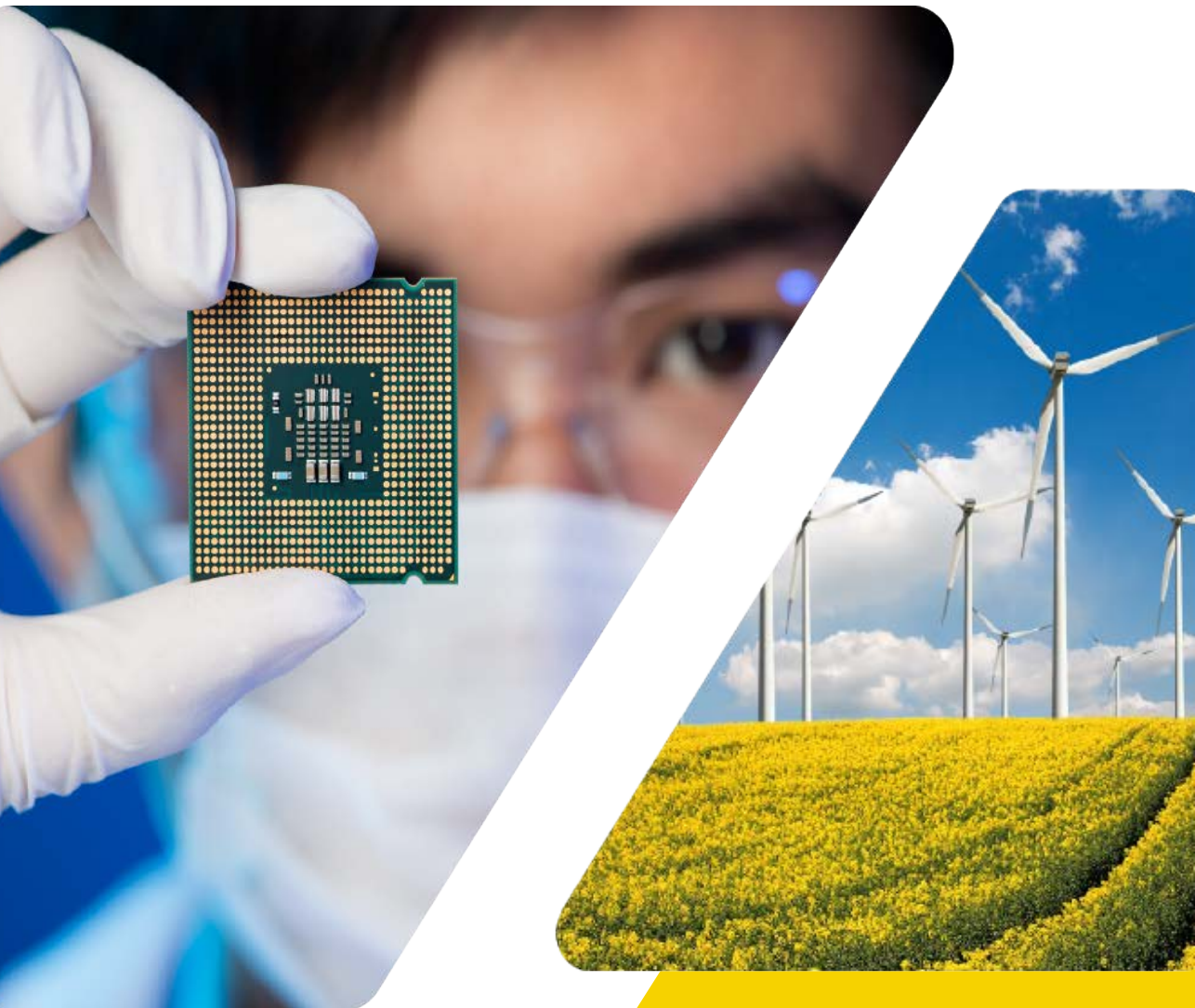




UCD College of Engineering  
and Architecture

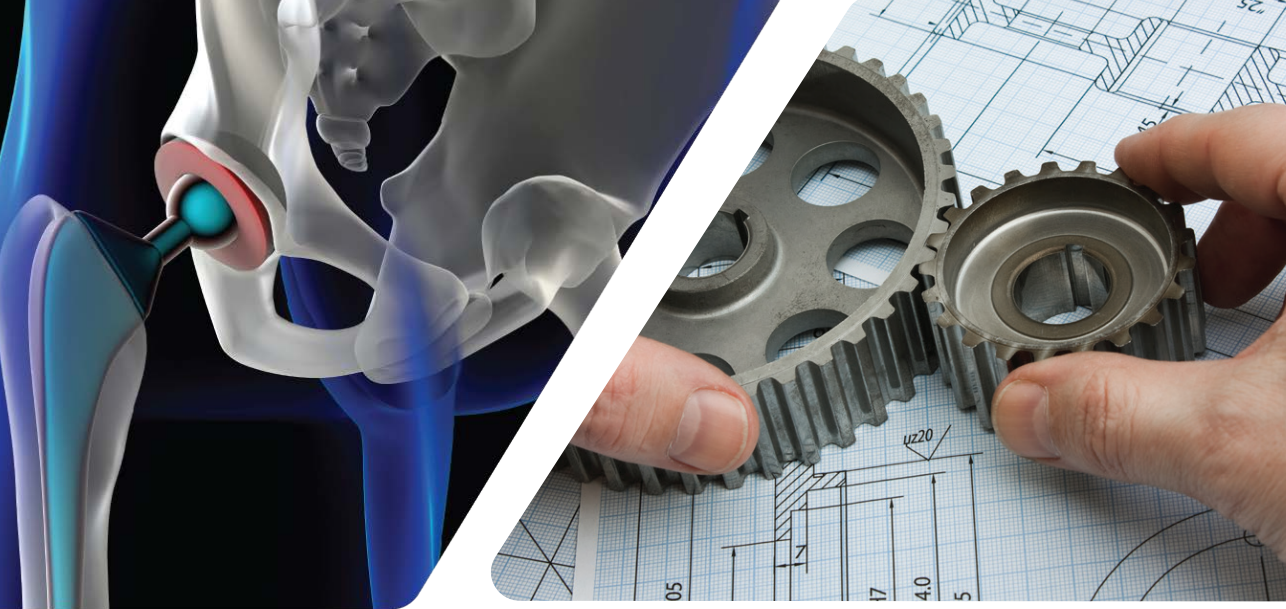
# UCD Engineering Engineering Your Future

DN150 Engineering



**ENGINEERING OPEN EVENING**

Wednesday, 24 January 2018 – 6.00pm  
Visit [www.myUCD.ie](http://www.myUCD.ie) to register



## UCD ENGINEERING (DN150)

### Bachelor of Science or Bachelor of Engineering (Honours) or Master of Engineering (Integrated ME)

BSc (Engineering Science) (NFQ Level 8) or BE (Hons) (NFQ Level 8) or Integrated ME (NFQ Level 9)

### WHAT IS UCD ENGINEERING?

UCD DN150 Engineering is the entry point to all of the Engineering programmes at UCD. We have the widest range of degree choices in the country and, after completing the common first year, you can choose your second year pathway from one of the following:

- Biomedical Engineering
- Chemical & Bioprocess Engineering
- Civil Engineering
- Electrical or Electronic Engineering
- Mechanical Engineering
- Structural Engineering with Architecture

Your chosen area of specialisation in second year will also offer routes to further branches of engineering at Masters level in year 4 and 5.

### WHAT WILL I STUDY IN FIRST YEAR?

Your first year in UCD will see you immersed in a completely new life. Educationally, the first year is a common year which allows you gain an understanding of the many engineering disciplines available before you commence your specialisation in second year.

