best ways in which to approach your studies. It also contains information to help you settle easily into the course and to make decisions about choices such as, specialisms, optional subjects and projects.

The Courses (C320UJ, C520UJ, C326UJ)

The BEng(Hons) course C320UJ, is a 4-year programme with three years in the University and one year on industrial placement. Students fulfilling the requirements of the course will be awarded a classified honours Degree and a Diploma in Industrial Studies (DIS). The BEng(Hons) course code C520UJ is a part-time version of the course, omitting the DIS placement. Part-time candidates are generally working in the engineering industry and will have already undertaken a period of work at a professional engineer level which is deemed at least equivalent to that undertaken by students on course C320UJ. Students in this course will not be eligible for a DIS award. The MEng course, code C326UJ, with DIS is a 5-year programme with the first two academic years and Placement year common with the the BEng(Hons) courses. Students taking the Electronics route on the MEng course may optionally also study, without loss of time, for the German degree of Dipl. Ing. from the University of Applied Sciences in either Augsburg or Kempten in Bavaria, Germany. It is planned to develop a similar option for students on the mechanical stream.

The BEng & MEng courses were introduced as a result of the Engineering Council’s response to the report of the Finneston Committee of inquiry into the Engineering Profession (1980). Two conclusions of the report, in relation to engineering education and honours degree programmes were:

- They should provide an integrated mix of theory, applications and experience from which intending engineers can emerge with an appreciation of engineering as it is practised, well equipped and confident to begin contributing effectively.

- They should cater for the differing requirements of the main body of engineers, those who demonstrate exceptional potential for leadership in engineering and for a large group of supporting engineers.

For students taking either the mechanical stream or the electrical stream, both the BEng and MEng courses are CEng accredited by both the Institution of Mechanical Engineers (IMechE) and the Institution of Electrical Engineers (IEE), respectively.

The courses have established a good reputation for producing able graduates to serve the needs of local,
national and international industry. The industrial placement year enables undergraduates to develop and mature in relevant and live industrial settings, prior to final studies. A strong applications orientation is engendered and many graduates from the courses have also progressed to higher degree programmes.

**Philosophy of the BEng Course**

Central to the philosophy of the course is the aim to develop the students' powers of intellect, imagination and enterprise in order that they may progress as rapidly as possible towards fulfilling the roles and responsibilities of a professional engineer. Increasing knowledge constitutes part of this process of progression but a more complete appreciation of the integrated nature of engineering theory, application and practice, and commercial considerations must be accompanied by development of the ability to communicate effectively, to understand relationships and to synthesise. The course, therefore, seeks to meet these requirements by the way in which it is taught and the means by which the students' attainments are assessed. The sandwich year of professional training and the Diploma in Industrial Studies are seen as important features in this respect.

Whilst it is clear that in a broadly based course the content will by nature be relatively comprehensive it is desirable not to impose arbitrary pre-ordained limits on what students can or cannot achieve. The proposed course therefore provides the student with some freedom of choice in the development of career specialisms in mechanical, manufacturing, materials, electronics and communications engineering, consistent with a core of study which seeks to meet the deficiencies in engineering education previously identified.

Perception of a growing need to provide a route to professional engineering status for high-grade technician engineers currently employed in industry has lead to the introduction of regulations that allow completion of the degree requirements by a part time attendance mode. The numbers of students proceeding by this mode will be small and since activities are largely integrated with the full-time course resource constraints are minimised.

The course is seen to provide the following features:

- The course permits the broadly based study of mechanical and electrical engineering principles with the choice of career specialisms delayed until the second half of Year 2.
- Design orientated studies minimising formal lecture hours, encouraging personal development and promoting the satisfactory integration of theory and practice.
- Opportunities for students to study engineering within a European or world context through the E.U. and international student exchange schemes and collaborative cross-national study programmes are available within the course.
- Interaction of full-time with more mature and experienced part-time attendance mode students leading to the interchange of ideas, broadening of general attitudes and development of self-confidence levels.
Programme Management
A Course Director manages each University Course. The Course Director has responsibility for overall policy matters relating to the course and the day-to-day organisation of the course. The Course Director for both the BEng and MEng Engineering degree programs is Dr F J Owens (fj.owens@ulster.ac.uk, Room 5B15).

There is also a Course Committee associated with each course which comprises the Course Director, Senior Academic staff from the School, Academic staff who are assigned to teach modules on the course and student representatives from each year of the Course.

The Course Committee places great emphasis on quality and professionalism in all aspects of the course. There is, in place, a wide variety of checking mechanisms and procedures, both internal and external, to ensure that the standards expected from the course are met and maintained. There are thus mechanisms for example to ensure the quality of the course material and marking standards for both coursework and examinations.

External Examiners
External Examiners are usually Professors from different Universities who moderate and maintain the academic standards of the course. This Course has two external examiners, one with specialist knowledge of electrical engineering and the other with that of mechanical engineering. The Course Committee liaises closely with these External Examiners and is always appreciative of their advice and comments.

The External Examiners visit the University twice in the year although contact is made on a regular basis throughout the academic year. On their first visit final year students are questioned about their progress in the final year project. On the second visit they are involved in the moderation of assessment material and the meeting of the board of examiners at which each student is considered individually and recommendations for the award of degrees made.

All level 2 and 3 level (broadly Year 2 and final year) coursework assignments and examination papers with model solutions are presented to the External Examiners for approval. Similarly all examination scripts and coursework are made available for moderation. The reports from the External Examiner form an important part of the documentation associated with the Annual Course Review that is undertaken each year. In this Review each Course Director is invited to consider the operation of the previous academic year and comment on its success or otherwise. It is a University mechanism for ensuring that the standards expected from the course are being maintained.

Studies Advisers and Studies Advice Group
In addition to the Course Director, you will be assigned a Studies Advisor. This will be a member of academic staff from within the School who will act in a pastoral role for you and other students within a Studies Advice Group. You will be advised of your Group and Studies Advisor by the first week of the course. Groups comprise of between 10 to 15 students and meet on a regular weekly basis. The time for your meeting is indicated in the Timetable for Semester 1 of your course. Attendance at the weekly group meeting is compulsory and a register will be kept to monitor this. Absences from the group meetings will automatically activate staff to establish if you are ill or are experiencing any difficulties to cause the absences.

The function of the Studies Advice Group is to provide guidance and information on matters relating to study methods, time management, examination techniques, etc. In addition, it is used to regularly monitor your current position on the course and identify that your studies are going according to plan,
or for example on matters relating to problems with grants or accommodation. The Studies Advisor for your group will also be your “voice” in the meeting of the Board of Examiners at the end of the course year. Consequently you must always make him or her aware of any matters which you feel are affecting your performance in the coursework assessments or examinations, for example absence from the course due to illness or any other reason. Students are occasionally called for jury duty. If this is the case, contact your Studies Adviser immediately. You should also meet with your Studies Advisor on an individual basis (outside of the group) if you need to discuss any personal matters.

**Student Staff Consultative Committee**

A few weeks after the start of your course, your class will be asked to nominate three student representatives to serve on the Student/Staff Consultative Committee. This committee meets with the staff representatives at least once each term and provides an opportunity for you to discuss with the academic staff any problems associated with the organisation of the course so that remedial action can be quickly taken if necessary. These meetings are minuted and the minutes are included with the Course Annual Report.

**Course Notice Board**

Each course has an information notice board. The BEng in Engineering Course notice board is located outside room 5F10. You should locate this notice board and make a point of regularly consulting it for up-to-date information on the course.

However, all students of this Course are expected to view the Course's website at:

http://www.engj.ulst.ac.uk/courses_index/c320uj

This provides up to date information relating to your year of the Course and the Course in general. There are also direct links into module syllabi and support material, and other useful sites such as the library.

**Structure of a Year**

The University calendar is organised around the normal 3 terms (Autumn, Spring and Summer). However, the course is organised on a Semester basis in which the academic year is divided into 2 parts. Semester 1 runs from September to January. Semester 2 runs from February to June. There is also some special teaching in the University between July and September but this is normally unlikely to affect your course. The Semester dates and vacation periods are contained on the course calendar that should have been issued to you during enrolment.

**Modules**

The structure of this course reflects the unified modular structure introduced by the University in October 1992. This modular structure requires the accumulation of 360 credit points over three academic years for a degree award. The structure specifies 20, 10 and 30 point modules and for the award of an honours degree defines a requirement for 120 credit points at Level 1, 120 credit points at Level 2 and 120 credit points at Level 3. In the modular scheme academic sessions are now semester based with normally, two semesters per full time study year and three modules per semester. There are exceptions to this with, for example, Mathematics (MAT126J4A) and Mechanical Science (MEC107J4A) being taught across both semesters. The modular structure of the BEng Engineering course is shown in the diagram on the following page. Some of the details of the course structure in relation to module choices in final year are subject to formal approval by the University through its
During each year, you will normally study a total of 6 modules. In the first year of your course, the modules available to you are all compulsory but in the second and final year you will be asked to select optional modules. Normally an optional module will be offered only if at least 10 students opt to do it. The modules may be continuously assessed by coursework throughout or assessed by a combination of coursework and an examination. Examinations take place at the end of a module; i.e. there are 2 examination periods each year, in January and in May. In the University's modular course structure, a module may also be taken by students on courses other than your own. In your case you will mostly share modules with, the MEng/BEng Electronic Systems and BEng in Mechanical Engineering.
BEng (Hons) Engineering Course Structure

**Semester 1**

- MAT126J4A Engineering Mathematics
- MEC105J1A Mechanical Science 1

**Year 1**

- EEE107J1 Circuits
- MEC107J4A Engineering Communication

**Semester 2**

- MEC106J2 Design & CAE 1

**Year 2**

- EEE307J1A Electronic Engineering
- MEC308J1 Materials
- MEC303J1A Mechanical Science 2
- MEC304J2 Design & Industrial App 2
- EEE310J1 Comms. Princ. & Systems
- EEE306J2 Signals & Systems

**OR**

- EEE347J2 Engineering Analysis
- EEE350J2 Instrumentation & Control

**Year 3**

- MEC319J4 Placement (60)
- EEE515J1A ASICs & Digital Design
- MEC510J1A Mechanical Science 3
- EEE516J4 Honours Project (30)

**OR**

- EEE509J2 Control Systems Engineering
- MEC509J2 Manufacturing Technology
- MEC502J2 Computer Aided Engineering
- EEE509J2 Control Systems Engineering
- MEC506J2 Energy Studies
- EEE514J2U Digital Signal Processing
- EEE508J2 Communications Circuit Design

**Year 4**

- EEE529J1A Industrial Management (10)
- MEC505J1 Design & Ind. Applications 3
- EEE516J4 Honours Project (30)
- EEE509J2 Control Systems Engineering
- MEC509J2 Manufacturing Technology
- MEC502J2 Computer Aided Engineering
- EEE509J2 Control Systems Engineering
- MEC506J2 Energy Studies
- EEE514J2U Digital Signal Processing
- EEE508J2 Communications Circuit Design

- Mech. Options (Select 2)
- Elect. Options (Select 2)
### BEng Engineering with Specialisms

<table>
<thead>
<tr>
<th>Week beginning 13(^{th}) September, 2004</th>
<th>Course Committee Meeting</th>
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<tbody>
<tr>
<td><strong>Semester 1 - Autumn</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Monday 20(^{th}) September, 2004</strong></td>
<td>Autumn Teaching begins</td>
</tr>
<tr>
<td>Week beginning 11(^{th}) October, 2004</td>
<td>Staff/Student Consultative meetings</td>
</tr>
<tr>
<td>Week beginning 8(^{th}) November, 2004</td>
<td>Course Committee Meeting</td>
</tr>
<tr>
<td>Week beginning 22(^{nd}) November 2004</td>
<td>Staff/Student Consultative meetings</td>
</tr>
<tr>
<td>Friday 10(^{th}) December, 2004</td>
<td>Teaching Ends</td>
</tr>
<tr>
<td><strong>Monday 13(^{rd}) December, 2004</strong></td>
<td>Christmas Vacation begins</td>
</tr>
<tr>
<td>Saturday 25(^{th}) December 2004 - Monday 3(^{rd}) Jan 2005</td>
<td>University Closed (Christmas)</td>
</tr>
<tr>
<td><strong>Tuesday 4(^{th}) January 2005</strong></td>
<td>Christmas vacation ends</td>
</tr>
<tr>
<td>Wednesday 5(^{th}) - Monday 17(^{th}) January 2005</td>
<td>Examination Period</td>
</tr>
<tr>
<td>Week beginning 17(^{th}) January 2005</td>
<td>Course Committee Meeting</td>
</tr>
<tr>
<td>Friday 21(^{st}) January 2005</td>
<td>Autumn Semester ends</td>
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</tbody>
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### Semester 2 - Spring

