



NUI Galway  
OÉ Gaillimh

# 2019/20

Scoil na hInnealtóireachta

Scoil na Ríomheolaíochta

## Leabhrán Acadúil na Chéad Bhliana

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School of Engineering

School of Computer Science

## First Year Academic Booklet





# Léarscáil den Champas Campus Map





NUI Galway  
OÉ Gaillimh

# Foirgneamh na hInnealtóireacht Alice Perry Alice Perry Engineering Building

- Seomraí Seimineáir**  
Seminar Rooms
- Saotharlanna**  
Laboratories
- Seomra Boird**  
Boardroom
- Ceantair Taighde**  
Research Areas
- Ionaid Léitheoireachta**  
Lecture Venues
- Seomraí Ríomhaireachta**  
Computer Suites
- Innealtóireacht Bhithleighis**  
Biomedical Engineering
- Oifig Innealtóireachta Meicniúil**  
Mechanical Engineering Office
- Oifig Innealtóireachta Fuinnimh**  
Energy Engineering Office
- Innealtóireacht Leictreonach & Leictreonach**  
Electrical & Electronic Engineering
- Innealtóireachta Sibhialta**  
Civil Engineering
- Oifig an Choláiste**  
College Office
- Leithris**  
Toilets
- Stair**  
Stairs
- Bialann**  
Restaurant
- Ardaitheoir**  
Lifts





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**Please carry this booklet with you for at least the first two weeks of term.**

This Academic Booklet is valid for the 2019-20 Session. Whilst every effort is made to ensure the contents of the Academic Booklet are accurate, the Academic Booklet is issued for the guidance of students and staff only. The Academic Booklet is not an offer to supply courses of study nor is it in any way to be construed as imposing any legal obligation on the School or University to supply courses either at all or in part in respect of any subject. No guarantee is given that courses, syllabuses, fees or regulations may not be altered, cancelled or otherwise amended at any time. The Academic Booklet confers no rights on any student registered for the Session 2019-20.



**CÉIM** is an academic peer learning programme for 1st year Engineering students and is a joint initiative by the School of Engineering and NUI Galway Students' Union. Small groups of 1st year engineering students meet weekly for an hour throughout the academic year to learn from each other under the guidance of trained 2nd year student leaders, with input from academic staff. CÉIM is based on the well-established Peer Assisted Study Sessions (PASS) or Peer Assisted Learning (PAL) model. CÉIM is designed to help students gain a better understanding of complex subject matter in a relaxed atmosphere, quickly adjust to university life, become successful and independent higher education learners and get to know other 1st years and those in higher years. CÉIM sessions are informal and friendly, yet purposeful, with the emphasis on everyone in the group working together. Engineering students will be assigned to their CÉIM group in the second week of Semester 1. [www.su.nuigalway.ie/ceim](http://www.su.nuigalway.ie/ceim)

## What 1st Year Students of 2018/19 say:

"I really liked learning in small groups. I felt more relaxed and comfortable asking questions."

"It helped me talk to different people in my course with different strengths and weaknesses that we could help each other with."

"I found it very helpful for voicing your ideas and receiving constructive criticism on your work."

"CÉIM's smaller environment was helpful in reinforcing what I had learned in my classes. The flexible nature of what we did each week and being able to get a more individual focused aid made CÉIM a valuable asset to have."



**CÉIM Academic Peer Support for Engineering Students**  
Weekly sessions begin on Wed, 18th September at 15:00  
[www.su.nuigalway.ie/ceim](http://www.su.nuigalway.ie/ceim)

# Contacts Details for Programme Administrators

| Programme                                 | Administrator                  | Phone            | Email                         | Location                             |
|-------------------------------------------|--------------------------------|------------------|-------------------------------|--------------------------------------|
| Civil Engineering                         | Serena Lawless                 | 492170           | civilengineering@nuigalway.ie | ENG-1033                             |
| Project & Construction Management         |                                |                  |                               |                                      |
| Electrical & Electronic Engineering       | Mary Costello                  | 492728           | mary.costello@nuigalway.ie    | ENG-3050                             |
| Electronic & Computer Engineering         |                                |                  |                               |                                      |
| Mechanical Engineering                    | David Finn                     | 492223           | mecheng@nuigalway.ie          | ENG-2050                             |
| Biomedical Engineering                    | Jane Bowman                    | 492723           | jane.bowman@nuigalway.ie      | ENG-2023                             |
| Computer Science & Information Technology | Tina Earls                     | 493143           | info@it.nuigalway.ie          | IT-444,<br>3rd Floor,<br>IT Building |
| Energy Systems Engineering                | Sharon Gilmartin               | 492664           | sharon.gilmartin@nuigalway.ie | ENG-2050                             |
| Undenominated Engineering                 | Mary Costello<br>& Jane Bowman | 492728<br>492723 | undenominated@nuigalway.ie    | ENG-3050<br>ENG-2023                 |



## Important

The University only uses @nuigalway.ie email addresses to email students. Please remember to check your account DAILY.

## Contacts for Programme Directors

| Programme                           | Administrator            | Phone  | Email                          | Location               |
|-------------------------------------|--------------------------|--------|--------------------------------|------------------------|
| Biomedical Engineering              | Dr. Pat McGarry          | 493165 | pat.mcgarry@nuigalway.ie       | ENG-3039               |
| Civil Engineering                   | Prof. Padraig O'Donoghue | 492214 | padraic.odonoghue@nuigalway.ie | ENG-1034               |
| Computer Science & IT               | Dr. Des Chambers         | 493311 | des.chambers@nuigalway.ie      | IT-408,<br>IT Building |
| Electronic & Computer Engineering   | Dr. Martin Glavin        | 492035 | martin.glavin@nuigalway.ie     | ENG-3045               |
| Electrical & Electronic Engineering | Dr. Maeve Duffy          | 493972 | maeve.duffy@nuigalway.ie       | ENG-3046               |
| Energy Systems Engineering          | Dr. Rory Monaghan        | 494256 | rory.monaghan@nuigalway.ie     | ENG-2044               |
| Mechanical Engineering              | Dr. Noel Harrison        | 493173 | noel.harrison@nuigalway.ie     | ENG-2043               |
| Project & Construction Management   | Dr. Eoghan Clifford      | 492219 | eoghan.clifford@nuigalway.ie   | ENG-1035               |
| Undenominated Engineering           | Dr. Mark Healy           | 495364 | mark.healy@nuigalway.ie        | ENG-1038               |

## Contacts for Heads of Disciplines

| Discipline                          | Head of Discipline       | Phone  | Email                          | Location               |
|-------------------------------------|--------------------------|--------|--------------------------------|------------------------|
| Biomedical Engineering              | Prof. Peter McHugh       | 493152 | peter.mchugh@nuigalway.ie      | ENG-3051               |
| Civil Engineering                   | Prof. Padraic O'Donoghue | 492214 | padraic.odonoghue@nuigalway.ie | ENG-1034               |
| Computer Science & IT               | Prof. Michael Madden     | 493797 | michael.madden@nuigalway.ie    | IT-442,<br>IT Building |
| Electrical & Electronic Engineering | Prof. Gearóid Ó Laighin  | 492685 | gearoid.olaighin@nuigalway.ie  | ENG-3049               |
| Mechanical Engineering              | Prof. Sean Leen          | 495955 | sean.leen@nuigalway.ie         | ENG-2051               |

# Contact Details for Service Module Providers

| Modules     | Administrator | Phone  | Email                    | Location                        |
|-------------|---------------|--------|--------------------------|---------------------------------|
| Chemistry   | Karen Kelly   | 492460 | karen.kelly@nuigalway.ie | Room 240, Arts/Science Building |
| Physics     | Joan Lally    | 492770 | joan.lally@nuigalway.ie  | PHY222, Arts/Science Building   |
| Mathematics | Mary Kelly    | 492332 | mary.kelly@nuigalway.ie  | ADB-G025A, Áras de Brun         |

## Making the Transition to University

When students make the transition from school to University they are faced with a whole range of new experiences and issues. You may be living away from home for the first time, you may not know any of your classmates yet, you are probably not familiar with the campus and may not even be familiar with Galway city. One of the most significant issues for you though will be getting to grips with the way university differs from school. For instance, no one is going to nag you about deadlines. Your assignments may not need to be handed in for weeks and no one is going to contact your parents if you fail to turn up for lectures.

Learning at university is of course a very different experience to that of being at school. For a start, as a student you are considered an adult learner, capable of managing your own study schedule and putting in the time to read textbooks, articles and other materials so that you really understand your chosen subjects and feel more confident as you progress.

### SUPPLEMENTARY LEARNING OUTSIDE OF THE CLASSROOM

The lectures, seminars, laboratory classes and other timetabled classes are actually only a small part of the total effort that you need to put in to succeed. Supplementary learning outside of lectures is a critical component of the learning experience. All of the

assessment, coursework and available credit are based on the idea that you are spending a minimum of 40 hours per week, every week of the semester, on learning and assessment. This just represents a full-time workload and is the standard model used across Ireland and all courses that use European Credits (something called ECTS – European Credit Transfer System). In some courses it may be a little higher than this because of the nature of the subject.

The other big difference between university-level courses and some other types of qualification is that you really need to try to understand the subject and the ideas you come across in class or your reading. It's not about memorizing and regurgitating facts, but about seeing the ideas that lie behind them and being able to make use of knowledge to tackle new problems. That can be tricky to adjust to and sometimes it is really difficult to make sense of new concepts.

The good news is, that this is exactly what learning something new is like for everyone. There are always ideas that are really tricky to grasp at first and which don't make sense until you try again and again, hopefully getting some feedback on your efforts and maybe through working with fellow students. But when it does 'click' things fall into place and you get a sense of satisfaction that hopefully makes some of that struggle worth it! That's why we say you need to spend so many hours on self-study, because we know from experience (and extensive research on education) that you will need that time.

# Attendance and Submission of Assignments

It is essential that you get into the habit of attending all your lectures, tutorials and laboratories. Every year we see that there is a direct correlation between good attendance and good performance in examinations. All lecturers will routinely monitor attendance and poor attendance will have consequences.

**If you miss lectures/labs/assignments due to illness/sporting commitments, please ensure that you inform your Lecturers and submit a medical certificate/letter from your team manager to your Programme Administrator.**

It is also critical that assignments are submitted on time. You will need to learn to prioritise your work and leave plenty of time for assignments. Familiarise yourself with the library so that you know where you need to go to locate books and articles relevant to your area of study.

## SUPPORTS IN PLACE

The University has put in place various resources to help you make the transition including the Student Support Services facility, Orientation programmes, tours of campus, 1st year handbooks, the CEIM mentoring scheme (see page 6) etc. From an academic perspective there are also a range of invaluable supports in place such as the Academic Writing Centre, SUMS (Maths Support Centre) and DISC (Computer Programming Drop In Support Centre).

**The Academic Writing Centre** (housed in the Library) offers free one-on-one teaching sessions tailored to the needs of the individual student. There is no need to make an appointment, simply drop in during the opening hours of the Centre: <https://library.nuigalway.ie/awc>

**The SUMS: Maths Support Centre** is a drop-in centre where any NUI Galway student can work on their maths questions, with expert tutors on hand to offer individual help if necessary. The centre is FREE to students and is an initiative of the Students' Union and the School of Mathematics, Statistics and Applied Maths. SUMS (Support for Undergraduate Maths Students) is located in Áras de Brun on the ground floor C116. Further information including opening hours, is available at [www.maths.nuigalway.ie/sums](http://www.maths.nuigalway.ie/sums)

**ComputerDISC** is a free resource for all NUIG students that are enrolled in computer programming or software development courses. It is designed to complement the lectures, tutorials labs and other supports available. ComputerDISC is located in room 205 on the first floor of the IT building. Students can drop in at any time during opening hours as no appointments are necessary. Further information can be found at [www.computerdisc.it.nuigalway.ie](http://www.computerdisc.it.nuigalway.ie)

**Blackboard** is a learning system which allows lecturers to post materials such as lecture notes, reading materials, weblinks, videos, quizzes, etc, online. Many courses also use this for announcements, news items and for students to submit their coursework. Blackboard has a lot of additional tools and capabilities and quite which of these are used is decided by the lecturer or course team. Blackboard is available 24/7 from both on and off campus. Not every lecturer or module will necessarily be using it, but most will and in different ways.

You should certainly login regularly to check for updates to your modules. For those of you with a smartphone or tablet, there is also a Blackboard App (in iPhone and Android versions) which you can download.

Once you are enrolled in the university you will have access to Blackboard using the same username and password for email and other computer services. Blackboard is available at: [nuigalway.blackboard.com](http://nuigalway.blackboard.com)

### The Learning Centre - Online Support and Training

All first year students are also enrolled onto a Blackboard course called the 'Learning Centre,' which contains online self-study lessons and guides to many relevant academic skills such as essay/report writing, studying and preparing for assessments. The University has a licence to make these materials available to students and we would strongly encourage you to make use of them. Feedback from other students has been very positive. The Learning Centre will also have links to other materials and interesting articles and updates will be posted there throughout the academic year, so please log in regularly.

Becoming familiar with the wealth of resources offered by the library can be daunting. However, library staff provide support help and training to enable you to get to grips with the literature of your subject and the other resources on offer. As well as being available for one-to-

one enquiries and consultations, the support staff provide training sessions throughout the semester aimed at helping you to identify and use the information resources you need for your study. Checkout the library website to see the programme of training events available this September.

### In Case of Difficulty...

If you are experiencing difficulties or take ill please make sure that you inform a lecturer, the administrative assistant associated with your Discipline or a member of staff in the College Office. You may have an individual advisor or may need to speak with the Head of School or Dean. Please don't hesitate in letting us know of any issues so that we can provide help where possible. Academic and support staff in this university are very approachable and used to helping students with all sorts of issues that might impede their studies.



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# CHECK OUT NUI GALWAY'S NEW ONLINE ACADEMIC SKILLS HUB

Supported by  
the NUI Galway  
Student  
Project Fund

FOR HANDY TIPS AND INFORMATION ON:

Studying at NUI Galway

How to take notes and do research

IT and digital skills

Doing assignments and exams

And much more

**[nuigalway.ie/academic-skills](http://nuigalway.ie/academic-skills)**

### NEED TO DEVELOP YOUR ACADEMIC SKILLS?

Check out NUI Galway's online Academic Skills Hub at [www.nuigalway.ie/academic-skills](http://www.nuigalway.ie/academic-skills) for lots of info and tips to help you succeed in your studies.

On the Online Academic Skills Hub there are top tips on eight key academic skills, as well as some information

to help you get started. You will also find links to additional sources of support for students, including Library resources and academic skills workshops.

This online resource provides helpful information to on getting started with emails and Blackboard and getting organised with managing your time.



## The Geec (Galway Energy-efficient Car)

The Geec (Galway energy-efficient car) is an electric car built by NUI Galway engineering students. It is the most efficient car ever built in Ireland and one of the best in the world. The Geec has tested at 354 km per kilowatt-hour on a 15-km urban circuit, equivalent to over 10,000 miles per gallon, or 200 times as efficient as most cars on the road.

In July 2018 the team won the Technical Innovation Award at Shell Eco-marathon Europe in London, where 149 of Europe's best engineering schools competed and raced to test their energy efficiency.

In September, a new Geec team will assemble to design, build, race and manage a car for the 2020 season. There are places for students from first year to fourth year, so watch out for posters and email announcements!

**For more information, see [www.theGeec.ie](http://www.theGeec.ie) or follow the project on Facebook ([facebook.com/theGeec.ie](https://facebook.com/theGeec.ie)) or Twitter (@theGeec).**



# Academic Integrity

As an engineering student, over the next four years you will be required to complete many assignments, projects, reports and presentations. These are opportunities for you to learn and develop as an engineer and of course they are also used to assess your progress. The concept of academic integrity means that all staff and students must be absolutely honest in presenting their own work. Academic integrity breaks down in plagiarism, where somebody makes use of material from another source without making it absolutely clear where that material comes from. For example, plagiarism typically occurs when somebody copies text or images from the internet into a report. Academic integrity - doing our own work and giving credit to the work of others where we use it - is vital for the learning process. As a university, we put a high value on the integrity of our work and we have a strict code of practice for dealing with plagiarism when it happens.

**All students are required to read the guide “Plagiarism as an Obstacle to Academic Integrity” which is available at [www.nuigalway.ie/engineering-informatics/undergraduatestudents/plagiarism](http://www.nuigalway.ie/engineering-informatics/undergraduatestudents/plagiarism)**

## Jargon Buster – Modules, Programmes, Levels

All courses in NUI Galway are made up of ‘modules’. These are usually described by a set of ‘Learning Outcomes’ that state what you should be able to do after successfully completing the module and a number of ‘ECTS’ credits. ECTS is basically an indicator of how big the module is. A module that is rated at 5 ECTS, for example, means that you need to spend at least 100 hours of concerted effort (including lectures, exams and self-study) in order to complete it satisfactorily. A module that is 10 ECTS, unsurprisingly, requires double that effort.

