

How your Engineering Degree Award and GPA is calculated

Your performance across the range of modules you take will be calculated using a Grade-point Average (GPA) system, which is an average of grade-points awarded for each module weighted, according to the credit value of the modules for which the grades were approved – most modules will count for 5 credits. Each stage has 60 credits and you will receive a GPA at the end of each stage. You will also receive a **Degree GPA (Degree Award)** when you have completed your programme. The classification of your Degree Award will be based on a method of calculation which combines your GPA in stages 2 and 3 or stages 3 and 4 (depending on whether you graduate with a Bachelor of Engineering (BE) or a BSc (Bachelor of Engineering Science), per the table below).

Method of Calculation - RULE

Final and penultimate stages (weighted) - The degree GPA is calculated based on all modules, including elective modules, which the student completed and passed in UCD to satisfy the credit requirements of the final and penultimate stages of the programme where the credit values and grade points of final-stage modules are weighted by a factor of 7 and those of penultimate-stage modules are weighted by a factor of 3.

BE (Bachelor of Engineering) – 4 Years	Final Stage – Stage 4 Penultimate Stage – Stage 3
BSc (Engineering Science) – 3 Years	Final Stage – Stage 3 Penultimate Stage – Stage 2

Module Levels and your Engineering Degree

The level of a module is an indication of the level of difficulty of the learning outcomes and the material that will be encountered. **Levels** generally give a broad indication of the stage when a student is likely to take the module, although this is not always the case. For example, a Level 1 module within the Bachelor of Engineering (BE) indicates that the module is 'introductory' and a Level 2 module indicates that the module is 'intermediate'. Most stage 1 modules are Level 1 and most stage 2 modules are Level 2, and so on. However, a student could also be registered to take a Level 0 module which indicates that the module is 'Foundation'. The number of credits you take at a particular Level is also important. Within the Bachelor of Engineering (BE) and Bachelor of Science (BSc), the following requirements need to be achieved in order to be eligible to collect your Degree Award, per the table below.

Further information regarding guidelines for students regarding Module Levels can be found at www.ucd.ie/registry/academicsecretariat/docs/modulelevel_g.pdf

Degree Award	Programme Credit Accumulation Structure	Levels	Credits
Honours Bachelor Degree (NQAI level 8)	Module level restrictions for 180-credit Honours Bachelors Degree and 240-credit Honours Bachelors Degree	Level 0 Level 2 Level 3	10 credits maximum 100 credits must be at Level 2 or above* 40 credits must be at Level 3 or above

*These modules may include the 40 credits of Level 3 modules that are also required.

Academic Calendar 2013/2014

2013/2014 Semester 1		
Orientation	3 September 2013 - 6 September 2013	2 days
Teaching Term 1	9 September 2013 - 29 November 2013	12 weeks
Revision	2 December 2013 - 8 December 2013	1 week
Exams	9 December 2013 - 20 December 2013	11 working days
2013/2014 Semester 2		
Teaching term 2a	20 January 2014 - 7 March 2014	7 weeks
Fieldwork/Study Period	10 March 2014 - 23 March 2014	2 weeks
Teaching Term 2b	24 March 2014 - 25 April 2014	5 weeks
Revision	28 April 2014 - 4 May 2014	1 week
Exams	6 May 2014 - 17 May 2014	11 working days



