

**“A degree in Civil Engineering is an excellent choice as it gives great flexibility in terms of career choice. Civil Engineering graduates are skilled at solving practical and numerical problems, making them highly desirable employees in many industries.”**

**Dr. William Forrest** BE (Civil) 2005, PhD 2010 (TCD)  
Quantitative Analyst, Paddy Power PLC.



**UCC**

Coláiste na hOllscoile Corcaigh, Éire  
University College Cork, Ireland

## The BE (Hons) (CIVIL)

### 1<sup>st</sup> Year

#### Core:

Mathematics (I+II), Applied Maths (I+II), Physics, Chemistry, Computer Programming & Problem Solving, Professional Engineering Communications & Ethics, Eng. Materials, Eng. Structures.

#### Optional:

Electrical & Electronic Systems, Process & Chemical Eng., Energy Eng.

### 2<sup>nd</sup> Year

Design Studio, Solid and Structural Mechanics (I+II), Fluid Mechanics (I+II), Surveying, Modelling & Visualisation, Heat & Mass Transfer, Maths, Applied Maths (I+II).

### 3<sup>rd</sup> Year

#### Core:

Design Studio in Reinforced Concrete & Masonry; Design Studio in Steel & Timber, Solid & Structural Mechanics, Soil Mechanics (I+II), Construction Project Management, Hydraulics, Geology, Applied Probability & Statistics.

#### Choose one of four streams continued to 4th Year:

(a) **Structural Eng. and Construction;**

(b) **Environmental Eng.** - Environmental Eng. (Wet);

(c) **Building Energy Eng.** - Energy in Buildings;

(d) **IT in Architecture, Engineering and Construction (AEC).** - Engineering Computation;

#### Optional:

Materials & Sustainability, Sustainable Energy, Management & Organisation, Enterprise Planning & Processes.

### 4<sup>th</sup> Year

#### Core:

Design Studio, Dissertation, Architecture and Planning, Structural Analysis, Geotechnical Eng., Water & Wastewater Treatment.

#### Continuing the chosen stream from 3<sup>rd</sup> Year:

(a) Design Studio in Structures, Bridge Engineering;

(b) Design Studio in Environment, Environ. Hydraulics;

(c) Design Studio in Building Energy, Energy Sys. in Blds.;

(d) Design Studio in IT in AEC, Sustainable Operation & Management of Buildings.

#### Optional:

Applied Elasticity, Transportation & Energy, Traffic & Highways, Environmental Hydrodynamics, Harbour & Coastal Eng., Biomedical Design, Work Placement, Entrepreneurship Practice & Opportunity Recognition, Entrepreneurial Business Start-Ups.

## 7 reasons to study Civil & Environmental Engineering in UCC

1. Recognised as the leading Civil Engineering degree in Ireland.
2. Highly qualified academic staff with vast international experience.
3. National and international professional placement at the end of 3<sup>rd</sup> year.
4. Design Studios taught by leading professional engineers from Industry.
5. An opportunity to spend your 3<sup>rd</sup> year studying abroad in Europe, USA or Canada.
6. State of the art Computer and Experimental Laboratory facilities.
7. Internationally accredited BE (Hons) (CIVIL).



**Civil and Environmental Engineering**

[cee.ucc.ie](http://cee.ucc.ie)

School of Engineering,  
University College Cork, Ireland.

For more information please contact either:

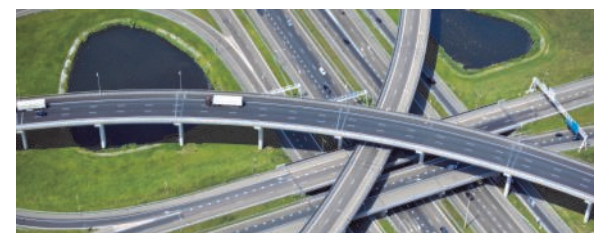
**Prof. Ger Kiely**, Programme Director  
[g.kiely@ucc.ie](mailto:g.kiely@ucc.ie) 021-490 2965

**Dr. Denis Kelliher**  
[d.kelliher@ucc.ie](mailto:d.kelliher@ucc.ie) 021-490 2308



**Civil and Environmental Engineering**

The 4 year Honours Degree in Civil and Environmental Engineering at UCC is taught by the most highly qualified academic lecturers and professors in Ireland, many with vast international experience. The course is supplemented with teaching input by several very experienced local and national professional engineers who engage the students with real world engineering problems, such as the design of buildings, bridges, flood alleviation works, water and wastewater plants, etc. In 3<sup>rd</sup> year the work placement and the Year Abroad option (at a US, Canadian or EU University) adds an international dimension to the UCC degree which is unique in Ireland.