<table>
<thead>
<tr>
<th><strong>Monday 24(^{th}) January 2005</strong></th>
<th>Spring Teaching begins</th>
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<tbody>
<tr>
<td>Friday 4(^{th}) February 2005</td>
<td>Last date to alter semester 2 option module selections</td>
</tr>
<tr>
<td>Week beginning 14(^{th}) February, 2005</td>
<td>Staff/Student Consultative meetings</td>
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<tr>
<td>Week beginning 7(^{th}) March 2005</td>
<td>Course Committee Meeting</td>
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<tr>
<td>?? March 2004 (TBA)</td>
<td>Visit by external examiners to interview project students</td>
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<tr>
<td><strong>Thursday 17(^{th}) March, 2005</strong></td>
<td>University Closed (St. Patrick’s Day)</td>
</tr>
<tr>
<td>Week beginning 21(^{st}) March, 2005</td>
<td>Staff/Student Consultative meetings</td>
</tr>
<tr>
<td><strong>Friday 25(^{th}) March 2005</strong></td>
<td>Easter Vacation begins</td>
</tr>
<tr>
<td><strong>Monday 28(^{th}) March - Friday 1(^{st}) April 2005</strong></td>
<td>University Closed (Easter)</td>
</tr>
<tr>
<td><strong>Friday 8(^{th}) April 2005</strong></td>
<td>Easter vacation ends</td>
</tr>
<tr>
<td><strong>Monday 2(^{nd}) May 2005</strong></td>
<td>University Closed (May Day)</td>
</tr>
<tr>
<td>Tuesday 3(^{rd}) May 2005</td>
<td>Project dissertation submission deadline</td>
</tr>
<tr>
<td>Tuesday 3(^{rd}) May - Friday 6(^{th}) May 2005</td>
<td>Revision week (non teaching)</td>
</tr>
<tr>
<td>Monday 9(^{th}) May - Monday 24(^{th}) May 2005</td>
<td>Examination Period</td>
</tr>
<tr>
<td>Week beginning Monday 23(^{rd}) May 2005</td>
<td>Dissertation Ranking Meetings</td>
</tr>
<tr>
<td><strong>Friday 27(^{th}) May, 2005</strong></td>
<td>Spring Semester ends</td>
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</table>

Thursday 9\(^{th}\) June 2004 *

**Final year students to be available for interview by the external examiners on day of or day preceding the Board of Examiners**

<table>
<thead>
<tr>
<th>Monday 27(^{th}) June to Wednesday 6(^{th}) July 2005</th>
<th>Graduation Ceremonies</th>
</tr>
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<tbody>
<tr>
<td><strong>Resit Period</strong></td>
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</tr>
<tr>
<td>Wednesday 17(^{th}) August to Thursday 25(^{th}) August, 2005</td>
<td>Supplementary Examinations</td>
</tr>
<tr>
<td>Week beginning Monday 29(^{th}) August 2005</td>
<td>Meeting of Boards of Examiners</td>
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**The Timetable for Semester 1**
You will be issued with an individual timetable on the Course Induction day. If changes are necessary throughout the year you will be notified of them and you should amend your individual timetable accordingly.

**Time management.**
All university courses are designed on the assumption that you will work an average of 10 hours for each credit point; that is 200 hours for a 20 point module. In general each semester covers the equivalent 60 credit points. Spreading that over twelve teaching weeks and, say, two vacation weeks, implies an average 43-hour week for all classes and private study. Some of you may need to work more than this; no one should be working less as you can always learn more and understand better. However, if you work more than, say, 50 hours, be sure it's time well used and remember that you need breaks!

To achieve your full potential, to understand and enjoy the course, and to maximise your chances of success and future employment, you will need to organise your time sensibly. You will be in timetabled classes for around 18 hours per week, so you need to find about 25 hours more in your own time, eg. 14 hours more within `office hours' and something like three whole evenings every week. If you work significantly less than this, you are likely to underachieve, to find your courses incomprehensible and dull, and to be in danger of failure.

**Programme Specification**
What follows is the Programme specification for your Course. It makes explicit the intended outcomes in terms of knowledge, understanding, skills and other attributes. This should help you to understand

- the teaching and learning methods that enable the outcomes to be achieved;
- the assessment methods that enable achievement to be demonstrated;
- relationship of the programme and its study elements to the qualifications framework and to any subsequent professional qualification or career path.
UNIVERSITY OF ULSTER

PROGRAMME SPECIFICATION

COURSE TITLES: BEng(Hons) Engineering with Specialisms & DIS (C320UJ) FT
BEng(Hons) Engineering with Specialisms (C520UJ) PT

PLEASE NOTE. This specification provides a concise summary on the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities provided. Detailed information on the specific learning outcomes, content and the teaching, learning and assessment methods of each module can be found at [http://www.engj.ulst.ac.uk/modules/](http://www.engj.ulst.ac.uk/modules/). The accuracy of the information is reviewed by the University. It may also be checked within the independent review process undertaken by the Quality Assurance Agency. This program specification is relevant only to students entering the course in the academic year 2001 / 2003. Some of the details presented are subject to formal approval by the University through its course update and quality enhancement procedure.

