

## First Year

### Compulsory courses

OCEA0049-1	<i>Pelagian oceanography</i> - Jean-Henri HECQ - [2d FW]	15	15	[+]	3
OCEA0011-2	<i>Coastal oceanography</i> - Salim DJENIDI - [3d FW]	20	10	[+]	5
OCEA0012-1	<i>marine meteorology</i> - Jean-Marie BECKERS	15	5	-	2
OCEA0010-1	<i>Physical Oceanography</i> - Jean-Marie BECKERS - [3d FW]	20	10	[+]	5
OCEA0013-1	<i>Chemical oceanography</i> - Alberto BORGES - [2d FW]	20	5	[+]	4
OCEA0014-1	<i>Mathematical analysis and modelling methods applied to the environment</i> - Eric DELHEZ	20	20	-	4
OCEA0015-1	<i>Principles of interdisciplinary study of sea systems</i> - Marilaure GRÉGOIRE	20	20	-	3
GCIV2061-1	<i>Undercurrents and pressure on marine structures</i> - Jean MARCHAL	15	5	-	2
DROI0725-1	<i>law of the sea and of sea environment</i> - Franklin DEHOUSSE, Philippe VINCENT	20	-	-	2
GEOL0255-2	<i>Geological oceanography</i> - Nathalie FAGEL - [1d FW]	20	20	[+]	4
OCEA0018-1	<i>Introduction to modelling ecosystems</i> - Marilaure GRÉGOIRE	15	15	-	3
ENVT0726-1	<i>Marine Ecology</i> - Sylvie GOBERT, Mathieu POULICEK - [4d FW]	15	-	[+]	4
OCEA0019-1	<i>Biological and biochemical oceanology</i> - Jean-Marie BOUQUEGNEAU, Gilles LEPOINT - [8d FW]	30	-	[+]	8
SSTA0001-1	<i>Integrated placement: preparation, fieldwork guidance, assistant writing up a report</i> - Aida ALVERA, Sylvie GOBERT - [30h Mon. WS]	-	-	[+]	3
OCEA0017-1	<i>Satellite oceanography</i> - Yves CORNET	15	15	-	3
GEOG0619-1	<i>Coastal geomorphology</i> - André OZER - [2d FW]	15	-	[+]	3
GEOG0620-1	<i>Economic geography of the sea</i> - Bernadette MERENNE#SCHOUMAKER	20	-	-	2

## Second Year

### Compulsory courses

OCEA0020-1	<i>Current issues in oceanography</i> - Salim DJENIDI	15	15	-	2
SMEM0003-1	<i>Final thesis</i> - COLLÉGIALITÉ	-	-	-	28

### Research Focus

#### Optional courses

Choose one option from the following :

#### Option Oceanography

Choose courses totalling 30 ECTS out of the following :

BOTA0401-1	<i>Molecular approaches to the diversity of marine microorganisms</i> - Annick WILMOTTE	15	15	-	2
ZOOL0218-1	<i>Aquariology</i> - Christian MICHEL	15	15	-	3
BACT0001-1	<i>Marine bacteriology</i> - Mathieu POULICEK (Even years)	15	30	-	3
OCEA0021-1	<i>Bacteria growth quantification in sea systems: theory and methods</i> - Branko VELIMIROV (Odd years)	20	-	-	2
OCEA0022-1	<i>Biodegradation of organic molecules in a sea environment</i> - Mathieu POULICEK	20	-	-	2
ZOOL0219-1	<i>Biology of benthos and necton animals, partim I: vertebrates</i> - Pierre VANDEWALLE - [2d FW]	15	15	[+]	3
ZOOL0219-2	<i>Biology of benthos and necton animals, partim II: invertebrates</i> - Patrick DAUBY, Mathieu POULICEK - [2d FW]	15	15	[+]	3
BOTA0402-1	<i>Marine plant biology</i> - Vincent DEMOULIN - [3d FW]	15	15	[+]	4
OCEA0023-1	<i>Ecological modelling</i> - Marilaure GRÉGOIRE, Jean-Henri HECQ	15	30	-	3
ZOOL0220-1	<i>Planctonology</i> - Jean-Henri HECQ	15	30	-	3
OCEA0025-1	<i>Dynamics of nutrients in marine environment, partim I: chemical and biochemical aspects</i> - Marc ELSKENS - [10h FW]	7,5	7,5	[+]	2

OCEA0025-2	<i>Dynamics of nutrients in marine environment, partim II : ecological processes</i> - Anne GOFFART - [10h FW]	7,5	7,5	[+]	2
BIOC0701-2	<i>Biogeochemistry 1</i> - Bruno DELILLE, Anne MOUCHET	30	-	-	3
BIOC0702-1	<i>Biogeochemistry 2</i> - Bruno DELILLE, Anne MOUCHET	20	-	-	2
OCEA0043-1	<i>Ecoethology of the marine animals</i> - Christian MICHEL - [3d FW]	15	-	[+]	3
OCEA0026-1	<i>Marine ecotoxicology</i> - Krishna DAS	15	15	-	3
OCEA0027-1	<i>Applications of stable isotopes in marine sciences</i> - Gilles LEPOINT	15	5	-	2
OCEA0028-1	<i>Impact study in a sea environment: theory and practice</i> - Pierre LEJEUNE	10	20	-	3
ZOOL0222-1	<i>Physiology and biochemistry of the marine animals</i> - