



NUI Galway
OÉ Gaillimh

College of Science and Engineering
2022/2023

Fullscreen

Next page

BSc MARINE SCIENCES



(V.1)

www.nuigalway.ie/science-engineering

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 35 credits of Core modules.</p> <p>Choose Electives to value of 25 credits from the list available.</p>	<p>There are 30 credits of Core modules.</p> <p>Choose Electives to value of 20 credits as follows:</p> <ul style="list-style-type: none"> at least one module from each of Botany and Plant Science (BPS), Earth and Ocean Sciences (EOS), Microbiology (MI) Zoology (ZO) <p>Choose further Electives to a value of 10 credits from the list available.</p>
<p>Module Descriptors for Years 1 to 4 are available at: http://www.nuigalway.ie/science-engineering/undergraduateprogrammes/marine-science.html#course_outline</p>			

BSc Marine Sciences

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: 35 credits; Electives: 25 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]*	BO202 Evolution and the Tree of Life [5]	MI3101 Microbial Genomics [5]	MR409 Marine Science Essay and Presentation [5]
BO101 Biology [15]	BPS202 Fundamentals in Aquatic Plant Science [5]	ZO3101 Marine Habitat [5]	MR413 Research Project [20]
CH120 Chemistry: Molecular Science [15]	MI202 Laboratory Skills in Microbiology I [5]	BPS3102 Plant Resources and Ecosystems [5]	<i>Semester 1</i>
PH101 Physics [15]	BO201 Molecular and Cellular Biology [5]	<i>Semester 2</i>	MR414 Field Skills in Marine Science [5]
CS102 Computer Science [15]*	EOS213 Introduction to Ocean Science [10]	EOS304 Aquatic Geochemistry [5]	
MA161 Mathematical Studies [15]*	-----	ZO320 Concepts in Population and Community Ecology [5]	
MA180 Mathematics (Honours) [15]*	<i>Semester 2</i>	ZO318 Geographic Information Systems and Biostatistics [5]	
	ZO208 Invertebrate Biology [5]	EOS303 Ocean Dynamics [5]	
	MI204 Microbes and the Environment [5]		
	ZO209 Vertebrate Zoology [5]		
* Select one 15-credit module	* Select at least two 5-credit modules		

Module Descriptors for Years 1 to 4 are available at: http://www.nuigalway.ie/science-engineering/undergraduateprogrammes/marine-science.html#course_outline

ELECTIVES

Year 1	Year 2	Year 3	Year 4
	<p><u>Full Year – Semester 1 and Semester 2</u></p> <p>FR252 French [10]</p> <p>GR224 Beginner's German for Science [10]</p> <p>GR252 German [10]</p> <p>GR353 German [10]</p> <p>-----</p> <p><u>Semester 1</u></p> <p>BO2101 Scientific Writing Skills [5]</p> <p>LN2210 Scileanna Gaeilge don Eolaíochta 1 [5]</p> <p>MA284 Discrete Mathematics [5]</p> <p>MA211 Calculus I [5]</p> <p>MP231 Mathematical Methods I [5]</p> <p>MP236 Mechanics I [5]</p> <p>ST2001 Statistics for Data Science I [5]</p> <p>-----</p> <p><u>Semester 2</u></p> <p>BPS203 Plant Diversity, Physiology & Adaptation [5]</p> <p>EOS2102 The Earth: From Core to Crust [10]</p> <p>LN2211 Scileanna Gaeilge don Eolaíochta 2 [5]</p> <p>MA203 Linear Algebra [5]</p> <p>MA212 Calculus II [5]</p> <p>MA216 Mathematical Molecular Biology II [5]</p> <p>MA2111 Anailís [5]</p> <p>MI203 Laboratory Skills in Microbiology II [5]</p> <p>MP232 Mathematical Methods II [5]</p> <p>MP237 Mechanics II [5]</p> <p style="text-align: right;"><i>Continued...</i></p>	<p><u>Full Year – Semester 1 and Semester 2</u></p> <p>FR365 Advanced French for Science [10]</p> <p>GR224 Beginner's German for Science [10]</p> <p>GR252 German [10]</p> <p>GR353 German [10]</p> <p>-----</p> <p><u>Semester 1</u></p> <p>BO3101 Developmental Biology [5]</p> <p>BPS3103 Plant Function [5]</p> <p>EOS323 Sediments and the Sedimentary Record [5]</p> <p>EOS3103 Palaeontology and Evolution [5]</p> <p>LN2210 Scileanna Gaeilge don Eolaíochta 1 [5]</p> <p>MA313 Linear Algebra I [5]</p> <p>MA335 Algebraic Structures [5]</p> <p>MI323 Food and Industrial Microbiology [5]</p> <p>MI326 Microbial Metabolic and Molecular Systems [5]</p> <p>MP305 Modelling I [5]</p> <p>MP345 Mathematical Methods I [5]</p> <p>ST2001 Statistics for Data Science I [5]</p> <p>ST311 Applied Statistics I [5]</p> <p>ZO317 Evolutionary Biology [5]</p> <p style="text-align: right;"><i>Continued...</i></p>	<p><u>Full Year – Semester 1 and Semester 2</u></p> <p>ZO418 Phylogenetics & Conservation [5]</p> <p>-----</p> <p><u>Semester 1</u></p> <p>BPS402 Current Topics in Algal Research [5]</p> <p>BPS4107 Plant Cell Biology and Biochemistry [5]</p> <p>EOS402 Global Change [5]</p> <p>ZO415 Biometry [5]</p> <p>ZO417 Marine & Costal Ecology</p> <p>-----</p> <p><u>Semester 2</u></p> <p>BPS405 Ecology and Conservation Issues [5]</p> <p>BPS4104 Primary Productivity and Global Change [5]</p> <p>EOS407 History of Life [5]</p> <p>EOS409 Biophysical Interactions in the Ocean [5]</p> <p>EOS4101 Earth Observation and Remote Sensing [5]</p> <p>MI4102 Microbial Ecosystems Services & Systems Biology [5]</p> <p>MI4103 Environmental Biotechnology [5]</p> <p>SP721 Ocean and Marine Politics [5]</p> <p>TI248 Coastal Environments [5]</p>

Electives – *Continued*

	<p>PAB2101 AgriBiosciences [5]</p> <p>ST2002 Statistics for Data Science II [5]</p>	<p><u>Semester 2</u></p> <p>BPS3107 Plants, atmosphere and environment throughout Earth History [5]</p> <p>BPS3104 Plant Interactions [5]</p> <p>LN2211 Scileanna Gaeilge don Eolaíochta 2 [5]</p> <p>CS3101 Software for Mathematical Scientists and Educators [5]</p> <p>MA302 Complex Variable [5]</p> <p>MI322 Environmental Microbiology [5]</p> <p>MI324 Immunology and Recombinant Techniques [5]</p> <p>MI325 Microbial Infectious Diseases [5]</p> <p>MP307 Modelling II [5]</p> <p>MP346 Mathematical Methods II [5]</p> <p>ST2002 Statistics for Data Science II [5]</p> <p>ST312 Applied Statistics II [5]</p> <p>ZO315 Applied Ecology [5]</p>	
			<p>At least one module from each of BPS, EOS, MI and ZO.</p>