# Geology

## CAO code: DN200 Option: Mathematical, Physical & Geological Sciences

## Sample pathway for a degree in Geology \*



#### **ENGAGE WITH THE PRINCIPLES**

**GEOLOGY** – Topics include:

- ▶ Introduction to Earth Sciences
- ▶ Earth Science and Materials
- ▶ Earth And Humanity
- Mathematics for the Biological and Chemical Sciences
- ▶ Geology and Earth Science involve applying : 'traditional' science subjects to the study of the past, present and future of the Earth System
- ▶ Explore across the range of scientific disciplines available to study in UCD
- ▶ Two Elective modules
- ▶ One Small-Group **Project**



### **CHOOSE YOUR SUBJECTS**

**GEOLOGY** – Topics include:

- ▶ Earth's Structure
- ▶ Investigating Minerals
- ▶ Field Geology
- ▶ Global Environmental Change
- ▶ Sedimentology and Palaeobiology
- ▶ We do not require that students take a specific combination of additional modules
- ▶ Subject to regulations, students are free to select relevant Science modules that they are interested in

**▶** Two Elective modules





#### FOCUS ON YOUR CHOSEN SUBJECT

**GEOLOGY** – Topics include:

- ▶ Geological Structures
- ▶ Sedimentary Environments
- ▶ Igneous & Metamorphic Petrology
- ▶ Geological Fieldwork
- ▶ Applied Palaeontology
  - ▶ Precambrian Geology & Geotectonics
  - ▶ Low Temperature Geochemistry
  - ▶ Geomaterials and Geoenergy

▶ Two Elective modules

module inspired me

▶ Selected students have the opportunity to gain valuable workplace experience via an internship in commercial companies



#### **REFINE YOUR KNOWLEDGE**

**GEOLOGY** – Topics include:

- ▶ Field Mapping Research Project
- ▶ Geobiology
- ▶ Basin Analysis
- ▶ Petrology & Ore Geology
- ▶ Geological Fieldwork
- ▶ Geophysics & GIS
- Research Seminars
- ▶ Emphasis on independent learning and research, including a field-based project
- Many modules contain laboratory-based projects and field-based
- ▶ Breadth of course ensures graduates have a wide range of future career options within and outside the discipline

#### **Other Options**

Our Geology graduates are routinely sought for careers outside Earth Science including:

- ▶ Management consultancy
- ▶ Education
- ▶ Financial services

#### PhD

hydrocarbon and

volcanic and

palaeobiology,

environmental

geochemistry,

geophysics and

climate change

mineral exploration,

earthquake hazards,

BSc (Honours) Geology

- ▶ Resources (oil and ▶ Students can pursue a PhD in universities in mineral exploration Ireland or abroad in and development) areas as diverse as
  - **Environmental** consultancy companies

Industry

- Hydrogeology and water resources Geological Surveys.
- Environmental **Protection Agencies**
- **Engineering Geology**
- Oceanography and Marine Geology

#### **Conversion Courses**

▶ Master of Management

provided me with a great understanding of geological principles, and knowledge across the spectrum of the subject. Following my degree, I secured employment with a mineral exploration company in Ireland. The strong laboratory and field components were highly enjoyable parts of the learning experience at UCD, and have been vital as my job involves exploring and prospecting in a geologically diverse region.

Second year field class in the Doolough valley, Co. Mayo.

Sectors

The Field

Geology

to pursue the subject

of Geology by giving

Maria Noone, Student

me the opportunity to apply real practical geological work and

giving a feel for what it would be like to be a real life geologist.

My Geology BSc

A broadly-based BSc with

emphasis on field courses and

research projects in Ireland and

abroad structured for a wide

range of employment options in the Earth and Environmental

Cian O'Meara, Graduate

\*See pages 4 and 5 for information on the terminology used above. Potential combinations shown here are examples only and are not guaranteed by UCD. Topics are subject to change each year.



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