<table>
<thead>
<tr>
<th>1. AWARDING INSTITUTION/BODY:</th>
<th>University of Ulster</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. TEACHING INSTITUTION</td>
<td>University of Ulster</td>
</tr>
<tr>
<td>3. LOCATION</td>
<td>Jordanstown</td>
</tr>
<tr>
<td>4. COURSE ACCREDITED BY</td>
<td>IEE &amp; IMechE</td>
</tr>
<tr>
<td>5. FINAL AWARD</td>
<td>BEng(Hons) with DIS, BEng(Hons)</td>
</tr>
<tr>
<td>6. MODE OF ATTENDANCE</td>
<td>Full Time/Part Time</td>
</tr>
<tr>
<td>7. SPECIALISMS</td>
<td>Communications, Electronics, Manufacturing, Mechanical Engineering</td>
</tr>
<tr>
<td>8. UCAS CODE</td>
<td>H110</td>
</tr>
<tr>
<td>9. QAA SUBJECT UNIT</td>
<td>Engineering</td>
</tr>
</tbody>
</table>
### 10. EDUCATIONAL AIMS OF THE COURSE -

- To produce graduates with the skills and attributes that a Chartered Engineer will be expected to display and consolidate in industry and throughout their professional career.
- To provide the intended engineer with the analytical, scientific and engineering principles to act as the foundation of the subject.
- To provide an appropriate balance between the vocational skills necessary for immediate employment and the more fundamental principles necessary for post graduate work.
- To develop the student's personal attributes, especially in the areas of problem solving, design and critical assessment of engineering.
- To cultivate an attitude of professionalism and to develop a facility in communication skills, team working and project planning.
- To develop the student’s awareness of the environment in terms of materials and energy usage; safety and legal issues within engineering; and general cost implications in design and manufacture.
- To demonstrate potential to engage in research through initiative, perception and original thinking.
- To demonstrate potential for management in industry.
- To provide students with the opportunity to specialise in an area of knowledge supported by a research base.

In addition for students who obtain the Diploma In Industrial Studies (DIS) -:

- To enhance an understanding of the work place.
- To develop personal and professional skills.

### 11. LEARNING OUTCOMES -

The course provides opportunities for students to achieve and demonstrate the following learning.

#### SUBJECT RELATED QUALITIES

**Knowledge and Understanding of:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>K1</td>
<td>Basic scientific and mathematical principles that are fundamental to engineering.</td>
</tr>
<tr>
<td>K2</td>
<td>The structural relationships which exist among engineering fundamentals.</td>
</tr>
<tr>
<td>K3</td>
<td>The economic, environmental, human and social impacts of technology.</td>
</tr>
<tr>
<td>K4</td>
<td>Detailed knowledge and understanding of the student’s chosen area of specialisation.</td>
</tr>
<tr>
<td>K5</td>
<td>The solution of engineering problems in the light of technological, economic and human constraints.</td>
</tr>
</tbody>
</table>

**Teaching and Learning Methods**

Subject related qualities are acquired mainly through lectures, seminars, directed reading, videos, IT based resources, case studies and experiential learning. Exposure to the engineering environment is an important aspect of the teaching and learning methods as are projects.

**Assessment Methods**

Testing of the knowledge base is principally through examinations, coursework assignments, laboratory reports, project dissertation and oral presentations.
INTELLECTUAL QUALITIES

Able to:

I1 analyse problems and design solutions using appropriate mathematical methods, scientific principles and engineering applications.

I2 be creative in the solution of problems and in the development of designs.

I3 integrate engineering theory and practice with particular emphasis on applications, design and commercial and management studies.

I4 integrate information and data from a variety of sources.

I5 plan, conduct and report a programme of original research.

Teaching and Learning Methods
Intellectual qualities are developed mainly through coursework assignments, experimental work and projects.

Assessment Methods
Assessment focuses on the coursework assignments, experimental write-ups and project reports. Some of these skills are also assessed in the formal examinations.

PROFESSIONAL /PRACTICAL SKILLS

Able to:

P1 apply the design process in the development and realisation of engineering products and systems.

P2 design and carry out a programme of experiments using modern equipment.

P3 prepare and interpret technical reports and technical drawings.

P4 source and use engineering information.

P5 utilise industry standard computer application packages across a variety of engineering applications.

P6 demonstrate hands on experience of basic workshop practices.

P7 use management skills to plan, organise and provide leadership in work groups and projects.

Teaching and Learning Methods
The teaching and learning methods place emphasis on engineering workshop practice, visits to local engineering companies and the supervised industrial placement year. Experimental work, team projects and design assignments also contribute.

Assessment Methods
The supervised work experience is assessed with visits, reports and an oral presentation. Coursework assignments, workshop exercises, laboratory reports, project dissertations and student peer assessment also contribute to the assessment methods.
TRANSFERABLE/KEY SKILLS

Able to:

**T1** use information technology and associated skills.

**T2** communicate to engineering professionals, non-engineering professionals and with society at large.

**T3** apply mathematical and modelling skills to engineering problems.

**T4** function as a member and a leader of a team.

**T5** transfer techniques and solutions from one field of engineering to another.

**T6** learn in familiar and unfamiliar situations.

**T7** develop the facility for independent learning, open mindedness and the spirit of critical enquiry.

**Teaching and Learning Methods**
Transferable and key skills are delivered throughout the course, i.e. lectures, coursework assignments, laboratory work, industrial placement year and project dissertations. The IT skills are taught within the course structure.

**Assessment Methods**
Assessment is principally through coursework assignments, laboratory reports and project dissertations. Assessment of teamwork is through submission of teamwork tasks, student peer and self assessment, and oral presentations.
### MODULE OUTCOME MAP for BEng(Hons) Engineering with Specialisms

**Please Note:** The matrix displays only the main measurable outcomes. There may be other outcomes detailed in the module descriptions (e.g. attitudes and behaviours) which are not assessed.

