

# BSC (HONS) GEOSCIENCE

## Programme Requirements

Code	Title	Credits
<b>Year 1</b>		
Students take <b>60</b> credits as follows:		
<i>Core Modules</i>		
BL1002	Cells, Biomolecules, Genetics and Evolution	5
BL1004	Physiology and Structure of Plants and Animals	5
BL1006	Habitats and Ecosystems	5
BL1009	Grand Challenges in Biological, Earth and Environmental Sciences	5
CM1003	Introductory Chemistry for Environmental Scientists	10
EV1002	Introduction to Environmental Science	5
GG1010	Introduction to Physical Geography	5
GS1001	Introduction to Geology	5
GS1004	Geological Evolution of Ireland	5
MA1001	Calculus for Science Part 1	5
PY1009	Physics for the Environmental Sciences I	5
<b>Year 2</b>		
Students take <b>60</b> credits as follows:		
<i>Core GS Modules</i>		
GS2001	Dynamic Earth	5
GS2002	The Evolving Earth	5
GS2003	Field Geoscience	10
<i>Core GG Modules</i>		
GG2005	Ice Age Quaternary Environments and Geomorphology	5
GG2037	Introduction to Geoinformatics	5
<i>Core EV Modules</i>		
EV2002	The Environment and Human Health	5
EV2003	Practical Data Analysis and Research Skills	5
<i>Core AE/ST Modules</i>		
AE2001	Fundamentals of Ecology	5
ST2001	Introduction to Biostatistics	5
<i>Elective CM/PY/PS/ZY Modules</i>		
CM2101	Introductory Organic Chemistry for Environmental Scientists	5
or PY2009	Physics for the Environmental Sciences II	
PS2002	Ecological Plant Physiology	5
or ZY2005	Invertebrate Diversity	
<b>Year 3</b>		
Students take <b>60</b> credits as follows - all listed core modules ( <b>45</b> credits) and <b>15</b> credits of elective modules, chosen from one of the three themes below:		
<i>Core GS Modules</i>		
GS3001	Advanced Earth Systems	5
GS3002	Data Analysis	5
GS3003	Sedimentology & Sedimentary Environments	5
GS3004	Applied Structural Geology	5
GS3005	Palaeontology	5

GS3008	Geoscience Literature Review	5
GS3009	Crustal Evolution of Britain and Ireland	10
GS3010	Mineralogy, Igneous and Metamorphic Petrology	5

### Elective Modules

Students take modules to the value of **15** credits from one of the following three themes:

#### Theme 1 (Geological) GS/GG Modules

GS3006	Environmental Hydrogeology (5)
GS3007	Evolution 1—Plant and Animal Evolutionary Origins (5)
GG3012	Advanced Geographical Information Systems (5)
GG3056	Climate Change and Historical Climatology (5)

#### Theme 2 (Environmental) CM/GS/ EV/GG/PY Modules

GS3006	Environmental Hydrogeology (5)
GG3012	Advanced Geographical Information Systems (5)
GG2046	Atmosphere, Weather and Climate (5)
EV3013	Global Environmental Issues (5)
PY3011	Environmental Physics (5) (only if PY2009 taken in second year)
CM3104	Environmental Chemistry and Analysis (5) (only if CM2101 taken in second year)

#### Theme 3 (Palaeobiological) GS/BL/PS/ZY Modules

GS3007	Evolution 1—Plant and Animal Evolutionary Origins (5)
BL3008	Evolution 2—Diversity and Extinction (5)
PS2003	Plant Identification (5)
ZY2000	Vertebrate Diversity (5)

### Year 4

Students take **60** credits as follows - all listed core modules (**35** credits) and **25** credits of elective modules, chosen from one of the three themes below:

#### Core GS Modules

GS4002	Environmental Sedimentology	5
GS4003	Economic Geoscience	5
GS4004	Advanced Igneous Processes	5
GS4030	Geoscience Final Year Project	15
GS4011	Frontiers in Geoscience	5

### Elective Modules

Students take modules to the value of **25** credits from one of the following three themes (students are required to follow the same theme they chose in Third Year):<sup>1</sup>

#### Theme 1 (Geological) GG/GS Modules

GG3041	Environmental Remote Sensing (5)
GG3007	Marine and Coastal Geosciences (5)
GS4005	Advanced Palaeobiology (5)
GS4006	Practical Offshore Marine Science (5)
GS4007	Neotectonic Field Studies (5)
GS4008	Geoscience Work Placement (5)

#### Theme 2 (Environmental) EV/GG/GS Modules

EV4012	Environmental Impact Assessments (5)
GG3041	Environmental Remote Sensing (5)
GS4006	Practical Offshore Marine Science (5)
GG3007	Marine and Coastal Geosciences (5)
GG3056	Climate Change and Historical Climatology (5)

GS4007	Neotectonic Field Studies (5)
GS4008	Geoscience Work Placement (5)
Theme 3 (Palaeobiological) AE/BL/GS/GG/ZY Modules	
AE4016	Advanced Ecology and Biogeography (5)
BL3003	Conservation Biology (5)
GG3056	Climate Change and Historical Climatology (5)
GS4005	Advanced Palaeobiology (5)
GS4006	Practical Offshore Marine Science (5)
GS4007	Neotectonic Field Studies (5)
GS4008	Geoscience Work Placement (5)
ZY4021	Evolutionary 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*.