A whole year’s worth of modules (if you are a full-time student) should total up to 60 ECTS (30 in each semester). To be awarded the credits for a module you must of course have successfully completed it in terms of attendance, participation, coursework and examinations.

A ‘programme’ is a whole degree course, made up of all the individual modules. It is usually described by ‘Programme Learning Outcomes’ and there will be rules that determine which modules you need to successfully complete each year to end up with the appropriate degree title (e.g. BE (Mechanical), BComm, BA (History), etc)).

All of our degree programmes are recognised by employers and other educational institutions and comply with international agreements on course structure (the ‘Bologna Process’). All programmes are subject to regular quality reviews where the quality of the teaching and learning is scrutinised by an external panel with international experts in the subject. Every programme also has an ‘external examiner’ (a senior academic from another university) who oversees the final decisions about grades, checks the examination papers and processes and guarantees that the quality of our courses and graduates compare well with the standards in the subject.

Ireland has a National Framework of Qualifications (NFQ) that describes the levels of all courses of study and this matches similar schemes in other countries so that it is easy for employers and educators to make sense of different qualifications obtained from different institutions, as well as making it easier for students to move between one country and another, picking up credit and qualifications along the way. According to this scheme, an undergraduate honours degree (BA, BSc, BComm, etc) is a ‘level 8’ qualification. A Masters would be level 9 and a PhD level 10.

So what does this mean in practice? Well, that you must attend all the scheduled classes, spend time every week on reading, studying and working through course

materials and that what you are trying to do in the assessments and exams is show that you can actually achieve the learning outcomes. There's still plenty of time to socialize and get involved in clubs and sports (see later section) outside the 40 hours!

The lectures, labs, tutorials and other classes, combined with the textbooks, online materials and the library are all resources that the university provides to help you succeed. At the end of the day, though, success depends on your own efforts. It is possible to not only succeed in the assessments and feel a sense of achievement at having learned new knowledge and skills, but also to

enjoy being a student in your chosen subject. Your final qualification will be well-regarded and recognised internationally by employers and other educational institutions across the world.

The University doesn't see you as a 'customer' or a 'consumer' but hopes that you will, instead, be a member of our academic community. That you will be able to get the most out of being in a city of ideas and learning not just about the basics of your subject but also get a feel for the latest research, the big ideas, the debates and where future opportunities lie for further study, research or employment.

## Know The Code!

**Your programme has a unique University Code.**  
**This is the code you will see on your registration statement:**

| CAO Code | Programme Name                                | University Code |
|----------|-----------------------------------------------|-----------------|
| GY350    | BSc Computer Science & Information Technology | BCT             |
| GY401    | Undenominated Engineering                     | EG              |
| GY402    | Civil Engineering                             | BE              |
| GY405    | Mechanical Engineering                        | BM              |
| GY406    | Electronic & Computer Engineering             | BP              |
| GY408    | Biomedical Engineering                        | BG              |
| GY410    | Project & Construction Management             | BCM             |
| GY413    | Energy Systems Engineering                    | BSE             |
| GY414    | Electrical & Electronic Engineering           | BLE             |

# Curriculum

## First Year Engineering (EG, BE, BM, BP, BG, BSE, BLE)

| Module Code | Module Name                      | ECTS Credits | Taught in Semester(s) | Examined/ Submitted in Semester(s) |
|-------------|----------------------------------|--------------|-----------------------|------------------------------------|
| CH140       | Engineering Chemistry            | 5            | 1                     | 1                                  |
| CT1110      | Engineering Computing I*         | 5            | 1                     | 1                                  |
| EI160       | Engineering Graphics             | 5            | 1                     | 1                                  |
| MA140       | Engineering Calculus             | 5            | 1                     | 1                                  |
| MP120       | Engineering Mechanics            | 5            | 1                     | 1                                  |
| CT1111      | Engineering Computing II*        | 5            | 2                     | 2                                  |
| EI150       | Engineering Design*              | 10           | 2                     | 2                                  |
| MM140       | Engineering Mathematical Methods | 5            | 2                     | 2                                  |
| PH140       | Engineering Physics              | 5            | 2                     | 2                                  |
| EI140       | Fundamentals of Engineering      | 10           | Full Year             | 1 + 2                              |

c/a=continuous assessment

\*This module is a course requirement: Students must achieve a minimum of 40% in this module. It cannot be passed by compensation.

## First Year Computer Science & Information Technology (BCT)

| Requisite Type: | Module Code | Module Name                                           | ECTS Credits | Taught in Semester(s) | Examined/Submitted in Semester(s) |
|-----------------|-------------|-------------------------------------------------------|--------------|-----------------------|-----------------------------------|
|                 | EE130       | Fundamentals of Electrical & Electronic Engineering I | 5            | 1                     | 1                                 |
|                 | CT1113      | Next-Generation Technologies I                        | 5            | 2                     | 2                                 |
|                 | PH150       | Introduction to Physics                               | 5            | 2                     | 2                                 |
|                 | CT101       | Computing Systems                                     | 10           | Full Year             | 2                                 |
|                 | CT102       | Algorithms & Information Systems                      | 10           | Full Year             | 2                                 |
|                 | CT103       | Programming                                           | 10           | Full Year             | 2                                 |
| PR: Maths HL    | MA160       | Mathematics                                           | 10           | Full Year             | 2                                 |
|                 | Or MA190    | Mathematics (honours)                                 | 10           | Full Year             | 2                                 |
|                 | CT1112      | Professional Skills I                                 | 5            | Full Year             | 2                                 |

Up to 60% of a module may be examined by continuous assessment

## First Year Project & Construction Management (BCM)

| Module Code | Module Name                                       | ECTS Credits | Taught in Semester(s) | Examined/ Submitted in Semester(s) |
|-------------|---------------------------------------------------|--------------|-----------------------|------------------------------------|
| AY104       | Introduction to Financial Accounting              | 5            | 1                     | 1                                  |
| CT1110      | Engineering Computing I*                          | 5            | 1                     | 1                                  |
| EI160       | Engineering Graphics                              | 5            | 1                     | 1                                  |
| MG1101      | Introduction to Management                        | 5            | 1                     | 1                                  |
| AY105       | Management & Enterprise                           | 5            | 2                     | 2                                  |
| CE119       | Fundamentals of Project & Construction Management | 5            | 2                     | 2                                  |
| PH150       | Introduction to Physics                           | 5            | 2                     | 2                                  |
| CE141       | Introduction to Engineering and Design            | 15           | Full Year             | 2                                  |
| MA1161      | Mathematical Studies                              | 10           | Full Year             | 1 + 2                              |

c/a=continuous assessment

\*This module is a course requirement: Students must achieve a minimum of 40% in this module. It cannot be passed by compensation.