| Module No. | Module Description               | K1 | K2 | K3 | K4 | K5 | I1 | I2 | I3 | I4 | I5 | P1 | P2 | P3 | P4 | P5 | P6 | P7 | T1 | T2 | T3 | T4 | T5 | T6 | T7 |
|------------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| MAT126J4A  | Engineering Mathematics          | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE107J1   | Circuits                         | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC105J1   | Engineering Communication        | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC107J4A  | Mechanical Science 1             | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC106J2   | Design & CAE 1                   | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC308J1   | Materials                        | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC303J1A  | Mechanical Science 2             | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE307J1   | Electronic Engineering A         | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC304J2   | Design & Industrial Appl. 2      | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE350J2   | Instrumentation & Control        | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE310J2   | Comms. Principles & Systems      | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE347J2   | Engineering Analysis             | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE306J2   | Signals & Systems                | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC319J4   | Industrial Placement             | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE529J1   | Industrial Management            | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC510J1   | Mechanical Science 3             | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE513J1   | ASICs & Digital Design           | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC505J1   | Design & Industrial Appl. 3      | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE516J4   | Honours Project                  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE509J2   | Control Systems Engineering      | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC509J2   | Manufacturing Technology         | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| MEC502J2   | Computer Aided Engineering       | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE323J2   | Communication Systems            | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE507J2   | Object Oriented Programming      | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE514J2U  | Digital Signal Processing        | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| EEE508J2   | Communications Circuit Design    | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
12. COURSE STRUCTURE AND REQUIREMENTS

The course offers a study programme leading to the award of a BEng Honours Degree. The programmes is full time and conforms to the University’s modular requirements. An accumulation of 120 credit points is necessary to complete each year of the course, with the exception of the industrial placement year. Modules in Years 1 and 2 share much commonality irrespective of the specialism that will be finally studied. This honours degree is of 4 years duration with a one year industrial placement representing the third year.

Progression, transfer and award criteria are outlined in section 16.

Details of the modules, and their corresponding credit level, for each programme are listed below.

**Year 1 - All modules at Level 1**

<table>
<thead>
<tr>
<th>Module No.</th>
<th>Module</th>
<th>Credit Points</th>
<th>*Module Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT126J4A</td>
<td>Engineering Mathematics</td>
<td>20</td>
<td>C</td>
</tr>
<tr>
<td>EEE107J1</td>
<td>Circuits</td>
<td>20</td>
<td>C</td>
</tr>
<tr>
<td>MEC105J1</td>
<td>Engineering Communication</td>
<td>20</td>
<td>C</td>
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<tr>
<td>MEC107J4A</td>
<td>Mechanical Science 1</td>
<td>20</td>
<td>C</td>
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<td>MEC106J2</td>
<td>Design &amp; CAE 1</td>
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<td>C</td>
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<tr>
<td>MEC109J2A</td>
<td>Materials &amp; Manuf. Processes</td>
<td>20</td>
<td>C</td>
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**Year 2 - All modules at Level 2**

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<tr>
<td>MEC303J1A</td>
<td>Mechanical Science 2</td>
<td>20</td>
<td>C</td>
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<tr>
<td>EEE307J1A</td>
<td>Electronic Engineering A</td>
<td>20</td>
<td>C</td>
</tr>
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<td>EEE310J1</td>
<td>Communication Principles and Systems</td>
<td>20</td>
<td>O</td>
</tr>
<tr>
<td>MEC308J1</td>
<td>Materials</td>
<td>20</td>
<td>O</td>
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<td>Design &amp; Industrial Applications 2</td>
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<td>O</td>
</tr>
<tr>
<td>EEE306J2</td>
<td>Signals &amp; Systems</td>
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<td>O</td>
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<tr>
<td>EEE347J2</td>
<td>Engineering Analysis</td>
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<td>C</td>
</tr>
<tr>
<td>EEE350J2</td>
<td>Instrumentation &amp; Control</td>
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<td>C</td>
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</table>

**Year 3 - Industrial Placement Year (Level 2)**

<table>
<thead>
<tr>
<th>Module No.</th>
<th>Module</th>
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<th>*Module Status</th>
<th>Award</th>
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<tr>
<td></td>
<td>Industrial Placement</td>
<td>60</td>
<td>C</td>
<td>DIS on award of degree</td>
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</table>

**Year 4 - All modules at Level 3** - Students take 6 modules to a total value of 120. The choice depends on their chosen speciality.

<table>
<thead>
<tr>
<th>Module No.</th>
<th>Module</th>
<th>Credit Points</th>
<th>*Module Status</th>
<th>Award</th>
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<td>Design &amp; Industrial Applications 3</td>
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<td>C</td>
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<td>EEE516J4</td>
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</table>

*Either / Or*

<table>
<thead>
<tr>
<th>Module No.</th>
<th>Module</th>
<th>Credit Points</th>
<th>*Module Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEE515J1</td>
<td>ASICs &amp; Digital Design</td>
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<td>O</td>
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<tr>
<td>MEC510J1</td>
<td>Mechanical Science 3</td>
<td>20</td>
<td>O</td>
</tr>
</tbody>
</table>
### 13. SUPPORT FOR STUDENTS AND THEIR LEARNING

Students and their learning are supported in a number of ways:-

- A comprehensive induction for new students regardless of entry level.
- Course handbooks and module booklets.
- Access for students to the Course Director and academic staff.
- Student representation on the course committee.
- Opportunity to address general course concerns through the student/staff consultative committees (separate committees exist for each year of the course).
- Personal studies advisors allocated to each student.
- Opportunity for feedback on academic progress at the end of each semester.
- Guidance and information on safety-related matters.
- Facilities and assistance offered by the library and computer services (ISD).
- Student email accounts and full access to the Internet.
- Department of Student Affairs provides services in the fields of accommodation, health, counselling & guidance, careers, childcare, finance & special needs.
- The Careers Service, in conjunction with course teams, provides structured careers management skills.
- University has protocols for assessment of students with disabilities.
- Student membership and participation in professional bodies is encouraged.
- Students Union, in conjunction with the International Office, runs an orientation course for overseas students.

### 14. CRITERIA FOR ADMISSION TO THE COURSE

Applicants must satisfy the University's general entry requirements:

Students may gain entry to the course in the following ways:-

**BEng(Hons)**

- GCE A level grades CCC/BCD including mathematics and a physical science.
- GNVQ Overall Distinction and 4 extra units must include Optional and Additional Maths. (Key Skills required)
- BTEC Diploma in Engineering 3 Distinctions plus 3 Merits in level III units including
mathematics and engineering science.

