

**Stage 2 Civil Engineering and  
Structural Engineering with Architecture  
Welcome Session**

Dr. Páraic Carroll, Year Head

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Room G77, Newstead Building

# Programme Directors

- **Civil Engineering**

- Assistant Prof. Daniel McCrum



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- **Structural Engineering with Architecture**

- Associate Prof. Arturo Gonzalez



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## **Head of School, Civil Engineering**

- Associate Prof. Amanda Gibney



## **College Dean – Engineering & Architecture**

- Professor Aoife Ahern



## **Associate Dean – Engineering & Architecture**

- Associate Prof. Vincent Hargaden



# College Office

- **Programme and Operations Manager (Engineering)**  
- Debra Heeney
- **Director, College of Engineering and Architecture Office**  
- Sue Philpott
- **Student Advisor, College of Engineering and Architecture**  
- Dr. Julia Maher

College Administration Team Contacts:

<https://www.ucd.ie/eacollege/contact/collegeadministration/>

# Civil Engineering & SEA

## STAGES 2 & 3

- Prepare graduates to work in any of the main civil engineering sub-disciplines, such as:
  - Structural Engineering: from buildings to bridges
  - Water and Environmental Engineering: from pipelines to pumping stations (Civil)
  - Geotechnical Engineering: from undergrounds to tunnels
  - Transportation Engineering: from roads to cycle lanes (Civil)

50 credits of Core Modules, and 10 credits of Elective Modules.  
Students should choose one Elective Module from each Trimester, to ensure a balanced workload of 30 credits per Trimester

# Current Civil Engineering Syllabus

## Core Modules

- 50 credits of Core Modules

Module ID	Module Title	Trimester	Credits			
<b>Stage 2 Core Modules</b>						
CVEN20030	Environmental Engineering Fundamentals	Autumn	5	CVEN20010	Mechanics of Solids	Spring
CVEN20080	Construction Materials	Autumn	5	CVEN20070	Computer Applications in Civil Engineering	Spring
CVEN20110	Geotechnics 1	Autumn	5	CVEN20120	Construction Practice	Spring
CVEN20130	Hydraulics I	Autumn	5	CVEN20140	Design and Communications	Spring
MATH20290	Multivariable Calculus for Eng	Autumn	5	STAT20060	Statistics & Probability	Spring

# Current Civil Engineering Syllabus

## Option/ Elective Modules

- May select 2 Elective Modules. Can be selected from anywhere in UCD but the following are suggested Engineering related Electives.
- Total number of credits must be 30 per trimester

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ARCT20040	History & Theory of the Designed Environment III - Survey Course 2	Autumn
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CVEN20040	The Engineering & Architecture of Structures 2	Spring
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CHEN20050	Bioprocess Engineering Principles	Autumn
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MEEN20030	Applied Dynamics I	Spring
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COMP20080	Computer Science for Engineers II	Autumn
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MEEN20070	Materials Science and Eng. I	Spring
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# Current Structural Engineering with Architecture Syllabus

## Core Modules

- 50 credits of Core Modules

Module ID	Module Title	Trimester	Credits			
<b>Stage 2 Core Modules</b>						
ARCT20040	History & Theory of the Designed Environment III - Survey Course 2	Autumn	5	CVEN20010	Mechanics of Solids	Spring
CVEN20080	Construction Materials	Autumn	5	CVEN20040	The Engineering & Architecture of Structures 2	Spring
CVEN20110	Geotechnics 1	Autumn	5	CVEN20070	Computer Applications in Civil Engineering	Spring
MATH20290	Multivariable Calculus for Eng	Autumn	5	CVEN20120	Construction Practice	Spring
				CVEN20140	Design and Communications	Spring
				STAT20060	Statistics & Probability	Spring



# Current Structural Engineering with Architecture Syllabus

## Option/ Elective Modules

- May select 2 Elective Modules. Can be selected from anywhere in UCD but the following are suggested Engineering related Electives.
- Total number of credits must be 30 per trimester

CVEN20030	Environmental Engineering Fundamentals	Autumn	5
CVEN20130	Hydraulics I	Autumn	5

# Civil & Structural Engineering Society



- The Civil / Engineering societies are official UCD societies
- It holds events of interest to Civil Eng students
  - Trips/outings
  - Lectures
- There is a budget for activities provided by central UCD
- It is good to have early-stage students involved, some of whom will continue with the Society in future years

<https://societies.ucd.ie/civilengineering/>



Civil Eng Page

<https://societies.ucd.ie/engineering/>



Engineering Page

# Class Representative

- It is important to have a Class Rep.
  - Convey queries from students to staff (staff-student forum)
  - Provide a means for staff to consult with students
- Please email me ([paraic.carroll@ucd.ie](mailto:paraic.carroll@ucd.ie)) if you are willing to volunteer or if you would like to nominate someone from the year
- Ideally we need separate Class Rep's for Stage 2 Civil and Stage 2 SEA

# Software Download

- UCD IT Services provides access to a wide range of software:  
<https://www.ucd.ie/itservices/ourservices/software/softwaredownloads/>.
- There is some excellent free software for students that only works on Windows
  - Revit (and other Autodesk products)
  - Ansys (Finite element software)
- These will be used in some of the modules – if you are about to buy a laptop better to get a Windows machine

# Milestones

Civil: 4 or 5 year degree

BSc at end of Stage 3: decision point as to whether BE or ME

BE at end of Stage 4

ME at end of Stage 5

SEA: Integrated 5 year degree

BSc at end of Stage 3

ME at end of Stage 5

# Note to Students Taking 5-year Programmes

- The results of your B.Sc. Degree is calculated based on 30% Stage 2 + 70% Stage 3

# For all Students: Pre-requisites

- You can progress from one stage to another provided you have attained a minimum of **50 credits**.
- Many Stage 3 modules have pre-requisites in Stage 2
- However, you cannot take the next stage module if you have failed the pre-requisite module

# Your Degrees

- Engineers Ireland (EI) is the legally recognised institution for Engineering in Ireland
- BE, ME etc. all accredited and we are committed to this which takes place every 5 years.
- EI and ourselves recommend that the most appropriate way forward towards being a Chartered Engineer is to qualify with an ME degree
- If you qualify with a BE degree you will essentially have to do “further learning” to Masters level in order to become chartered



# Institution Membership

- You can join Engineers Ireland now as a student member (it's free)
- <https://www.engineersireland.ie/students>
- Institution of Structural Engineers (<http://www.istructe.ie/>)
  - They have a very active Rep. of Ireland branch
- Institution of Civil Engineers (ICE) is a UK institution with international branches including one here (<https://www.ice.org.uk/about-ice/near-you/europe/republic-of-Ireland>)

# Awards & Prizes

- <https://www.ucd.ie/students/scholarships/>
- Stage scholarships available to the student with the highest GPA (has to be greater than 3.68) in their studies in Stages 2 and 3.
- Michéal Mac Cárthaigh Academic Performance Award

# Common Room facility

- Facility is available for making tea/coffee and for having lunch.

# Student Plagiarism Policy

- Students are responsible for being familiar with the requirements in it

# Academic Advising Webpage

- <https://www.ucd.ie/civileng/study/academicadvice/>

# Stage 2 Coffee Morning

- TBD
- The coffee/ tea etc will be set up on tables in Newstead
- The goal is to build rapport between staff and students for informal, regular conversation, provision of guidance, and advice.



**Questions?**