# Programme Timetables

## First Year Engineering (EG, BE, BM, BP, BG, BSE, BLE)

### Semester I Timetable

| Time / Day    | MONDAY                                                                                                                       | TUESDAY                                                                             | WEDNESDAY                                                                           | THURSDAY                                                                          | FRIDAY                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 09.00 – 10.00 | Engineering Mechanics<br>MP120<br>Venue: ENG-G018                                                                            | Engineering Mechanics<br>MP120<br>Venue: ENG-G018                                   | Engineering Computing<br>CT1110<br>Venue: ENG-G018                                  | Engineering Mechanics<br>MP120<br>Venue: ENG-G018                                 | Engineering Computing<br>CT1110<br>Venue: ENG-G018                                                |
| 10.00 – 11.00 | Engineering Chemistry<br>CH140<br>Venue: ENG-G018                                                                            | Engineering Calculus<br>MA140<br>Venue: ENG-G018                                    | Engineering Calculus<br>MA140<br>Venue: ENG-G018                                    | Engineering Calculus<br>MA140<br>Venue: ENG-G018                                  | Fundamentals<br>of Engineering<br>EI140<br>Venue: ENG-G018                                        |
| 11.00 – 12.00 | Engineering Mechanics<br>Tutorial*<br>MP120<br>Venue: ENG-2001 &<br>ENG-3036                                                 | Engineering Mechanics<br>Tutorial*<br>MP120<br>Venue: ENG-2001 &<br>ENG-2034        | Fundamentals of<br>Engineering<br>EI140<br>Venue: ENG-G018                          | Engineering Calculus<br>Tutorial*<br>MA140<br>Venue: ENG-2002<br>& ENG-3035       | Engineering Mechanics<br>Tutorial*<br>MP120<br>Venue: ENG-2002 &<br>ENG-2035                      |
| 12.00 – 13.00 | Engineering Graphics<br>EI160<br>Venue: ENG-G018                                                                             | Engineering Chemistry<br>CH140<br>Venue: ENG-G018                                   | Engineering Graphics<br>EI160<br>Venue: ENG-G018                                    | Engineering Chemistry<br>CH140<br>Venue: ENG-G018                                 | Engineering Computing<br>Tutorial*<br>CT1110<br>Venue: ENG-G018                                   |
| 13.00 – 14.00 |                                                                                                                              |                                                                                     |                                                                                     |                                                                                   | Engineering Calculus<br>Tutorial*<br>MA140<br>Venue: ENG-2002<br>& ENG-2035                       |
| 14.00 – 15.00 | Fundamentals<br>of Engineering<br>EI140<br>Venue: ENG-G018                                                                   |                                                                                     | Engineering<br>Chemistry Tutorial<br>CH140<br>Venue: ENG-G018                       | Engineering<br>Graphics Lab<br>EI160<br>Venue: ENG-G046<br>& 2016 (CS)<br>Group B | Chemistry Lab<br>Week 6 & 11 only<br>CH140<br>Chemistry Lab Arts/<br>Science Concourse<br>Group A |
| 15.00 – 16.00 | Engineering<br>Graphics Lab<br>EI160<br>Venue: ENG-G046<br>& 2016 (CS)<br>Group A                                            | Engineering Calculus<br>Tutorial*<br>MA140<br>Venue: ENG-2003 &<br>ENG-2034         | CÉIM<br>Venue: ENG-2001,<br>2003, 2035, 3034,<br>3035, 3036                         | Engineering<br>Graphics Lab<br>EI160<br>Venue: ENG-G046 & 2016<br>(CS) Group B    | Chemistry Lab<br>Week 6 & 11 only<br>CH140<br>Chemistry Lab Arts/<br>Science Concourse<br>Group A |
|               | Fundamentals<br>of Engineering Lab<br>EI140<br>Venue: Design and Build<br>Lab wk 1-4 & 9-12,<br>Elec Lab week 5-8<br>Group B |                                                                                     |                                                                                     |                                                                                   |                                                                                                   |
| 16.00 – 17.00 | Engineering<br>Graphics Lab<br>EI160<br>Venue: ENG-G046<br>& 2016 (CS)<br>Group A                                            | Engineering<br>Computing Lab<br>CT1110<br>Venue: ENG-G046 &<br>2017 (CS)<br>Group A | Engineering<br>Computing Lab<br>CT1110<br>Venue: ENG-G046 &<br>2016 (CS)<br>Group B | Engineering<br>Graphics Lab<br>EI160<br>Venue: ENG-G046 &<br>2016 (CS)<br>Group B | Chemistry Lab<br>Week 6 & 11 only<br>CH140<br>Chemistry Lab Arts/<br>Science Concourse<br>Group B |

| Time/Day    | MONDAY                                                                                                            | TUESDAY                                                                       | WEDNESDAY                                                                                                        | THURSDAY                                                                                 | FRIDAY                                                                                         |
|-------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| 16.00–17.00 | Fundamentals of Engineering Lab<br>EI140<br>Venue: Design and Build Lab wk 1-4 & 9-12, Elec Lab wk 5-8<br>Group B |                                                                               | Fundamentals of Engineering Lab<br>EI140<br>Venue: Design and Build Lab wk1-4 & 9-12, Elec Lab wk 5-8<br>Group A | Fundamentals of Engineering Lab<br>Weeks 5-8 ONLY<br>EI140<br>Venue: Elec Lab<br>Group C |                                                                                                |
| 17.00–18.00 | Engineering Graphics Lab<br>EI160<br>Venue: ENG-G046 & 2016 (CS)<br>Group A                                       | Engineering Computing Lab<br>CT1110<br>Venue: ENG-G046 & 2017 (CS)<br>Group A | Engineering Computing Lab<br>CT1110<br>Venue: ENG-G046 & 2016 (CS)<br>Group B                                    | Fundamentals of Engineering Lab<br>Weeks 5-8 ONLY<br>EI140<br>Venue: Elec Lab<br>Group C | Chemistry Lab<br>Week 6 & 11 only<br>CH140<br>Chemistry Lab Arts /Science Concourse<br>Group B |
|             |                                                                                                                   |                                                                               | Fundamentals of Engineering Lab<br>EI140. Venue: Design and Build Lab wk 1-4 & 9-12, Elec Lab wk 5-8<br>Group A  |                                                                                          |                                                                                                |

(CS) = computer suite \* Students attend one tutorial per week, per module

## First Year BSc in Computer Science & Information Technology (BCT)

### Semester I Timetable

| Time/Day | MONDAY                                                        | TUESDAY                                                                            | WEDNESDAY                                                 | THURSDAY                                                           | FRIDAY                                         |
|----------|---------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------|
| 10.00    | EE130 Fundamentals of EEE: ENG-2001                           | [A] MA160 Mathematics: Tyndall Theatre [B] MA190 Mathematics (H): Anderson Theatre | [A] MA160 Mathematics: AC213 [B] MA190 Mathematics: AM200 | [A] MA160 Mathematics: Dillon Theatre [B] MA190 Mathematics: AM200 | CT102 Algorithms & Information Systems: IT125G |
| 11.00    | CT103 Programming: Dillon Theatre                             | CT101 Computing Systems: ENG G018                                                  | CT103 Programming: Charles McMunn Theatre                 | CT1113 Next Generation Technology I: BLE2012, Block E              | CT1112 Professional Skills I: IT125G           |
| 12.00    |                                                               |                                                                                    | CT1112 Professional Skills I: TBC                         | CT1113 Next Generation Technology I: BLE2012, Block E              |                                                |
| 13.00    | [A] MA160 Mathematics: IT125 [B] MA190 Mathematics (H): IT250 | CT101 Computing Systems: ENG 3035                                                  |                                                           | MA190 Mathematics Workshop: ADB-1020                               |                                                |
| 14.00    |                                                               | CT103 Programming Lab: IT102                                                       | CT101 Computing Systems Lab: IT102                        |                                                                    |                                                |
| 15.00    | EE130 Fundamentals of EEE: ENG-2001                           | CT103 Programming Lab: IT102                                                       | CT101 Computing Systems Lab: IT102                        | CT102 Algorithms & Information Systems: ENG-2002                   |                                                |
| 16.00    | CT103 Programming Tutorial: TBC                               | CT103 Programming Lab: IT102                                                       | CT101 Computing Systems Lab: IT102                        | CT102 Algorithms & Information Systems Tutorial: TBC               |                                                |
| 17.00    |                                                               | CT103 Programming Lab: IT102                                                       | CT101 Computing Systems Lab: IT102                        |                                                                    |                                                |

Timetable is available at: <http://bit.ly/InfoTechTimetable>

**FIRST YEAR COORDINATOR:** Ms. Josephine Griffith,

Tel: 091-493717, Email: josephine.griffith@nuigalway.ie, Office: IT-405, IT Building

# Project & Construction Management (BCM)

## Semester I Timetable

| Time / Day    | MONDAY                                                                 | TUESDAY                                                              | WEDNESDAY                                                                            | THURSDAY                                                                        | FRIDAY                                                                         |
|---------------|------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 09.00–10.00   |                                                                        | Intro. to Financial Accounting<br>AY104<br>Venue: O’Flaherty Theatre | Engineering Computing<br>CT1110<br>Venue: ENG-G018                                   |                                                                                 | Engineering Computing<br>CT1110<br>Venue: ENG-G018                             |
| 10.00–11.00   |                                                                        | Mathematical Studies<br>MA161<br>Venue: Kirwan Theatre               | Mathematical Studies<br>MA161<br>Venue: Kirwan Theatre                               | Mathematical Studies<br>MA161<br>Venue: Kirwan Theatre                          | Introduction to Engineering & Design<br>CE141<br>Venue: ENG-G018               |
| 11.00–12.00   |                                                                        |                                                                      | Introduction to Engineering & Design<br>CE141<br>Venue: ENG-G018                     |                                                                                 |                                                                                |
| 12.00–13.00   | Engineering Graphics<br>EI160<br>Venue: ENG-G018                       |                                                                      | Engineering Graphics<br>EI160<br>Venue: ENG-G018                                     |                                                                                 | Engineering Computing<br>CT1110<br>Venue: ENG-G018                             |
| 13.00 - 14.00 | Mathematical Studies<br>MA161<br>Venue: O’Flaherty Theatre             |                                                                      |                                                                                      | Maths Tutorial*<br>MA160<br>Venue: IT125G                                       |                                                                                |
| 14.00–15.00   | Introduction to Engineering & Design<br>CE141<br>Venue: ENG-G018       |                                                                      | Introduction to Financial Accounting<br>AY104<br>Venue: AM250 OhEocha Theatre        | Engineering Graphics Lab EI160<br>Venue: Computer Suite ENG-G046 & 2016 Group B | Introduction to Engineering & Design Lab<br>CE141<br>Venue: Design & Build Lab |
| 15.00–16.00   | Management & Enterprise<br>MG1101<br>Venue: Kirwan Theatre             |                                                                      | Management & Enterprise<br>MG1101<br>Venue: Kirwan Theatre                           | Engineering Graphics Lab EI160<br>Venue: Computer Suite ENG-G046 & 2016 Group B | Introduction to Engineering & Design Lab<br>CE141<br>Venue: Design & Build Lab |
| 16.00–17.00   |                                                                        |                                                                      | Engineering Computing Lab<br>CT1110<br>Venue: Computer Suite ENG-G046 & 2016 Group B | Engineering Graphics Lab EI160<br>Venue: Computer Suite ENG-G046 & 2016 Group B | Introduction to Engineering & Design Lab<br>CE141<br>Venue: Design & Build Lab |
| 17.00–18.00   | Introduction to Financial Accounting<br>AY104<br>Venue: Kirwan Theatre |                                                                      | Engineering Computer Lab<br>CT1110<br>Venue: Computer Suite ENG-G046 & 2016 Group B  |                                                                                 | Introduction to Engineering & Design Lab<br>CE141<br>Venue: Design & Build Lab |