Your first year will be spent intensively learning and discovering how to solve problems through physics, chemistry and mathematics, as well as gaining exposure to engineering subjects such as Mechanics, Energy, Creativity in Design and Electronic or Electrical Engineering.

UCD Engineering students also have the option to take elective modules throughout UCD on the Horizons programme.

#### CAO Points Range 2017

498 – 625

#### Length of Course

3 Years (BSc)

4 Years (BE) (Hons)

5 Years (Integrated ME)

#### Places

260

#### Entry Requirements

- English
- Irish
- Mathematics (Min H4 in LC or equivalent)
- One laboratory science subject (Min H6 in LC or equivalent) (Chemistry, Physics or Biology is recommended)
- Two other recognised subjects

#### Leaving Certificate

You must obtain a minimum of Grade H5 in two subjects and a minimum of Grade O6/H7 in the remaining four subjects

#### A-Level/GCSE

see [www.ucd.ie/myucd/alevel](http://www.ucd.ie/myucd/alevel)

#### Level 5/6 FETAC Entry Routes

None

#### Level 6/7 Progression Entry Routes

Yes, see [www.ucd.ie/myucd/hetac](http://www.ucd.ie/myucd/hetac)

#### Mature Entry Route

Yes

## WHAT MAKES A GOOD UCD ENGINEER?

UCD engineers have inquisitive minds and love to solve problems – and it is their creativity that sustains them when times get tough. Sometimes the tried and trusted solutions won't work and you'll have to come up with a new way of solving a problem, be it a health issue, a design issue, an energy issue, or a business issue. You will be the person that people will look to for answers and a UCD engineer will try to find a creative way of arriving at a solution that meets the needs of all parties.