- HND  Overall Merit with at least 3 distinctions including Mathematics
- Other qualifications as deemed equivalent to the above.

15. EVALUATING AND IMPROVING THE QUALITY AND STANDARD OF LEARNING AND TEACHING

The following mechanisms are used:
- Formal student feedback is sought on the content and delivery of each module via a module evaluation questionnaire, a free response method or a module forum.
- Upon completion the module team reviews each module. Statistical information, student feedback, content, delivery, assessment methods, resources and proposed enhancements are considered.
- Regular student/staff consultative meetings provide the means of highlighting any difficulties, relating to the course, experienced by the cohort.
- The course committee considers module evaluations and other student feedback, with matters of concern highlighted for action, as part of the annual course review.
- Students are given opportunity to be represented at course committee and faculty board.
- The course is periodically reviewed by the Institution of Mechanical Engineers (IMechE) and the Institution of Electrical Engineers (IEE).
- Staff teaching performance is monitored annually through student questionnaires. In addition, staff members are encouraged to participate in peer observation of their teaching.
- Staff appraisal is carried out on a 2-year cycle with attention given to the development needs of the individual staff member.
- At school and faculty levels there are active Learning and Teaching Committees responsible for co-ordinating developments and initiatives relating to innovative methods for delivery, technology mediated learning, as well as general resource issues. In addition, this committee is responsible for regulating faculty codes of practice relating to course management and delivery.
- The University has an active Educational Development Unit which supports and funds specific research/projects into improvement of delivery and overall student experience.
- The University has an active Staff Development Unit, which works closely with Educational Development and, in addition provides specific training/development for staff. Specifically, all new staff members (opportunity is also provided for existing staff) have to pursue a formal teaching qualification (Postgraduate Certificate) and are encouraged to apply for membership of the ILT.
16. REGULATION OF STANDARDS

**General Requirements**

General course regulations are in accordance with the current University of Ulster “Charter, Statutes, Ordinances and Regulations” and updated annually in the Student Handbook for the course.

**Specific Requirements**

The following outlines those regulations specific to the course:

- Pass mark for individual assessments = 40%

**Final Year Assessment**

The award of degree is based on the assessment of student performance in the final year of the degree. An aggregate mark of the final year marks will be used to classify the degree.

**Performance levels for Honours Degree Classification**

(Average mark from the 7 final year modules at level D, weighted in accordance with their module value as given in section 11)

Pass mark for individual assessments = 40%

Further details of assessment regulations are found in the relevant student handbook at [http://www.engj.ulst.ac.uk/courses_index/c320uj](http://www.engj.ulst.ac.uk/courses_index/c320uj)

The following percentages shall be used as the basis for determining candidates’ overall gradings and degree classifications.

- At least 70% First Class
- At least 60% and less than 70% Upper second class
- At least 50% and less than 60% Lower second class
- At least 40% and less than 50% Third Class
- Less than 40% Fail

In order to be considered for a particular class of honours degree a candidate must normally have obtained marks in an appropriate range or above in at least 50% of the course modules taken in the final year.

**External Examination**

External Examiners will be appointed for the course. Their role will be to moderate the assessment process, ensure appropriate standard of final awards and ensure that accuracy and consistency of assessment has been applied. Detailed duties are as specified in the current University of Ulster “Code of Practice for External Examiners” (consistent with QAA standards).
17. INDICATORS OF QUALITY RELATING TO LEARNING AND TEACHING

• Teaching staff within the faculty are encouraged to become accredited members of the Institute for Learning and Teaching. To date 6 members have fulfilled the requirements through completion of the Postgraduate Certificate in University Teaching. A further 6 staff members are in process of gaining the award.

• As well as teaching, most staff are actively engaged in research that informs their teaching. In addition, most have substantial industrial experience prior to joining the University. A significant number are full members of appropriate professional bodies (e.g. CEng, MIMechE, MIEE, MICE, MStructE, CGeol, CMath etc.).

• In the 2000 Research Assessment Exercise staff teaching on the course contributed to Unit 33 “Built Environment” gaining a score of 4. The subject areas of “Metallurgy and Materials” gained a score of 4 and “General Engineering” gained a score of 3b.

• A member of the teaching team was awarded the Distinguished Teacher award from the University.

• All honours degree students obtain a suitable one year industrial placement for their DIS year either locally or internationally.

• Graduates from the courses have substantially better employment prospects than those from other subject disciplines. Most will have paid employment within industry within 3 months of graduation.


• The courses are accredited by the Institution of Mechanical Engineers (IMechE) and the Institution of Electrical Engineers (IEE). The most recent accreditation visits were in May 2002.

Course Regulations

Your Course is governed by regulations that in part are set, and changed, by the University.

University Course Regulations

The current regulations are given at the end of this section on your course: but the regulations that will apply to you at any stage of your Course will be those in force at the time. Updates are published on the University web site. The number system used is that of the standard University template for such regulations.

Tables of Modules

The final section of the University Course Regulations, Table of Modules, is specific to your Course and is given below.
<table>
<thead>
<tr>
<th>Year/Level</th>
<th>Semester</th>
<th>Module Title</th>
<th>Code</th>
<th>Credit Value</th>
<th>Status</th>
<th>Condonable (Y/N)</th>
<th>Assessment Methods</th>
<th>% Written Exam</th>
<th>% Coursework</th>
<th>Contribution to the overall mark of the Final Award</th>
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<td>Engineering Communication</td>
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<td>20</td>
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19
3 BEng (Hons) Engineering PROGRAMME REGULATIONS

1. COURSE TITLE
   BEng (Hons) Engineering with Diploma in Industrial Studies.

2. COURSE CODE
   C320UJ (full-time); C520UJ (part-time).

3. MODE OF ATTENDANCE
   Full-time (C320UJ) or part-time (C520UJ).

4. DURATION
   Full-time - 4 years; part-time - 3 years (minimum) - 7 years (maximum)

5. LOCATION
   Jordanstown

6. FACULTY
   Engineering

6. ADMISSION REQUIREMENTS

6.1 Entry to Year 1 - BEng (Hons) Full-time

Applicants must satisfy the University's general entry requirements:

Students may gain entry with the following qualifications:

- GCE A Level 240 UCAS tariff points to include at least grades C,C in mathematics plus one from Physics/Chemistry/Biology/Technology & Design/Technology.
- VCE - Vocational A Levels - 240 UCAS tariff points to include at least grades B,B from Double Award VCE in Engineering plus single award or GCE A Level in any other subject.
- Irish Leaving Certificate (ILC) Highers - grades BBBCC including mathematics plus one from Physics/Chemistry/Biology/Technology & Design/Technology
- BTEC National Diploma in Engineering with 3 Distinctions including mathematics and 3 Merits at level III.
- HND Overall Merit including mathematics.
- GNVQ Overall Distinction and 4 extra units must include Optional and Additional Maths. (Key Skills required)
- Access Course in Science or Science & Technology - overall average of 55% (candidates will be interviewed to assess suitability)
- Other qualifications as deemed equivalent to the above.