\*students attend one tutorial per week, per module

Students must attend group B for Engineering Graphics Lab and Computing Lab

Note: Venues beginning with “AM” are located in the Arts Millenium Building. Venues beginning with “SC/AC” are in the Arts/Science Building.

# Academic Calendar 2019-2020

| Semester 1                |                                                               |
|---------------------------|---------------------------------------------------------------|
| Orientation 1st Years     | Monday 2nd & Friday 6th September 2019                        |
| Start of Teaching         | <b>Monday 9th September 2019</b>                              |
| End of Teaching           | Saturday 30th November 2019                                   |
| Study Week                | Monday 2nd - Saturday 7th December 2019                       |
| Semester 1 Exams          | Monday 9th December 2019                                      |
| Semester 1 Exams End      | Friday 20th December 2019                                     |
| <b>Christmas Holidays</b> | <b>Saturday 21st December 2019</b>                            |
| Semester 2                |                                                               |
| Start of Teaching         | <b>Monday 13th January 2020</b>                               |
| End of Teaching           | Saturday 4th April 2020                                       |
| Field Trips               | Monday 6th April - Thursday 9th April 2020                    |
| <b>Easter Holidays</b>    | <b>Good Friday 10th April - Easter Monday 13th April 2020</b> |
| Study Week                | Tuesday 14th April - Monday 20th April 2020                   |
| Semester 2 Exams Start    | Tuesday 21st April 2020                                       |
| Semester 2 Exams End      | Friday 8th May 2020                                           |
| Autumn Exams              | Tuesday 4th August - Friday 14th August 2020                  |

## Financial Aid Fund

The Student Assistance Fund is intended to tackle disadvantage by providing financial support to students who require financial support to enable them to fully benefit from their third level studies. The Financial Aid Fund comprises the Student Assistance Fund and an additional contribution from the University. Support from the Financial Aid Fund takes into account a student's financial situation and other personal circumstances. A standardised assessment system is used to determine the level of need and aid. The ability to support a student depends on the size of the fund available, the number of applications and the circumstances of the applicants in any given year.

For more information visit:

[www.nuigalway.ie/student-life/accommodation/financial-matters](http://www.nuigalway.ie/student-life/accommodation/financial-matters)

# Health & Safety Tips

## SAFETY FIRST



The Riverside Walk should not be used during night hours. 24 hour Security. Phone: 091-49 3333 Building EirCode H91 HX31.

In event of a medical emergency, the AED and a list of First Aiders can be found at the Ground Floor Atrium.



Locate all Exits at the front the two black doors are fire exits. During Fire Drills move away from the doors to allow free access.



Covered bicycle racks at front & riverside of building.



The area around the building is a Smoke-Free-Zone

# Regulations for Courses of Study and Examinations in the College of Engineering and Informatics

1. The following degree programmes are offered in the College of Engineering and Informatics:
  - i) BE/ME in Civil Engineering
  - ii) BE/ME in Biomedical Engineering
  - iii) BE/ME in Electrical & Electronic Engineering
  - iv) BE/ME in Electronic & Computer Engineering
  - v) BE/ME in Mechanical Engineering
  - vi) BSc Computer Science & Information Technology
  - vii) BE/ME in Energy Systems Engineering
  - viii) BSc in Project & Construction Management

Students will also be admitted to the First Year Course, Engineering (Undenominated). On successful completion of the First University in Engineering (Undenominated), students may apply to transfer to one of the courses listed (i) to (viii) above. **Allocation of places may be based** on overall performance at the First University Examination in Engineering (Undenominated).

2. Admission to the BE programmes in the College of Engineering and Informatics is confined to students who satisfy the general requirements for Matriculation in the College of Engineering and Informatics and who have reached at least H4 in Higher Level papers in Mathematics at the Leaving Certificate Examination.

Candidates who satisfy the general requirements for Matriculation in the College but have NOT attained a minimum of H4 in Higher Level papers in Mathematics may apply to take the Engineering Maths Qualifying Examination in Mathematics held by the University.

Places will be allocated in strict order of merit based on performance in the exam and subject to capacity. The number of places may vary from year

to year. Candidates must also achieve the points requirement for the programme that year and satisfy the general matriculation requirements.

3. Applications for entry to each of the courses indicated in (1) above will be considered separately and if the number of qualified applicants for any course exceeds the number of places available in that course, these places will be offered to qualified candidates according to a selection scheme approved for the purpose by the Academic Council. Details of this scheme may be had on application to the Admissions Office.
4. The duration of each Degree Programme indicated in (1) above is four years.
5. In addition to attendance at lectures, practicals and other work during university terms, students may be required to attend for field-work or gain specified industrial experience during university vacations. Arrangements in relation to field-work or industrial experience will be made by the discipline concerned.
6. All engineering students are required to complete the Professional Experience Programme (PEP)

Students who fail to participate in the PEP or an approved equivalent exercise will not be permitted to progress to the 4th year of the degree programme. Students are obliged to comply with all arrangements put in place by the College of Engineering and Informatics and the University Placement Office for the allocation of placements. In certain circumstances, students may be required to accept a placement outside of Galway.

- 7 Examinations may be held at the end of Semester I and/or at the end of Semester II. Repeat examinations are held in the Autumn.
- 8 No candidate shall pass in an examination whose Laboratory Work, Computer Work, Project or Year's Work fails to satisfy the Examiners. Candidates at the summer Examinations in Engineering who are deficient in their attendance at the academic exercises or in the submission of their Year's Work may, on the recommendation of the Board of Examiners, be excluded from admission to the relevant Autumn Examination. Thus it will not be possible to repeat continuously assessed material over the summer period. Allowances may be made only in exceptional circumstances such as in cases of bereavement, hospitalisation and prolonged medically certified illness.

**The following modules must be passed outright and cannot be passed by compensation:**

|         |                                              |
|---------|----------------------------------------------|
| BME3127 | Biomedical Professional Experience Programme |
| BME4102 | Biomedical Engineering Project               |
| CT1110  | Engineering Computing I                      |
| CT1111  | Engineering Computing II                     |
| CT434   | Electronic and Computer Engineering Project  |
| EE443   | BE Project                                   |
| EI150   | Engineering Design                           |
| EG3105  | Energy Systems Engineering Design Project    |
| EG400   | Advanced Energy Systems Engineering          |
| EG4100  | Energy Systems Engineering Project           |
| ME3100  | Mechanical Professional Experience Programme |

- 9 Candidates for the BE and BSc Degrees are required to pass the First, Second and Third examinations and the Degree examination. The First Examination must be completed within two years of entry upon the course.

The Second Examination must be completed within two years of passing the First Examination and the Third Examination must be completed within two years of passing the Second Examination. The Degree Examination must, save in exceptional circumstances, be completed within three years of passing the Third University Examination.

No candidate will be admitted to the Third Examination in Engineering (Civil) who has failed to complete satisfactorily the specified Surveying Fieldwork.

Students failing to pass any examination within the prescribed time limit will be ineligible to proceed further unless the Academic Council, on the recommendation of the College, grants exemption from this regulation. Such exemptions will be granted only for serious reasons.

