



ME Structural Engineering with Architecture

UCD School of Civil, Structural and Environmental Engineering

PROFESSIONAL WORK
EXPERIENCE AVAILABLE
ON THIS PROGRAMME

Why is this course for me?

This ME programme is suitable for Engineering graduates holding a first cycle qualification in Structural Engineering with Architecture, or equivalent. The focus in the ME cycle is on Structural Engineering and it is expected that entrants would have covered the fundamentals of structural engineering, and have prior learning in Architecture, in their first cycle qualification.

The ME Structural Engineering with Architecture will provide you with the required educational standard for the Professional title of Chartered Engineer awarded by Engineers Ireland. Through its mutual recognition agreements this standard is also recognised internationally through the Washington Accord.

Furthermore with modules taught by senior academic staff and industry practitioners students you will be exposed at an early stage to the collaborative design process that is Structural Engineering in an industry setting. The programme offers a strong emphasis on design and

Why study at University College Dublin?

innovation, a highly portable degree enabling employment here and abroad. There is the option to spend time on work placement.

Professional Work Experience:

The Professional Work Experience (PWE) module is incorporated into the 2-year Masters of Engineering Programme and is designed to integrate a student's academic and career interests with paid practical work experience for a 6-8 month period. The module will provide students with the perfect opportunity to gain increased experience and understanding of their chosen field, assess where their strengths and weaknesses lie and maximise their knowledge of the available career possibilities. The practical skills acquired during this placement will give graduates a competitive advantage when applying for positions upon graduation.

Why study at University College Dublin?

Some of the reasons to study at UCD:

- Top 1% world university
- Ireland's largest provider of graduate education
- Ireland's largest and most international university
- Emphasis on research and innovation
- Safe, modern campus in Dublin, capital city of Ireland
- Extensive range of on-campus accommodation

UCD College of Engineering and Architecture

The UCD College of Engineering and Architecture's research and taught programmes are centred around a wide variety of activities spanning basic, strategic and applied research from the diverse range of disciplines covered by the Schools of Architecture, Biosystems Engineering; Chemical and Bioprocess Engineering; Civil, Structural and Environmental Engineering; Electrical, Electronic and Communications Engineering and Mechanical and Materials Engineering.

We have a proud history in research going back 100 years. Today, there are exciting opportunities for those wishing to pursue a higher research degree to doctoral or masters level. Within the broad disciplines listed above there are many research centres, clusters and institutes lead by highly experienced world renowned researchers.

The College has an excellent track record in attracting significant

Science Foundation Ireland (SFI), European and industrial funding to support its many research activities. Through research, the UCD College of Engineering and Architecture will continue to promote excellence in Graduate training. The range of interdisciplinary taught Master's programmes now available within the college and initiatives including the Structured and Thematic PhD programmes, mean that the Graduate School is ideally placed to offer innovative graduate level training programmes.

UCD School of Civil, Structural and Environmental Engineering

The UCD School of Civil, Structural and Environmental Engineering is home to our university's community of staff and students engaged in research, teaching and learning on many facets of the designed environment. Their interests are diverse – buildings, urban spaces, rural environments, transport systems, water supply, flood control, bridges, tunnels, historical fabric - to mention just a few! Their specializations may be diverse but they share a common desire to advance the boundaries of knowledge in an atmosphere that fosters curiosity, the joy of discovery and empowerment for life-long learning.

What will I study?

The programme is structured over two years with two semesters per year. The curriculum includes lectures, practicals, teamwork exercises, design and innovation exercises, optional work placement and project work, individually and in groups. In addition to the technical course content there is a strong emphasis on idea communications skills, using a variety of media, development.

Subjects include:

- Realising Built Projects
- Professional Engineering for Civil and Structural Engineers
- Structural Analysis, Design and Specification
- Systems and Geotechnics
- Materials & Design
- Structural Dynamics
- Structural Design (Building Construction)
- Work Placement
- Soil-Structure Interaction
- Engineering Design Project
- Advanced Structural Analysis and Design
- Case Studies
- Construction Management
- Innovation Leadership
- Bridge Engineering
- Soil Mechanics and Geotechnical Engineering
- Engineering Research Project
- Quantitative Methods for Engineers

What are the career opportunities?

Our graduates would typically follow careers in engineering consultancy, engineering contracting, construction management, project planning both in Ireland and abroad. A small percentage of graduates would be expected to move into management consultancy or other professional disciplines seeking graduates with numerate degrees.



Academic Profile

Prof Eugene O'Brien, Programme Director

- 1985-1989: Worked with firms of Consulting Engineers including Mott McDonald EPO and Roughan ODonovan/G. Maunsell & Partners. Designed various bridge and viaduct structures.
- 1989-1990: Director of Tower Software, a small software firm developing and distributing Civil Engineering software. Author of the POSTTEN program for post-tensioned prestressed concrete design.
- 1990-1998: Lecturer, Trinity College Dublin.
- 1998-2004: Professor & Head of Civil Engineering, University College Dublin.
- 2004-date: Professor & Head of Subject, School of Architecture, Landscape & Civil Engineering, University College Dublin. 2006-Sep 2007: Director of UCD Urban Institute, University College Dublin.



Entry Qualifications

- Entrants to the programme will have a first cycle honours Bachelors Degree in Structural or Civil Engineering or equivalent and the appropriate prior learning.
- External applicants will be reviewed individually and interviewed where there is any doubt about their suitability for the programme. Academic transcripts and names and contact details for two referees should be provided with your application.

If English is not your native language, the minimum acceptable score on the TOEFL Internet Based Test is 100 and on IELTS it is 6.5

Duration This ME is two years in duration

Contact

General Admission queries: Rebecca Patterson / Karina O'Neill
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www.ucd.ie/eacollege

Applying Online

To apply online, please go to www.ucd.ie/apply, create a user account, select 'Graduate Taught Courses' as your application type from the drop down list and then select 'ME Structural Engineering with Architecture (nas2)'

Useful Links

www.ucd.ie/programmes/nas2
www.ucd.ie/graduatestudies/coursefinder/