6.2 Mature Candidates

Applicants of 21 years of age or over (or in exceptional circumstances, of less than 21) at the date of entry may be admitted even if they have not satisfied the requirements, provided they can demonstrate their ability to undertake the course.

6.3 Direct Entry to Second Year

Applicants who have taken alternative courses of study, either at Higher Diploma or Degree Level, and have attained a standard deemed to be equivalent to, or better than,
the first year of the Course will be granted module exemptions accordingly. The alternative course and any previous qualifications will be assessed on a subject or module basis in order to establish an equivalence to the Level 1 modules in the first year of the full time course and their progression requirements. The same condition will apply to internal transfer candidates from first year courses at the University of Ulster

6.4 Entry for Part Time Mode Candidates

(a) Candidates for admission will be over 21 years of age and possess:
   (i) a Higher National Diploma in an appropriate engineering subject. Such candidates will be required to have achieved an adequately high level of performance within the HND course;
   (ii) a Higher National Certificate in an appropriate engineering subject. Such candidates will be required to have achieved an adequately high level of performance within the HNC course;
   (iii) any equivalent qualification
(b) Candidates for admission to the part time mode will normally be in employment in an engineering function which is assessed by the course committee as equivalent to meeting the industrial training requirements of the course.
(c) Applicants holding acceptable qualifications will be required to demonstrate that they have the support of their employers in seeking release for part time study and the motivation to cope with the demands of the course.
(d) Exemptions
Candidates with acceptable admission qualifications may, at the discretion of the course committee be exempted from appropriate Level 1 modules, up to a maximum of six. Such exemption will be determined before the student enters the course.

7. EXEMPTIONS

Studies pursued and examinations passed in respect of other qualifications awarded by the University or by another university or other educational institution may be accepted as exempting candidates from part of an approved course provided that they shall register as students of the University of Ulster for modules amounting to at least the final third of the credit value of the award at the highest level.

8. PLACEMENT

8.1 Industrial placement is compulsory for the course and undertaken at the end of Year 2. Students will be required to spend a minimum of 25 weeks at the workplace. The minimum pass mark for progression to the final year of the course will be 40%. The minimum pass mark for the DIS award will be 50%.

8.2 Exemption
Exceptional individual circumstances, such as sufficiency of relevant industrial experience, may allow exemption from the sandwich year. Applications for exemption must normally be received no later than the commencement of the second year of the course. Applications, which must be properly documented, will be adjudged by the Dean in consultation with the appropriate Course Directors and where appropriate, the Academic Registrar. A student who is exempted from the sandwich year will proceed on a full-time degree programme and will not be eligible for the award of DIS.
9 ATTENDANCE REQUIREMENTS

9.1 Students are expected to attend all classes associated with the course and be punctual and regular in attendance.

9.2 A student who has not been in attendance for more than three days through illness or other cause must notify immediately the Course Director. The student shall state the reasons for the absence and whether it is likely to be prolonged. Where the absence is for a period of more than five working days, and is caused by illness which may affect their studies, the student shall provide appropriate medical certification in accordance with the General Regulations for Students.

9.3 Students who are absent without good cause for a substantial proportion of classes may be required to discontinue studies, in accordance with the General Regulations for Students.

10. RULES GOVERNING STUDENT CHOICE

10.1 Modules are offered as indicated in the attached table at the end of these regulations. Revisions may be made in accordance with the University’s quality assurance procedures. Module availability may vary.

11. EXAMINATION AND ASSESSMENT

11.1 The performance of candidates shall be assessed by the Board of Examiners in accordance with the Regulations Governing Examinations in Courses of Study.

11.2 Candidates shall be assessed in the modules for which they have enrolled in each year of study. At the discretion of the Board of Examiners candidates may be required to attend a viva voce examination.

11.3 Within each module candidates shall be assessed by coursework or a combination of coursework in accordance with information contained in the course specification.

11.4 The pass mark shall be 40% for each assessment element and for the module overall.

11.5 The pass mark for the placement year is 50%; a mark of 40% is sufficient for progression to the next stage of the course.

12. SUBMISSION OF COURSEWORK

12.1 Coursework shall be submitted by the dates specified by the course committee.

12.2 Students may seek prior consent from the course committee to submit coursework after the official deadline; such requests must be accompanied by a satisfactory explanation, and in the case of illness by a medical certificate. This application shall be made to the Course Director.

12.3 Coursework submitted without consent after the deadline shall not normally be accepted.
13. PROGRESS

13.1 Subject to 14 and 15 hereof, candidates are required to pass all modules in each year of study in order to proceed to the next. Progress from semester 1 to semester 2 is automatic.

13.2 Transfer

Subject to satisfactory performance in Year 2, candidates may at the discretion of the Board of Examiners transfer from the BEng (Hons) course to the MEng Engineering course or vice versa.

Candidates who transfer from the BEng (Hons) to the MEng course and who subsequently fail to satisfy the examiners may be assessed for the award of BEng (Hons).

14. CONDONEMENT

14.1 Condonement permits candidates to fail in modules without a requirement to repeat assessment. Failure in assessment elements of modules or in the modules overall as specified below and in the module table at the end of the regulations shall not be condoned:

Module EEE516J4 Honours Project
MEC319J4 Industrial Placement

In considering performance in an academic year, subject to this proviso, the Board of Examiners shall condone failure in modules in accordance with the following principles:

14.2 Minimum Mark

The minimum percentage which must be obtained by a candidate in each assessment element (coursework or examination) in order to be considered for condonement of failure is 35%.