## 10 Grading Scheme

| %        | Grade | %       | Grade |
|----------|-------|---------|-------|
| 70 - 100 | A     | 35 - 39 | E+    |
| 60 - 69  | B     | 30 - 34 | E-    |
| 50 - 59  | C     | 0 - 29  | F     |
| 40 - 49  | D     |         |       |

# University Academic Regulations

All University studies at NUI Galway are governed by a standard set of rules and regulations called “Marks and Standards” (see below). All students must comply with the regulations as set out in the ‘Marks and Standards’.

It is important that all first year students read these regulations so that you know what is expected of you. The Marks and Standards explain for instance the notion of credit weightings of the modules which comprise your degree programme, timing of examination periods and repeats, progression from year to year of your degree programme, the pass mark and circumstances in which students are allowed to ‘compensate’ in order to pass the examination and details of how the award of honours in your final year is calculated by incorporating your 3rd year result.

## Marks & Standards for all Full-time Undergraduate Degree Examinations

**All modules on Level 8 Programmes, whether Year, 1, 2, 3, 4... are level 8 modules. Exit awards may be made at level 7.**

### 1. INTRODUCTION

These general regulations apply to all full-time undergraduate degree programmes in the University. Every full-time undergraduate programme **must comply** with these regulations unless otherwise provided as per section 9 below. Students must also refer to the specific College degree programme regulations and requirements.

These regulations are approved by the University’s Academic Council and are regulated and reviewed by the Academic Council’s Standing Committee, following prior consideration by the Academic Regulations Committee. The Academic Regulations Committee will be comprised of the Registrar and Deputy-President (Chair), Deans of College, another representative from each College and the Director of Adult Education.

Relevant administrative staff will be in attendance at the Committee’s meetings. The Committee will report to Standing Committee of Academic Council.

### 2. DEGREE PROGRAMME CURRICULA

The University’s awards and degree programmes are organized in accordance with the European Credit Transfer System (ECTS). **Programmes** of study are organized into specific units of study called **Modules**. Each Module is a unit of teaching and learning formally offered within the University and carrying credit expressed as a number of credit points in accordance with the ECTS.

A programme will have a prescribed aggregate credit value in accordance with the Level of Study as set-out in Ireland’s National Framework for Qualifications, FETAC. Full-time undergraduate degree programmes are aligned with Level 8 of the Framework and consist of 3, 4 or more academic years of study. An Academic Year for a full-time undergraduate degree will have a module load to an aggregate credit value of 60 ECTS.

Undergraduate degree programmes at the University are normally organized into Stages delimited by an Academic Year of study. Each Stage (or Programme Year) will have prescribed Learning Outcomes for that Stage or Year and will have an associated aggregate credit value, 60 ECTS. For completion of a Stage (or Programme Year), full-time students will be required to successfully complete the relevant aggregate credit standard, 60 ECTS. **Full-time** students will be expected to complete a stage within an academic year. **Part-time** students may complete a stage over several years, accumulating the credits required for each stage in a more flexible credit accumulation structure. For part-time students the University may set a minimum number of credits that must be taken during any given academic year. **Students must successfully complete each stage before progressing to a subsequent one.**



### 3. MODULE DESCRIPTIONS & WEIGHTINGS

Each programme offered by the University will comprise a set of Modules where each module represents a unit of teaching and learning with prescribed **Learning Outcomes** and carrying credit expressed as a number of credit points in accordance with the European Credit Transfer System. **Module Descriptions** will be specified in the University's central **Module Repository** (or "Module Manager" System) and will be set-out in the **Programme Descriptions and Regulations** for each College's programmes.

**Individual modules will have an ECTS credit weighting of 5 ECTS, or may be expressed in whole multiples of 5 ECTS where good academic practice requires larger units of study.**

Credit is awarded to students who obtain 40% on a module (see also provisions on compensation at 5.5 below).

### 4. ARRANGEMENTS FOR ASSESSMENT AND FORMAL EXAMINATION

**The University's standard examination periods are**

- End of semester 1
- End of Semester 2
- Repeat (of Semester 1 & 2) Examinations (August).

The holding of examinations outside of these periods requires the prior approval of the Academic Regulations Committee.

Repeat examinations will be held for all programmes and modules unless the prior approval of the Academic Regulations Committee is given.

Modules may be assessed in any combination of formal examinations, assignments, projects, essays, papers, reports, presentations & debates, locally-set exercises, laboratory or field-work, or other experiential learning.

Where modules are examined by means of a **formal examination** paper administered by the University's Examinations Office and time-tabled centrally, the examination will be of a **standard two hours duration**. Where a module weighting is greater than 5 ECTS, the formal examination may be broken into a number of 2 hour papers or one 2 hour paper and alternate assessment methods (e.g. a 10 credit year-long module might attract two 2 hour examinations). In exceptional circumstances, where robust academic assessment reasons require longer examinations, 3-hour (or longer) examinations may be facilitated. Approval for such arrangements will require the prior approval of the Academic Regulations Committee.

### 5. PASSING AND PROGRESSION

The Examination Board is the formal examination authority for each College and examination session. Chaired by the Dean, the Board is made-up of academic staff members of the College and extern examiners from the relevant disciplines, or from the Colleges responsible for multi-College programmes. Only those decisions approved by the Examinations Board will be formally recognized as official University examination results – relating to Passing, Progression, Determination of Honours and Granting of Deferrals.

Examination Boards will be held at the end of a Stage, normally Semester 2 and after the repeat examinations in August. The Examination Board will determine the overall result and will apply compensation provisions.

#### 5.1 Progression

Undergraduate degree programmes at the University are normally organized into **Stages**. **Students must successfully complete each stage before progressing to a subsequent one.** Full-time Undergraduate Degree Programmes will be organised on an academic year basis, where each year represents a defined Stage. Full-time undergraduate students will be required to register for and present for examination in a set of modules to a total credit weighting of 60 ECTS,

in accordance with the programme structures and regulations set-out in the College's **Programme Descriptions and Regulations** for their chosen programme of study. Provision may be made for **Part-time** students to complete a stage over several years, accumulating the credits required for each stage in a more flexible credit accumulation structure.

### 5.2 Passing

**The pass mark on all modules is 40%.** Where different components of assessment (course work, laboratory work, continuous assessment, final assessment, etc.) within a module contribute to the final grade it shall **not normally** be a requirement that any one of these components be separately passed. Only an overall mark for the module will be returned. Marks will not be returned for components of a module.

**A mark of 'Incomplete' must be returned to the Examinations Office where there is a requirement that an element(s) of a module be passed and that element(s) is not passed. A student is required to retake all elements of an incomplete module** unless the relevant College provides by regulation that students be exempt from retaking specific components.

College level provisions should be the same across all programmes and modules in a College.

### 5.3 Carrying Forward Marks

A student will be given credit for modules passed and will not have to re-present for examination in any module in which a minimum mark of 40% has been returned within the time-limit set out in regulations for the successful completion of the particular stage. The normal time-limit for carrying forward of marks to subsequent examination sessions is 2 academic years. A College may prescribe a time-limit provision other than the preceding one with the approval of the Academic Regulations Committee.

### 5.4 Material Assessed at Repeat Examinations

Marks for components of a module (i.e. sub-module assessment elements) from previous attempt(s) do not carry forward from one assessment to the next unless the relevant College has made provision to exempt student from retaking specific components for academic reasons.

### 5.5 Compensation Provision

Compensation will only be applied in cases where its application enables the student to pass the Examination as a whole.

The pass standard for a Module is 40%. However a student with marks of less than 40% in one or more modules will be deemed to have passed the Stage provided

- The aggregate mark for all modules of the Stage is at least 40%
- The mark in every module is 35% or more
- The module(s) with marks in the range 35-39% total 15 ECTS or less

The carrying forward of marks into a particular examination session does not invalidate the potential for compensation provision to be applied in that session.

Where a module has been passed by compensation the mark for the module will appear on transcripts with a grade of Pass by Compensation.

In some programmes, Compensation may not be allowed in core or mandatory prescribed modules or groups of modules, as to do so would undermine the achievement of the learning outcomes for the Stage or Programme. These specific regulations will be set-out in the College's **Programme Descriptions and Regulations** for the relevant degree programmes.

### 5.6 Capping of Examination Marks

With effect from the academic year 2015/16 the maximum mark which may be awarded at a repeat examination of a module, will be the pass mark for the module, viz. 40%.

**There are two exceptions:**

- (a) Capping will not apply in the first year of undergraduate programmes
- (b) in the case of modules of the MB, BCh, BAO and BSc (Occupational Therapy, Podiatry and Speech and Language) programmes the maximum mark which may be awarded will be 50%, viz. the pass mark for modules on those programmes.