ENGINEERING 2013/14

A Guide to First Year

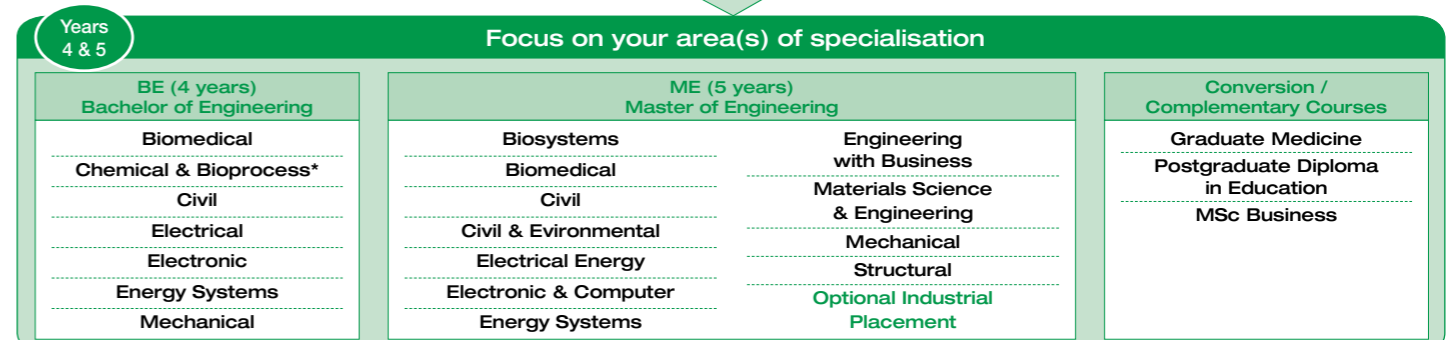
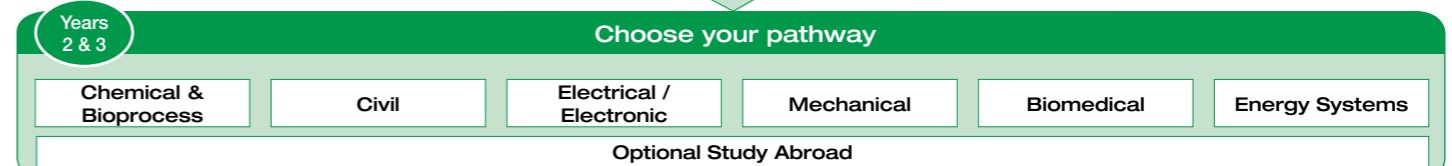
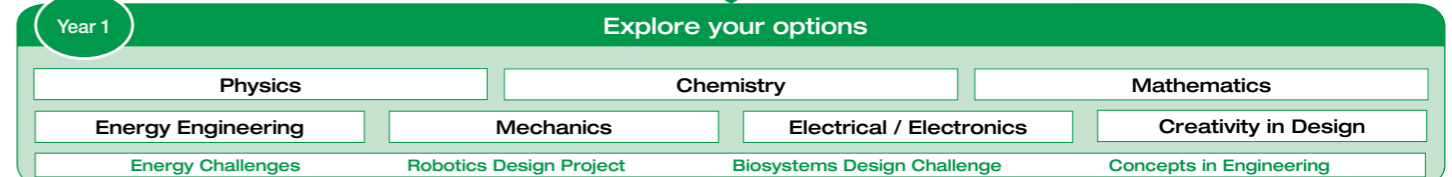


Dean's Welcome

A warm welcome to UCD Engineering. We hope that your time here will be an enjoyable and rewarding one, for academic achievement and for your personal development. As international leaders in the field of engineering, our staff will enable you to develop your capacity for independent, creative thought so that you will be equipped to provide sound leadership in an uncertain future world. Although we endeavor to provide you with the necessary skills you will need to meet the challenges ahead, we do need you to put in the effort and engage wholeheartedly with your programme. Think about your personal development from the beginning of your time at University. You will surely find University clubs and societies that cater for your interests.

Wishing you every success in your studies at UCD.
Professor Gerry Byrne, Dean of Engineering

Studying UCD Engineering



DN150 STAGE 1 ENGINEERING - PROGRAMME INFORMATION

This programme provides access to all the traditional Bachelor of Engineering (BE) degrees offered by UCD, after four years study. It also allows access to a range of Master of Engineering (ME) programmes (refer to 'Studying UCD Engineering' diagram on front cover). In the latter case, graduates will be awarded both BSc (Engineering Science) and ME degrees, after a total of 5 years of study. It is also possible to leave after three years with a Bachelor of Science (BSc) degree in Engineering Science.

