

"I chose to study Structural Engineering with Architecture because the course seemed like a perfect balance of problem solving, creativity and design. What really sets this course apart is that the school recognizes the importance of developing areas such as leadership, team work, innovation, economics and communication.

The 8-month work placement in 4th year was a highlight for me, this placement gave me the opportunity to apply what I had learned in UCD to real life problems and get exposure to potential employers. After graduating UCD, I was delighted to be offered a job with ARUP, a multi-national leading engineering design firm, where I have had the opportunity to watch my work take shape in the built environment.

Caitlin McDonnell Graduate



Structural Engineering with Architecture

BSc [Engineering Science] [NFQ Level 8]
leading to ME [NFQ Level 9]

Engineering NAS1

Length of Course 3 Years [BSc] [Hons]
+2 Years [ME] or 4 Years [BE]

Guideline Entry Requirements

IB- International Baccalaureate Diploma*
IB Total 34

Subject Requirements

Maths: 5 at Higher Level
Lab Science: 4 at Higher Level

Cambridge A Level [+ GCSE O Level]
ABBB / AAA / AAB+ CAS Level

Subject Requirements

Maths: A Level Grade C
Lab Science: A Level Grade D

Other Examinations

See www.ucd.ie/international

International Foundation Year

Yes. See www.ucdisc.com

Internship Opportunity

Yes

**please note IB requirements are under review at the time of printing.
See www.ucd.ie/international/ib*

Other courses of interest

Architecture →176
Civil Engineering →186

Why is this course for me?

If you're interested in the beauty of architectural design, and you want to be the one who realises these designs by creating viable solutions that ensure structures stand the test of time, then this is the course for you. The Structural Engineering with Architecture degree at UCD is a two-part degree, with an initial three-year Bachelor's degree followed by a two-year Master's degree, focusing primarily on the design of structures. The programme's aim is to develop an appreciation for architecture, coupled with the solid fundamentals of an engineering degree. This will enable graduates to challenge the traditional boundaries of structural design.

What will I study?

First Year

Engineering students follow a common first year. Modules include: Chemistry • Creativity in Design • Electrical/Electronic Engineering • Energy Engineering • Engineering Computing • Mathematics • Mechanics • Physics.

Second Year

Construction Materials • Construction Practice • Mechanics of Solids • Soil Mechanics • Architecture for Structural Engineers

Third Year

Structure & Form • Analysis of Structures • Design of Structures • Energy Systems: Buildings

Fourth Year

Taught modules in semester one are typically followed by an eight-month work placement.

Fifth Year

Innovation Leadership • Advanced Structural Analysis & Design • Professional Engineering [Management] • Soil Mechanics & Geotechnical Engineering • Bridge Engineering • Research Project

A student's week includes attending lectures and tutorials, as well as participating in laboratory-based workshops and undertaking independent study.

A combination of end-of-semester written examinations and continuous assessment is used. In your final year, you'll also submit a report of your research project.

Career & Graduate Study Opportunities

The ME programme in Structural Engineering with Architecture is fully accredited by Engineers Ireland, and thus recognised internationally. Graduates can find employment in Ireland and abroad in areas such as:

Engineering consultancy • Construction management • Project management and planning • Management consultancy and finance.

You can also pursue an academic career, and a PhD in Structural Engineering, in Ireland or abroad.

International Study Opportunities

There is the opportunity to spend a semester abroad. Students to date have spent semesters at: University of Cantabria, Spain • University of California, USA • University of Connecticut, USA • San Jose State University, USA • University of Washington, USA.

Professional Work Experience

Professional Work Experience [PWE] is incorporated in the ME programme. Eight-month internships (the majority of which are paid) have included the following employers: Arup, Meinhardt (London), OBA Consulting Engineers, O'Connor Sutton Cronin, Thornton Tomasetti (New York), and Waterman Moylan.