### 5.7 Arrangements for the Implementation of Capping Provisions

Capping will be applied to Undergraduate years of programme as follows:

#### 1. Academic Year 2015-16

- Capping does not apply to 1st years and final years.
- Capping applies to all other years of an undergraduate programme, i.e. from 2nd year to pre-final year inclusive.

#### 2. Academic year 2016-17:

- Capping does not apply to 1st years.
- Capping Applies to all other years of programme, i.e. from 2nd year to final year inclusive.
- Capping applies to students who are repeating any Stage of a programme from 2nd year to final year, regardless of when the first attempt at that Stage was made.
- Capping does not apply to those students who were on ERASMUS year abroad or other academic related programme approved by the relevant College in 2015-16 and are now in final year.
- Capping applies to students who are in final year in 2016-17 and in the course of the 2015-16 academic year availed of leave-of-absence, whether or not such leave was approved by the University.

#### 3. Academic year 2017-18 and thereafter:

- Capping does not apply to 1st years.
- Capping applies to all other years of undergraduate programmes i.e. from 2nd year to final year inclusive, including those students who are repeating a year or returning after a gap in their studies.

Capping will apply in all cases, as outlined above, unless a deferral has been granted, see Section 7 of this document regarding the University's Deferral Application Procedures.



### 6. AWARD OF HONOURS

Honours are awarded according to the following scheme, for each complete stage of study; that is, for each completed academic year for full-time undergraduate students.

#### 6.1 Award of Honours for Degree Examinations

At degree level, honours will be calculated on the basis of 30% of the aggregate mark obtained at the pre-final stage\* Examination and 70% of the aggregate mark obtained at the final stage Examination. The standard will be based upon the following table:

|      |                      |
|------|----------------------|
| H1   | 70% on the aggregate |
| H2.1 | 60% on the aggregate |
| H2.2 | 50% on the aggregate |
| H3   | 40% on the aggregate |

*\* Another year, other than the pre-final year, may be nominated for valid academic reasons with the approval of the Academic Regulations Committee.*

## 6.2 Pre-Final Stage Examinations

Honours will be calculated based upon the following table:

**H1** 70% on the aggregate

**H2.1** 60% on the aggregate

**H2.2** 50% on the aggregate

**Note (1):** Where a module is offered at pass and honours level, a scale for translating marks obtained at the pass level will be used to translate the marks to the equivalent mark at the honours level for the purpose of computing honours.

**Note (2):** Honours are awarded only on the aggregate performance at an Examination as a whole. Honours are not awarded on the basis of results obtained in individual modules.

**Note (3):** Credit awarded on the basis of a prior award or on the basis of Recognition of Prior Learning (RPL) will be grade neutral and will not be taken into account in the calculation of honours.

## 7. DEFERRAL PROVISION

Application for permission to defer taking a module or modules to a subsequent examination session must be made in accordance with the Deferral Application Procedures of the University, as outlined in the Deferral of Examinations Guidelines for students:

[www.nuigalway.ie/exams/downloads/deferral\\_of\\_examinations\\_guide\\_for\\_students.pdf](http://www.nuigalway.ie/exams/downloads/deferral_of_examinations_guide_for_students.pdf)

## 8. TRANSCRIPTS

Student transcripts will include details of all modules for which a mark has been entered. The Degree Honours Standard reported will be based on the grade bands shown in 6 above. The only additional or alternative annotations will be:

- Exempt
- Absent
- Pass by Compensation.
- Deferred
- Incomplete
- Audit

## 9. DEALING WITH EXCEPTIONS/DEVIATIONS

Only in exceptional circumstances will deviations be permitted from these regulations. A **structural deviation** is a significant and permanent change to these regulations which might be authorized for one or more programmes. Where a **structural deviation** is required for sound academic purposes, application must be made to the Academic Regulations Committee of Academic Council's Standing Committee, which shall recommend to Academic Council Standing Committee in the matter of applications received. A **concession** is the granting of explicit permission by the Standing Committee, following consideration and recommendation by the Academic Regulations Committee, to permit the deviation of a programme of study from these prescribed regulations. A **concession** may be required in occasional circumstances and will be a matter for Academic Council Standing Committee, following consideration and recommendation by the Academic Regulations Committee.

# Opportunities for Masters Level Study (Optional)

**Students can advance to Masters level (ME) through an integrated 1 year (September-June) follow-on to the 4 year BE programme, subject to a sufficient standard (2nd Class Honours minimum).**

The integrated 5 year ME programme (4 years BE and 1 year ME) meets Engineers Ireland's criterion for Level 9 degrees, providing graduates with a route to Chartered Engineering status and a qualification that will be recognised worldwide. The 5 year programme strengthens the ability of our graduates to compete nationally and internationally for employment at the highest level in industry and other sectors of the economy.

A Masters Degree qualification from the College of Engineering and Informatics will help you to compete and distinguish yourself in a competitive job market. It also enables you to develop the specialist skills you need to succeed in your chosen

field. Our ME programmes are accredited by Engineering Ireland, which means that they are recognised internationally. We work with industry to ensure that our programmes produce graduates who are highly skilled and trained to address the problems society face and our graduates secure employment soon after completing their programme in many world-leading companies.

During the 3<sup>rd</sup> year of study students will make a choice to continue on the integrated 5 year ME programme or can alternatively opt to exit with a BE after 4 years.