Stage 1

The first stage of your degree programme is mostly common – laying the mathematical, scientific and engineering foundations on which you will later build your specialised knowledge. However, you do have some flexibility in the second semester, where you can choose three modules to suit your interests and your career plans. Your first big decision comes at the end of your first stage (year), when you will have to decide on one area of specialisation for stages 2 and 3 of your degree programme. We will provide lots of useful information and advice during this year, to help you to make an informed decision.

Module Choices

In the first semester of this year, you will study a fixed set of **six Core modules**. The only decisions you have to make are to choose suitable times for your laboratory and tutorial sessions. In the second semester, you have to choose at least one of **three Option modules**, and you also have to choose **two Elective modules**. The option modules are listed in the table below.

Elective Modules

In the second semester, you may choose two Elective modules from anywhere in UCD, provided you meet any entry requirements, there is space in the modules, and the modules fit your timetable. If you want to choose modules related to your degree programme, see the list of "In-Programme Electives" in the table below. The option modules that you have not already chosen are available, along with some other relevant modules in Engineering.

What if I don't know where I am heading?

That is not a problem. All of these modules are in semester 2, so you do not have to make a decision now. We will arrange Engineering Discipline Information Sessions (see bottom of page) during semester 1 to help you choose. Just register for whichever module seems most interesting, and you can change your registration later. You are entitled to a place on any of these Option modules, so do not worry that the module that you want might be full.

Can I choose more than one option module?

Yes, you can use your Elective choices to choose extra Option modules if you wish. This would give you more flexibility next year.

Can I change my mind?

Yes, the Online Registration system will re-open in January 2014 to allow you to change your module registration.

OPTION MODULE

CHEN 10010
Chemical Engineering
Process Principles

MEEN 10060
Design and Materials

COMP 10060
Computer Science
for Engineers I

WHAT WILL BE COVERED?

This module introduces the principles and techniques that are used in the analysis of chemical and biochemical engineering processes.

This module introduces the fundamentals of engineering materials and their selection and use within a specific design project.

In this module you can learn to programme a computer to solve problems, using the "C" programming language.

WHO SHOULD TAKE THIS?

Strongly recommended for students heading towards **Chemical & Bioprocess Engineering**.

Strongly recommended for students heading towards **Civil, Mechanical, Materials Science or Biomedical Engineering** - Useful for all Engineering students.

Strongly recommended for students heading towards **Electrical, Electronic, Electronic & Computer, Electrical Energy or Energy Systems Engineering** – useful for all Engineering students.

STAGE 1 2013/14 - TABLE OF MODULES

SEMESTER 1 2013/14		
Module Code	Module Title	Credit
CHEM 10030	Chemistry for Engineers	5
CVEN 10040	Creativity in Design	5
EEEN 10010	Electronic and Electrical Engineering I	5
MATH 10250	Intro Calculus for Engineers	5
MEEN 10030	Mechanics for Engineers	5
PHYC 10150	Physics for Engineers I	5

SEMESTER 2 2013/14		
Module Code	Module Title	Credit
MATH 10260	Linear Algebra for Engineers	5
MEEN 10050	Energy Engineering	5
PHYC 10160	Physics for Engineers II	5
Stage 1 Option Modules: Choose One		
CHEN 10010	Chemical Eng Process Principles	5
COMP 10060	Computer Science for Engineers I	5
MEEN 10060	Design and Materials	5

Stage 1 Elective Modules: free choice subject to timetable constraints and availability. The following "In-Programme Electives" are available:		
BSEN 10010	Bio Engineering Design Challenge	5
EEEN 10020	Robotics Design Project	5
MEEN 10070	Energy Challenges	5
CHEN 10020	Introductory Concepts in Engineering I	5
CHEN 10030	Biopharmaceuticals Industry in Ireland	5

ENGINEERING DISCIPLINE INFORMATION SESSIONS

Information sessions about the different Engineering disciplines available to you on completion of Stage 1 will be arranged in Semesters 1 and 2. These also include information about graduate opportunities and career prospects. Students in the later stages of their programme share their experience of studies so far in their chosen discipline.