14.3 Extent of Condonement

14.3.1 In any year other than the final year, candidates may be permitted to fail in module(s) to a value of no more than one-third of the credit value of modules studied;

Candidates who are repeating an entire year may be permitted to fail in module(s) to a value of one-sixth of the credit value of modules studied.

14.3.2 In the final year, candidates may be permitted to fail in module(s) to a value of no more than one-sixth of the credit value of modules studied.

14.4 Application

14.4.1 In modules which are assessed by coursework or examination only, failure may be condoned provided that there is evidence of sufficient merit in the other modules taken in the year, demonstrated by an overall mark of at least 45% (with each module weighted according to its credit value).

14.4.2 In modules which are assessed by a combination of coursework and examination, failure in one element may be condoned provided that there is evidence of sufficient merit in the other element demonstrated by an overall mark of at least 45% in the module (with the application of equal weighting between the two elements). If this evidence is insufficient,
an overall mark of 45% in the year may be accepted (with each module weighted according to its credit value).

14.4.3 In modules which are assessed by a **combination** of coursework and examination, failure in **both** elements may be condoned provided that there is evidence of sufficient merit in the other modules taken in the year, demonstrated by an overall mark of at least 45% (with each module weighted according to its credit value).

14.5 **Repeated Assessments**

For the purpose of applying condonement only, the actual mark achieved shall be considered and the maximum mark allowed (40%) shall be disregarded.

15 **CONSEQUENCES OF FAILURE**

15.1 Candidates who fail to satisfy the Board of Examiners in assessment may be permitted at the discretion of the Board to re-present themselves as specified in 15.2 for one or more supplementary examination and repeat such coursework or other assessment requirements as shall be prescribed by the Board. Such candidates may be exempted at the discretion of the Board from the normal attendance requirements. Where candidates are required to repeat coursework or to take a supplementary examination the original mark in the failed coursework component or examination shall be replaced by a mark of 40% or the repeat mark whichever is the lower for the purpose of calculating the module result, except in the placement year where the maximum mark allowed shall be 50%.

15.2 In each year, other than the final year, the consequences of failure which is not condoned in accordance with 14 hereof shall normally be as follows:

*Failure at the First Attempt*

Failure in modules with an overall value up to and including 60 credit points

Repeat specified examinations and/or coursework in the failed modules (examinations August).

Failure in modules with an overall value of 70 or 80 credit points

Repeat specified examinations and/or coursework in the failed first semester module(s) (examinations January) and of specified examinations and/or coursework in the second semester modules (examinations May) with or without attendance OR withdraw from the course or discontinue studies at the University.

Failure in modules with an overall value of more than 80 credit points

Withdraw from the course or discontinue studies at the University.

*Failure by candidates in year 2*

Exceptionally second year students may be permitted to commence the placement period, pending a requirement to represent themselves for supplementary written examinations or to repeat coursework.
Failure at the Second Attempt

Failure in modules with an overall value up to and including 20 credit points

Provided that the module(s) are not prerequisite(s), proceed to next year and repeat once only specified examination(s) and/or coursework in the failed module(s) at the next examination period (January or May).

Failure in modules with an overall value up to and including 40 credit points (except as above)

Repeat once only specified examination(s) and/or coursework in the failed module(s) at the next examination period (January or May or August if semester already repeated) with or without attendance (progress to next year not permitted).

Failure in modules with an overall value of more than 40 credit points

Withdraw from the course or discontinue studies at the University.

Consequences of failure in placement year (DIS)

Failure at the First Attempt

Failure in placement

Repeat once only all or part of placement.

Failure at the Second Attempt

Failure in placement

Withdraw from the course

15.3 Failure in the Final Year (Honours degree)

In the final year the consequences of failure which is not condoned in accordance with section 14 hereof, shall normally be as follows:

Failure in modules with an overall value up to and including 40 credit points

Repeat once only specified examination(s) and/or coursework in the failed module(s) in consideration for Honours classification (examinations August).

Failure in modules with an overall value of more than 40 credit points

Withdraw from the course or discontinue studies at the University.

16. CLASSIFICATION OF FINAL RESULT

16.1 The Table attached at the end of the regulations indicates the contribution of each module/level to the final award.

16.2 Classification of Final Result (Honours degree)

The following percentages shall be used as a basis for determining candidates’ overall gradings:
Class I    At least 70%
Class II (division i) (IIi) At least 60% and less than 70%
Class II (division ii) (IIii) At least 50% and less than 60%
Class III    At least 40% and less than 50%

In order to be considered for a particular class of Honours degree a candidate must normally have obtained marks in the appropriate range of above in at least 50% of the modules taken in the final level of the course.

16.3 Award of Diploma in Industrial Studies

The following shall be the minimum percentages used in determining the overall gradings of candidates in the Diploma.

Pass with Commendation  70%
Pass     50%

17. ILLNESS AND OTHER EXTENUATING CIRCUMSTANCES

17.1 In any year other than final year:

The Board of Examiners may in the case of candidates who are prevented by illness or other sufficient cause from taking or completing the whole or part of the assessment during the course, or whose results are substantially affected by illness or other sufficient cause, permit the candidates to complete, take, or repeat the assessment in one or more modules at an approved subsequent date.

17.2 Final year (Honours Degree):

The Board of Examiners may in the case of candidates who are prevented by illness or other sufficient cause from taking or completing the whole or part of the final stage assessment or whose results are substantially affected by illness or other sufficient cause:

(a) permit the candidate to complete, take, or repeat as candidates for the Honours degree, the assessment in one or more modules at an approved subsequent date or

(b) deem the candidate to have passed and recommend the award of an Aegrotat Honours Degree.

17.3 Before an Aegrotat award is recommended a candidate must have signified that he or she is willing to accept the award.

18. REVISIONS TO REGULATIONS

These regulations may be revised during the student’s period of registration in accordance with the procedures approved by Senate.