

# BSC (HONS) (ENVIRONMENTAL SCIENCE WITH ENVIRONMENTAL MANAGEMENT)

## Overview

NFQ Level 8, Major Award

(Dual Degree)

This is a four year programme delivered in partnership with Minzu University of China (MUC) with whom University College Cork has signed a bilateral agreement under statute 263 of the National University of Ireland. This programme leads to a dual degree which is awarded independently from both institutions. In first, second and fourth year students will study in MUC. Third year is completed in UCC. Some modules will be taught and examined in English in first and second year and third and fourth year will be taught and examined entirely in English.

## First Year - Environmental Science with Environmental Management

This year is spent pursuing an approved course of study at a MUC with whom UCC has a bilateral agreement. Students take core modules to the value of **60** credits (or ECTS equivalent).

## Second Year - Environmental Science with Environmental Management

This year is spent pursuing an approved course of study at a MUC with whom UCC has a bilateral agreement. Students take core modules to the value of **60** credits (or ECTS equivalent).

## Third Year - Environmental Science with Environmental Management

To be admitted to the Third University Examination in Environmental Science with Environmental Management a student must have satisfactorily attended modules amounting to **60** credits comprising core modules to the value of **50** credits and elective modules to the value of **10** credits.

## Fourth Year - Environmental Science with Environmental Management

To be admitted to the Fourth University Examination in Environmental Science with Environmental Management a student must have satisfactorily attended modules to the value of **60** credits comprising core modules to the value of **50** credits, and elective modules to the value of **10** credits.

## Programme Requirements

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

## Programme Requirements

| Code   | Title | Credits |
|--|-------|---------|
| <b>Year 1</b>  |       |         |
| Students take modules to the value of <b>60</b> credits (or ECTS equivalent) as follows: |       |         |

### Core Modules

|            |  |    |
|------------|--|----|
| 1043030109 | Introduction to Environmental Science      | 5  |
| 1043030292 | Advanced Mathematics I                     | 10 |
| 1043030293 | Physics for Environmental Sciences I       | 5  |
| 1043030010 | Analytical Chemistry Lab                   | 5  |
| 1043030129 | Analytical Chemistry                       | 5  |
| 1043040294 | Physical Chemistry                         | 5  |
| 1043040095 | Physical Chemistry Lab                     | 5  |
| 1043040430 | Environmental Geology                      | 5  |
| BL1007     | Plants and Animal Physiology and Structure | 5  |
| BL1008     | Ecosystems and Habitats                    | 5  |
| EV1004     | Environmental Science and Management       | 5  |

### Year 2

Students take modules to the value of **60** credits (or ECTS equivalent) as follows:

#### Core Modules

|            |  |    |
|------------|--|----|
| 1043040296 | Environmental Information Technology   | 5  |
| 1043030070 | Environmental Chemistry                | 5  |
| 1043030071 | Environmental Chemistry Lab            | 5  |
| 1043040178 | Environmental Biology                  | 5  |
| 1043030068 | Environmental Monitoring               | 5  |
| 1043030069 | Environmental Monitoring Lab           | 5  |
| 1043030132 | Ecology and Lab                        | 10 |
| GL2005     | Introduction to Earth Science          | 5  |
| EV2005     | Environmental Science Field Training 1 | 5  |
| PS2004     | Plant Identification and Taxonomy      | 5  |
| ZY2008     | Invertebrate Zoology                   | 5  |

### Year 3

Students take modules to the value of **60** credits (or ECTS equivalent) as follows - all listed core modules (**50** credits) and **10** credits of elective modules:

#### Core Modules

|        |   |    |
|--------|---|----|
| EV3019 | Reviewing Scientific Literature         | 5  |
| BL3003 | Conservation Biology                    | 5  |
| CM4112 | Atmospheric Chemistry and Air Pollution | 5  |
| EV2002 | The Environment and Human Health        | 5  |
| EV3016 | Environmental Science Field Training II | 10 |
| EV3017 | Freshwater Science                      | 5  |
| GG3041 | Environmental Remote Sensing            | 5  |
| PY3011 | Environmental Physics                   | 5  |
| ST2001 | Introduction to Biostatistics           | 5  |

#### Elective Modules

|   |  |  |
|---|--|--|
| Students take modules to value of <b>10</b> credits from the following: |  |  |
| GG3012  | Advanced Geographical Information Systems (5)    |  |
| GL3031  | Environmental Hydrogeology (5)                   |  |
| GS2002  | The Evolving Earth (5)                           |  |
| PA3300  | Valuing the Environment (5)                      |  |
| PS3008  | Physiology of Plants in extreme Environments (5) |  |

### Year 4

Students take modules to the value of **60** credits (or ECTS equivalent) as follows - all listed core modules (**50** credits) and **10** credits of elective modules:

#### Core Modules

|   |   |            |
|---|---|------------|
| AE4017  | Biogeography  | 5          |
| EV4014  | Environmental Science and Management Research Project | 15         |
| EV4015  | Environmental Auditing and Risk Assessment            | 5          |
| EV4016  | Environmental Science Work Placement                  | 5          |
| 1043030227  | Environmental Impact Assessment                       | 10         |
| 1043030309  | Environmental Management                              | 10         |
| <i>Elective Modules</i>   |   |            |
| Students take modules to value of <b>10</b> credits from the following: |   | 10         |
| 1043040426  | Environmental Economics (10)                          |            |
| 1043030249  | Environmental Law (5)                                 |            |
| 1043040090  | Environmental Microbiology (5)                        |            |
| 1043030077  | Environmental Microbiology Lab (5)                    |            |
| 1043040315  | Global Change Ecology (5)                             |            |
| <b>Total Credits</b>  |   | <b>240</b> |

## 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 BSc (Hons) (Environmental Science with Environmental Management) (NFQ Level 8, Major Award)

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

- Appreciate the functioning and management of environmental systems
- Appraise impacts of human activities on the environment and current approaches to minimising or preventing negative impacts as well as the management and restoration of ecosystems
- Evaluate environmental issues using scientific principles
- Source information on environmental issues and critically appraise it for scientific credibility and relevance
- Synthesise and apply published information and data from the biological, chemical and earth sciences to the analysis of environmental problems
- Perform field measurements of basic environmental parameters and analyse, interpret and report the results
- Select appropriate methods, and design programmes, for environmental assessment and monitoring
- Design and undertake scientific research projects
- Communicate effectively, orally and in written reports, about environmental issues with technical and non-technical audiences