## WHAT ARE THE CAREER OPTIONS FOR ENGINEERING GRADUATES?

From running a company to designing an industrial plant, from working in a multinational like Google to visiting Africa to work on irrigation systems, the opportunities that will be available to you as a UCD engineering graduate are as wide as they are varied. Whether your career path is to make a million by the time you are 25 or help save the world, you won't go too far wrong with engineering! It is not only a profession, it is a discipline, which will equip you with a mindset and skill set that will make you an asset on every career path you decide to take, and to any company that employs you.

## WHAT ARE THE GRADUATE STUDY OPTIONS FOR AN ENGINEERING GRADUATE?

The options for UCD engineering graduates are numerous. In UCD there are taught Masters programmes including:

- Biomedical Engineering
- Biosystems & Food Engineering
- Chemical & Bioprocess Engineering
- Civil, Structural & Environmental Engineering
- Electrical Energy Engineering
- Electronic & Computer Engineering
- Energy Systems Engineering
- Engineering with Business
- Materials Science & Engineering
- Mechanical Engineering
- Structural Engineering with Architecture

There are also taught and research Masters and PhD opportunities available to you. The graduate opportunities in UCD are fantastic!

## WILL STUDYING ENGINEERING AT UCD NARROW MY CAREER OPTIONS IN THE FUTURE?

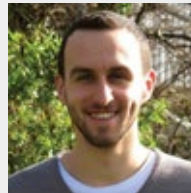
Absolutely not. Your engineering qualification from UCD will offer you great flexibility. The skills and knowledge you will gain in UCD are highly transferable and offer you a wide range of career options within the engineering profession and outside it, for example in business, finance or consulting.



### Rebecca Dwyer Graduate

After enjoying maths, physics and chemistry in school and learning about the excellent facilities and

labs in UCD, I was eager to study engineering. The course has a really good balance of theoretical and practical work. I'm quite academic but I like the idea of being 'out and about' and doing projects, or learning something in the classroom and then putting it into practice in the lab. If you like what you're learning, it makes studying a lot easier. I love the atmosphere of the engineering building; the older students are so helpful with advice and they're really friendly. I don't necessarily have to 'be an engineer'. The skills that we learn, like technical report writing, research and writing essays on a scientific process, are so transferable that engineers tend to get headhunted for them. I did an internship in Goldman Sachs and I can already see the value of these skills that I'll have forever.



### Ian Whelan Graduate

For as long as I can remember I always wanted to do Engineering, and that influenced my choice

of subject for the Leaving Cert. I did Maths, Applied Maths and Physics. I also did Art, which some people may find unusual but I found it really useful particularly in the design modules of the UCD Engineering degree. I chose to do Mechanical Engineering because I had a 'hands on' approach to all things mechanical (especially engines) while growing up, and I wanted to learn how and why things work the way they do. I'm currently employed by Ferrari in Italy, where I work on engine design and testing. I've worked really hard to make this dream of working on high-performance cars a reality and Mechanical Engineering in UCD has given me the platform.

## STUDYING UCD ENGINEERING



### Year/Stage 1 Explore your options

**Core Modules:** Chemistry, Mathematics, Physics, Creativity in Design, Electrical/Electronic, Energy Engineering and Mechanics  
**Option Modules:** Chemical Engineering Process Principles, Computer Science for Engineers I, Design and Materials, The Engineering and Architecture of Structures In-Programme  
**Electives:** Biosystems Engineering Design Challenge, Energy Challenges, Introduction to Civil and Environmental Engineering, and Robotics Design Project



### Years/Stages 2 & 3 Choose your pathway

**Choose one of the following Engineering pathways:** Biomedical; Chemical & Bioprocess; Chemical with Biochemical Minor; Civil; Electrical/Electronic; Mechanical or Structural Engineering with Architecture.  
**Optional Study Abroad on Exchange**



### Years/Stages 4 & 5 Focus on your area(s) of specialisation

Entry to master's degree programmes is subject to entry requirements.

**BE (4 years) Bachelor of Engineering**  
**Specialise in one of the following areas:** Biomedical, Chemical & Bioprocess, Civil, Electrical, Electronic, Energy Systems or Mechanical

**ME (5 years) Master of Engineering**  
**Specialise in one of the following areas:** Biosystems & Food; Biomedical; Chemical & Bioprocess; Civil, Structural & Environmental; Electrical Energy; Electronic & Computer; Energy Systems; Engineering with Business; Materials Science & Engineering; Mechanical or Structural Engineering with Architecture  
**Professional Work Experience**

## WHY ENGINEERING AT UCD?



UCD is Ranked Among the Top 1% of Universities Worldwide



World Class Engineering Education



Widest Range of Engineering Degree Options



6-8 Month Internships on ME Programmes



Links with Major Employers



Access to Non-Engineering Modules (Horizons)



Various Accredited by Engineers Ireland, IOM3 & IChemE



### UCD ENGINEERING AND ARCHITECTURE PROGRAMME OFFICE

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