School of Engineering CK600

Dr. Denis Ring CEng FIChemE MIEI

BE A DIFFERENCE MAKER
UCC’s Engineering Strengths

• Long history of **CONTINUOUS** development
  ◇ Civil Engineering 1900’s
  ◇ Electrical Engineering 1950’s
  ◇ Process & Chemical 1990’s
  ◇ Energy Engineering 2000’s

• 2014 : QS World University Rankings
  ✓ Electrical & Electronic ranked in **top 150**
  ✓ Process & Chemical ranked in **top 200**

• Accredited by **Engineers Ireland**
  (Energy Engineering applying for accreditation for the first time)

• PCE Internationally Accredited by **Institution of Chemical Engineers**
UCC’s Engineering Strengths

• Well resourced with excellent staff and Facilities

• Brilliant students
  ♦ 57 Teaching & Support Staff combined with 42 Researchers!
  ♦ 589 undergraduates, 232 postgraduates (128 Ph.D.)!
  ♦ Research activities well funded:
    - Irish Research Council
    - Environmental Protection Agency Ireland
    - EU Framework Programmes and Horizon 2020
    - Science Foundation Ireland
    - Sustainable Energy Authority of Ireland
    - United Technologies
    - Wellcome Trust (UK)
Research Opportunities

Beaufort Marine Research (MaREI, HMRC+CMRC)
- 53 staff
- 25 students

Links with research centres

Tyndall
- 460 staff
- 135 students

Environmental Research Institute
- 25 staff
- 15 students

School of Engineering www.ucc.ie/en/soe/
Graduate Destinations 2013: Civil & Environmental

Employers: - Arup, Bern Brothers, John Sisks & Son, Byrne Looby Partners, KPMG, Accenture, ...

Anne Moloney, Project Manager for €1Bn Forth Replacement Crossing in Edinburgh.
Graduate Destinations 2013: Electrical & Electronic

Employers:
- Texas Instruments Ltd
- ESB International
- Analog Devices Inc.
- Apple
- ON Semiconductor
- M/A-COM Technology Solutions

Dr. Niamh O’Mahony, Lead Applications Engineer for wearable wireless sensing, Shimmer (Dublin)

Employers: Texas Instruments Ltd, ESB International, Analog Devices Inc., Apple, ON Semiconductor, M/A-COM Technology Solutions, ...
Graduate Destinations 2013: Energy Engineering

36% In further study or training
4% Seeking employment
60% In employment

Shane McCarthy, Senior Associate Consultant at Clarity Solution Group/Data Engineer at Facebook

Employers: Accenture, ESB International, First Derivatives, Neodyne Ltd., Bord Gais, Mainstream Renewable Power...
Graduate Destinations 2013: Process & Chemical

Employers: PM Group, Merck Sharp & Dohme, Pfizer, Glanbia, GSK, Irish Distillers, Jacobs Engineering

Typical Earnings?

<table>
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<th>Years Qualified</th>
<th>Median</th>
<th>Lower Quartile</th>
<th>Upper Quartile</th>
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</table>

Source: Engineers Ireland Salary Survey 2012

Q. Primary Degree with highest number of millionaires?

A. Engineering – with entrepreneurship.

Source: SPEAR’s Wealth Management Magazine, 2013
Previous CAO Entries for Engineering

- CK601 Process & Chemical
- CK602 Civil & Environmental
- CK603 Energy Engineering
- CK605 Electrical & Electronic

Course-specific CAO cut-off points

How?

www.ucc.ie/en/soe/
**Previous CAO Entries for Engineering**

- CK601 Process & Chemical
- CK602 Civil & Environmental
- CK603 Energy Engineering
- CK605 Electrical & Electronic

*Course-specific CAO cut-off points*

**Current CAO Entries for Engineering**

- CK600
  - Process & Chemical
  - Civil & Environmental
  - Energy Engineering
  - Electrical & Electronic
  - No Preference

*Choose One Option Only*

*Single CAO cut-off point for all engineering applicants*

*How?*

Applicant Scenario

- Preferred Option (e.g. Energy Engineering)

  - **Advantage**: If accepted, the student is guaranteed a place on their programme of choice

  - **Disadvantage**: None
Applicant Scenario

• **Preferred Option** (e.g. Energy Engineering)
  
  ✧ **Advantage**: If accepted, the student is guaranteed a place on their programme of choice
  
  ✧ **Disadvantage**: None

• **No Preference Option**
  
  ✧ **Advantage**: If unsure about which programme to choose, defer choice until First Year exams are passed.

  ✧ **Disadvantage**: Place on programme of choice will be subject to academic performance and available capacity. Students **MAY NOT** get their first choice, although they are guaranteed a place on at least one engineering programme.

How?

www.ucc.ie/en/soe/
First Year Studies

• 50 credits common to all students.

• All four optional engineering modules run in Semester 2.

• **Preferred Option** students must study the 5 credit module associated with their initial choice (e.g. Energy Engineering) and choose one other optional 5 credit engineering module.

• **No Preference Option** students are free to choose any two 5 credit optional engineering modules.

Total: 60 credits

www.ucc.ie/en/soe/
Second Year Studies

- Having passed first year exams:
  - Preferred Option students either:
    - (a) Continue in their chosen programme
    - Or
    - (b) Apply for transfer to another engineering programme (capacity limits apply)
  - No Preference Option students apply for admission to their programme of choice (capacity limits apply).
Second Year Studies

• Programme-specific first year module (e.g. Energy Engineering) is **NOT** a prerequisite for second year studies in that programme.

• Guiding principle – Subject to resource constraints and satisfactory academic performance, every reasonable effort will be made to accommodate student choice.
CK600 Key Points

• Single CAO cut-off point for all applicants.

• Choose only one option.

• Preferred Option students can apply for transfer to another engineering programme.

• No Preference Option students are guaranteed a place in an engineering programme, but it may not be of their choosing.
School of Engineering UCC CK600

Welcomes You to Your Future

“The Best Way to Predict the Future is to Create It.”

- Abraham Lincoln