DN140 – BSc (STRUCTURAL ENGINEERING WITH ARCHITECTURE) - PROGRAMME INFORMATION

The Structural Engineering with Architecture degree is a two-part programme. The initial part is three-year bachelor's degree, BSc (Structural Engineering with Architecture) followed by a two-year master's degree (Master of Engineering - Structural Engineering with Architecture).

Stage 1 Module Choices

In the first semester of this year, you will study a fixed set of six modules. The only decisions you have to make are to choose suitable times for your laboratory and tutorial sessions.

SEMESTER 1 2013/14		
Module Code	Module Title	Credit
ARCT 10090	History & Theory of the Designed Environment I - Perspectives on Architecture	5
CHEM 10030	Chemistry for Engineers	5
CVEN 10040	Creativity in Design	5
MATH 10250	Intro Calculus for Engineers	5
MEEN 10030	Mechanics for Engineers	5
PHYC 10150	Physics for Engineers I	5

REGISTRATION

Check out the 'Welcome to UCD Booklet' which can be found at www.ucd.ie/incomingstudents/welcome_booklet.html for more information about Online Registration, IT Services, UCD Mobile App and much more!

In the second semester, you will study a fixed set of five modules and you will have to choose one **Elective** module.

Elective Modules

You may choose Elective modules from anywhere in UCD, provided you meet any entry requirements, there is space in the modules, and the modules fit your timetable. If you want to choose modules related to your degree programme, see the list of "In-Programme Electives" in the table below.

STAGE 1 2013/14 - TABLE OF MODULES

SEMESTER 2 2013/14		
Module Code	Module Title	Credit
ARCT 10070	History and Theory of the Designed Environment II – Survey Course 1	5
CVEN 10020	Theory and Design of Structures I	5
MATH 10260	Linear Algebra for Engineers	5
MEEN 10050	Energy Engineering	5
MEEN 10060	Design and Materials	5
Stage 1 Elective Modules: Choose one Module subject to timetable constraints and availability. The following "In-Programme Electives" are available:		
BSEN 10010	Bio Engineering Design Challenge	5
MEEN 10070	Energy Challenges	5
CHEN 10020	Introductory Concepts in Engineering I	5

ENGINEERING AND ARCHITECTURE PROGRAMME OFFICE - WHAT DO WE DO?

The Engineering and Architecture Programme Office comprises a team of committed, friendly administrative staff dedicated to supporting the degree programmes offered in Engineering, Architecture and Landscape Architecture.

Our aim is to provide you with first-rate assistance to enable you to get the very best out of your studies and enjoy life as a student in UCD. The office is open all year round and operates public hours: Monday to Thursday 9.30am - 5.00pm and Friday 9.30am - 4.30pm. We work closely with the Student Advisers, Academic Programme Co-coordinators, Mentors, Schools and your fellow students to offer you a one-stop shop for all your needs.

So, if you need assistance with **online registration, examination queries, understanding academic regulations/policies, extenuating circumstances** and any other support you might require during your time here, we'll try our best to help!

IMPORTANT STAFF CONTACTS

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IMPORTANT WEBSITES

Further information about the following topics can be found on the Engineering & Architecture Programme Office website www.ucd.ie/engineer in the "Current Students" section:

- Award of honours classification
- Timetables
- Programme Information
- General updated from the Programme Office

OTHER ESSENTIAL UCD WEBSITES

Incoming Students: www.ucd.ie/incomingstudents
Student Desk: www.ucd.ie/registry/studentdesk
Academic Secretariat: www.ucd.ie/registry/academicsecretariat
Assessment: www.ucd.ie/registry/assessment/
Online Registration: www.ucd.ie/students/registration.html