

BE (ORD) IN ENGINEERING STUDIES

Overview

National Framework Of Qualifications (NFQ) Level: 7

NFQ Award Class: Major Award

Total Credits: 180

Connected Curriculum:

- Employability
- Inter-and Transdisciplinary
- Sustainability

Sustainable Development Goals (SDGs):

- Good Health and Well-being
- Quality Education
- Gender Equality
- Affordable and Clean Energy
- Industry, Innovation, and Infrastructure
- Responsible Consumption and Production
- Climate Action

Graduate Attributes:

- Creator, evaluator and communicator of knowledge
- Digitally Fluent
- Effective global citizen
- Independent and creative thinker
- Socially Responsible

Exit Award only

Students who achieve a pass standard in the Third Year in any of the disciplines of Honours Bachelor of Engineering programme (Civil, Structural and Environmental (<https://ucc-ie-public.courseleaf.com/programmes/becse/>); Electrical and Electronic (<https://ucc-ie-public.courseleaf.com/programmes/beel/>); Energy (<https://ucc-ie-public.courseleaf.com/programmes/benrg/>); or Process and Chemical (<https://ucc-ie-public.courseleaf.com/programmes/bep/>)) may opt to exit the programme and to be conferred with a Ordinary Bachelor of Engineering in Engineering Studies degree (NFQ Level 7, Major Award).

The BE (Ord) in Engineering Studies is not accredited by any professional body, including Engineers Ireland and the Institution of Chemical Engineers (UK).

Programme Requirements

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

Programme Requirements

Code	Title	Credits
Year 1		
Students take 60 credits as follows:		
<i>Core Modules</i>		
CE1003	Introduction to Structural and Civil Engineering	5

CE1005	Engineering Computation and Problem Solving	5
CM1001	Chemistry for Engineers	5
EE1007	Introduction to Electrical and Electronic Engineering	5
MA1011	Mathematical Methods I	5
MA1012	Mathematical Methods II	5
ME1002	Engineering Thermodynamics	5
NE1001	Introduction to Energy Engineering	5
PE1003	Introduction to Process and Chemical Engineering	5
PY1006	Physics for Engineers II	5
PY1012	Physics for Engineers I	10

Year 2

Students take modules to the value of **60** credits from one of the following pathways:

BE (Hons) (Civil, Structural and Environmental) (<https://ucc-ie-public.courseleaf.com/programmes/becse/>)

BE (Hons) (Electrical and Electronic) (<https://ucc-ie-public.courseleaf.com/programmes/beel/>)

BE (Hons) (Energy) (<https://ucc-ie-public.courseleaf.com/programmes/benrg/>)

BE (Hons) (Process and Chemical) (<https://ucc-ie-public.courseleaf.com/programmes/bep/>)

Year 3

Students take modules to the value of **60** credits from the pathway taken in Year 2:

BE (Hons) (Civil, Structural and Environmental) (<https://ucc-ie-public.courseleaf.com/programmes/becse/>)

BE (Hons) (Electrical and Electronic) (<https://ucc-ie-public.courseleaf.com/programmes/beel/>)

BE (Hons) (Energy) (<https://ucc-ie-public.courseleaf.com/programmes/benrg/>)

BE (Hons) (Process and Chemical) (<https://ucc-ie-public.courseleaf.com/programmes/bep/>)

Total Credits 180

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

Programme Learning Outcomes

Programme Learning Outcomes for BE (Ord) in Engineering Studies (NFQ Level 7, Major Award)

On successful completion of this programme, students should be able to:

- Demonstrate an understanding of the sciences (mathematics, chemistry, physics and computer science) that underpin engineering.
- Recognise, delineate, analyse and solve a variety of engineering problems on a professional and practical manner.
- Apply pertinent knowledge to the practice of a branch of engineering, in an effective manner.
- Translate engineering knowledge to commercial entities who are evaluating new products.
- Write knowledgeable technical documents related to a branch of engineering.

- Make knowledgeable presentations related to a branch of engineering.