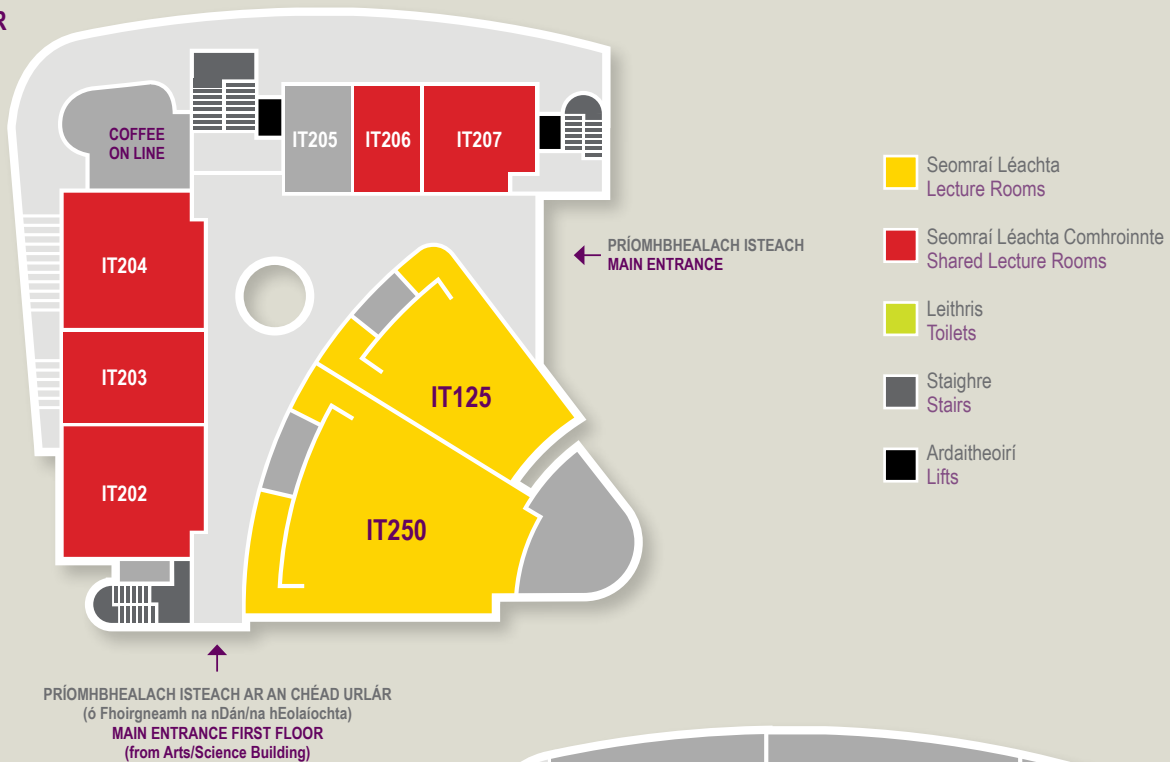


## Notes



# Foirgneamh IT IT Building

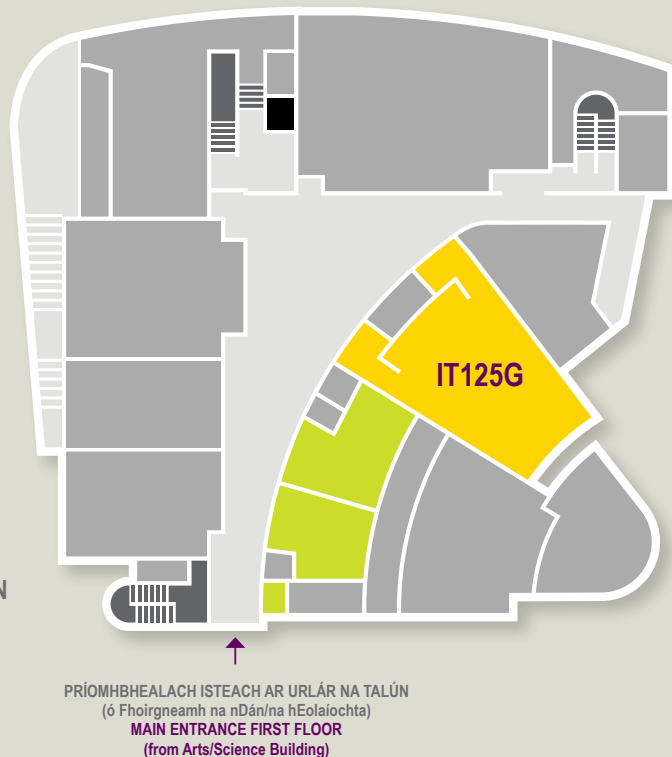
## AN CHÉAD URLÁR FIRST FLOOR



Tabhair faoi deara go bhfuil seomra IT125G suite ar urlár na talún agus go bhfuil seomra IT125 ar an chéad urlár.

Please note, room IT125G is located on the ground floor and room IT125 is on the first floor.

## URLÁR NA TALÚN GROUND FLOOR





NUI Galway  
OÉ Gaillimh

# Foirgneamh na nDán/na hEolaíochta

## Arts/Science Building

Seirbhísí Gairme  
Career Development Centre

Ofígaí na nDámh  
Faculty Offices

Seirbhísí Ríomhaireachta  
Computer Services

Leithris  
Toilets

Stair  
Stairs

Ardaitheoirí  
Lifts

Seandálaíocht  
Archaeology

Micribhitheolaíocht  
Microbiology

Eolaíocht an Chomhshaoil  
Environmental Science

Fisic Thurgnamhach  
Experimental Physics

Fisic Thurgnamhach (Optaic Fheidhmeach)  
Experimental Physics (Applied Optics)

Ceimic  
Chemistry

Bithcheimic  
Biochemistry

Tíreolaíocht  
Geography

Saotharlann Bitheolaíochta na Chéad Bhliana  
First Year Biology Laboratory (SC200C)

Clasaicí & Dlí  
Classics & Law

Dlí  
Law

Institiúid de Móra  
Moore Institute

Béarla  
English

Stair  
History

Béarla & Stair  
English & History

Seomraí Léachta Comhroinnte  
Shared Lecture Rooms

1 Téatar Cairnes (AC002)  
Cairnes Theatre (AC002)

2 Téatar D'Arcy Thompson (AC003)  
D'Arcy Thompson Theatre (AC003)

3 Téatar O'Flaherty (AC001)  
O'Flaherty Theatre (AC001)

4 Téatar Larmor (SC002)  
Larmor Theatre (SC002)

5 Téatar Kirwan (SC001)  
Kirwan Theatre (SC001)

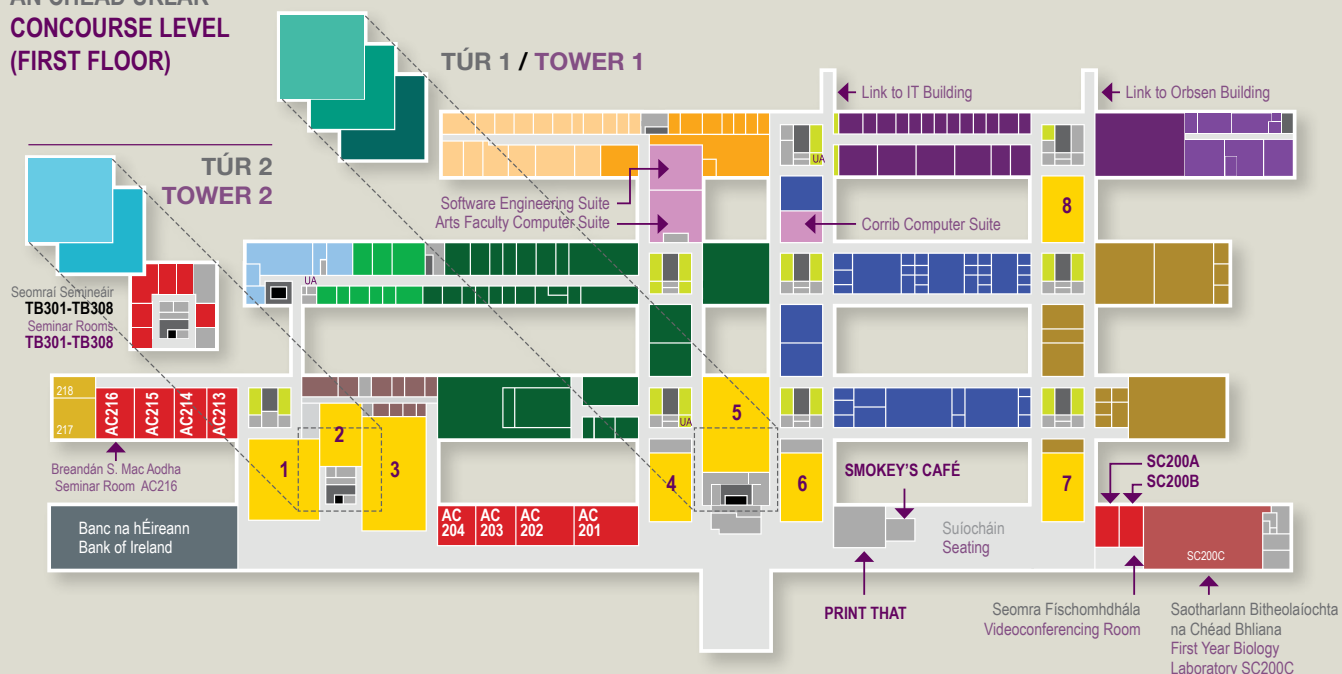
6 Téatar Dillon (SC003)  
Dillon Theatre (SC003)

7 Téatar McMunn (SC004)  
McMunn Theatre (SC004)

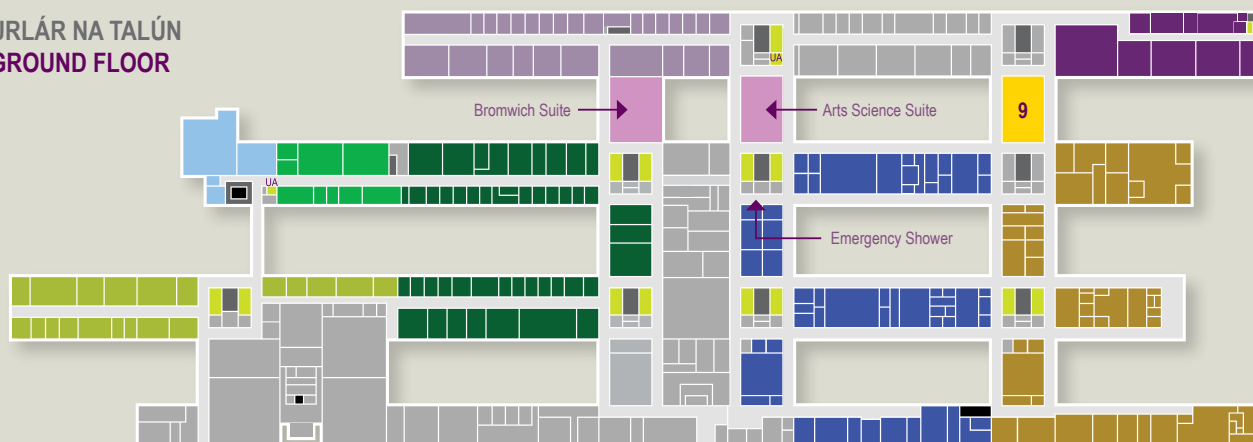
8 Téatar Tyndall (SC005)  
Tyndall Theatre (SC005)

9 Téatar Dunican (127)  
Dunican Theatre (127)

### AN CHÉAD URLÁR CONCOURSE LEVEL (FIRST FLOOR)



### URLÁR NA TALÚN GROUND FLOOR





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**OÉ Gaillimh**

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