# What do our graduates say?



## BE (Hons) (CIVIL)

### Anne Moloney BE(Civil) 2004

Senior Project Manager, Rambøll, Denmark



“A Civil engineering graduate in the modern commercial world is a very attractive to a prospective employee as such a degree illustrates a strong ana-

lytical mind and ability to solve complex problems. Currently I'm in Copenhagen working for Rambøll where I am the Project Manager for the Forth Replacement Crossing in Edinburgh, a €1bn project.”

“I can honestly say that while a full time career in Civil Engineering may not be the decision of all graduates upon completion I have found it to be an incredibly diverse and interesting profession.”

### Robert Wright BE(Civil) 2014

Design Engineer, Malachy Walsh & Part., Cork

“My favourite part of the Civil Engineering course was my final year project: it was based on the famous Shaky Bridge near Fitzgerald's Park in Cork. We made a 3D computer model of this suspension bridge which spans 51 meters across the river Lee and simulated the true behaviour of the bridge, which was captivating.”

“The skills that I have learnt throughout my time at UCC, both technical and non-technical have put me in an advantageous position as a Graduate Engineer and are proving to be invaluable in the workplace.”



**“I chose to study Civil and Environmental Engineering at UCC because I liked the idea of being able to create something new. And the great thing about my degree is that it allows me to work in any country I wish.”**

**Shane Luck BE (Civil) 2014**

### Dr. Rory Clune BE(Civil) 2008, PhD 2011 (MIT) Mgt. Consult., McKinsey & Co, Boston MA, USA

“My time at UCC and the degree in Civil Engineering inspired me to continue studying at the Massachusetts Institute of Technology (MIT), where I spent several enjoyable and rewarding years building engineering software and studying structural design. After leaving MIT last year, I went to work for McKinsey & Company, a management consultancy, where I have worked on a range of both engineering and non-engineering projects across the U.S.”



“The degree in Civil Engineering from UCC gave me a strong technical grounding and an ability to solve practical problems, which have served me well in both academia and business.”

### Margaret Keohane BE(Civil) 2011

Bus. & Sys. Integration Analyst, Accenture



“After graduating I joined Accenture Ireland and I am progressing in a Technology Consulting career path. Technology touches every industry sector in all parts of the world, the opportunities in this area are endless. My current role is in the Resources Industry as a Business and Systems Integration Analyst.”

“I work on designing and implementing changes to computer applications. I work with an offshore team in Mumbai, India, and have spent time training in India. The core teamwork and problem solving skills I learnt in Civil & Environmental Engineering have prepared me for the fast paced consulting industry. The Computer Programming and Project Management skills I learnt have been invaluable.”

## Is Civil Engineering for me?

- I'm creative and love design.
- I want to make a real difference and contribute to society.
- I'm intelligent and want to be challenged.
- I'm mathematical and love solving problems.
- I want a professional degree and be well paid.
- I want diverse career choices (Engineering, Finance, IT, Management, ...).
- I want to be able to work anywhere in the World.
- I want to graduate with a Civil Engineering degree that has a 165 year tradition of excellence.

## How do I apply for the BE (Civil)

1. On the CAO application choose “CK600 Engineering”
2. Then under the “Select CK600 course options” menu, choose “Civil & Environmental Engineering”

To learn more visit: [cee.ucc.ie](http://cee.ucc.ie)

Information on UCC Academic and Sports Scholarships can be found at:

[www.ucc.ie/en/quercus/](http://www.ucc.ie/en/quercus/)