



OLLSCOIL NA GAILLIMHE
UNIVERSITY OF GALWAY

Bachelor of Science Degree
College of Science and Engineering
2023/2024

BSc MARINE SCIENCE



Overview

Year 1	Year 2	Year 3	Year 4
[60 Credits]	[60 Credits]	[60 Credits]	[60 Credits]
<p>There are 45 credits of Core modules.</p> <p>Choose one module to a value of 15 credits:</p> <ul style="list-style-type: none"> Mathematics (Honours) Mathematical Studies Applied Mathematics Computer Science 	<p>There are 30 credits of Core modules.</p> <p>Choose two or three module options to a value of 10 or 15 credits:</p> <ul style="list-style-type: none"> Evolution and the Tree of Life Laboratory Skills in Microbiology I Molecular and Cellular Biology <p>Choose Electives to a value of 15 or 20 credits from the list available.</p>	<p>There are 40 credits of Core modules.</p> <p>Choose Electives to value of 20 credits from the list available.</p>	<p>There are 30 credits of Core modules.</p> <p>Choose 30 credits of Electives from the list of available modules.</p>
<p>Module Descriptors for Years 1 to 4 are available at: https://www.universityofgalway.ie/science-engineering/undergraduateprogrammes/marine-science.html#course_outline</p>			

Year 1	Year 2	Year 3	Year 4
[Core: 45 credits; Options: 15 credits]	[Core: 30 credits; Options: 10/15 credits; Electives: 20/15 credits]	[Core: 40 credits; Electives: 20 credits]	[Core: 30 credits; Electives: 30 credits]
<i>Full Year – Semester 1 and Semester 2</i>	<i>Semester 1</i>	<i>Semester 1</i>	<i>Full Year – Semester 1 and Semester 2</i>
MP180 Applied Mathematics [15]* BO101 Biology [15] CH120 Chemistry: Molecular Science [15] PH101 Physics [15] CS102 Computer Science [15]* MA161 Mathematical Studies [15]* MA180 Mathematics (Honours) [15]*	BO202 Evolution and the Tree of Life [5] BPS202 Fundamentals in Aquatic Plant Science [5] MI202 Laboratory Skills in Microbiology I [5] BO201 Molecular and Cellular Biology [5] EOS213 Introduction to Ocean Science [10] <i>Semester 2</i> ZO208 Invertebrate Biology [5] MI204 Microbes and the Environment [5] ZO209 Vertebrate Zoology [5]	ZO415 Biometry [5] ZO3101 Marine Habitat [5] MI3101 Microbial Genomics [5] BPS3102 Plant Resources and Ecosystems [5] <i>Semester 2</i> EOS304 Aquatic Geochemistry [5] ZO320 Concepts in Population and Community Ecology [5] ZO318 Geographic Information Systems and Biostatistics [5] EOS303 Ocean Dynamics [5]	MR409 Marine Science Essay and Presentation [5] MR413 Research Project [20] <i>Semester 1</i> MR4101 Field Skills in Marine Science [5]
* Select one 15-credit module	* Select at least two 5-credit modules		

Electives

Year 1	Year 2	Year 3	Year 4
	<p><i>Full Year Semester 1 and Semester 2</i></p> <p>FR252 French [10] GR224 Beginner's German for Science [10] GR252 German [10] GR353 German [10]</p> <p><i>Semester 1</i></p> <p>BO2101 Scientific Writing Skills [5] LN2210 Scileanna Gaeilge don Eolaíochta 1 [5] MA284 Discrete Mathematics [5] MA211 Calculus I [5] MP231 Mathematical Methods I [5] MP236 Mechanics I [5] ST2001 Statistics for Data Science I [5]</p> <p><i>Semester 2</i></p> <p>BPS203 Plant Diversity, Physiology & Adaptation [5] EOS2102 The Earth: From Core to Crust [10] LN2211 Scileanna Gaeilge don Eolaíochta 2 [5] MA203 Linear Algebra [5] MA212 Calculus II [5] MA216 Mathematical Molecular Biology II [5] MI203 Laboratory Skills in Microbiology II [5] MP232 Mathematical Methods II [5] MP237 Mechanics II [5] PAB2101 AgriBiosciences [5] ST2002 Statistics for Data Science II [5]</p>	<p><i>Full Year Semester 1 and Semester 2</i></p> <p>FR365 Advanced French for Science [10] GR224 Beginner's German for Science [10] GR252 German [10] GR353 German [10]</p> <p><i>Semester 1</i></p> <p>BO3101 Developmental Biology [5] BPS3103 Plant Function [5] EOS323 Sediments and the Sedimentary Record [5] EOS3103 Palaeontology and Evolution [5] LN2210 Scileanna Gaeilge don Eolaíochta 1 [5] MA313 Linear Algebra I [5] MA335 Algebraic Structures [5] MI323 Food and Industrial Microbiology [5] MI326 Microbial Metabolic and Molecular Systems [5] MP305 Modelling I [5] MP345 Mathematical Methods I [5] ST2001 Statistics for Data Science I [5] ST311 Applied Statistics I [5] ZO317 Evolutionary Biology [5]</p> <p><i>Semester 2</i></p> <p>BPS3107 Plants, atmosphere and environment throughout Earth History [5] BPS3104 Plant Interactions [5] LN2211 Scileanna Gaeilge don Eolaíochta 2 [5] CS3101 Software for Mathematical Scientists and Educators [5] MA302 Complex Variable [5] MI322 Environmental Microbiology [5] MI324 Immunology and Recombinant Techniques [5] MI325 Microbial Infectious Diseases [5] MP307 Modelling II [5] MP346 Mathematical Methods II [5] ST2002 Statistics for Data Science II [5] ST312 Applied Statistics II [5] ZO315 Applied Ecology [5]</p>	<p><i>Full Year Semester 1 and Semester 2</i></p> <p>ZO418 Phylogenetics & Conservation [5]</p> <p><i>Semester 1</i></p> <p>BPS402 Current Topics in Algal Research [5] BPS4107 Plant Cell Biology and Biochemistry [5] EOS402 Global Change [5] ZO4102 Biostatistics for Natural Sciences [5] ZO417 Marine & Coastal Ecology</p> <p><i>Semester 2</i></p> <p>BPS405 Ecology and Conservation Issues [5] BPS4104 Primary Productivity and Global Change [5] EOS407 History of Life [5] EOS409 Biophysical Interactions in the Ocean [5] EOS4101 Earth Observation and Remote Sensing [5] MI4102 Microbial Ecosystems Services & Systems Biology [5] MI4103 Environmental Biotechnology [5] SP721 Ocean and Marine Politics [5] TI255 Earth Surface Processes and Landforms [5]</p>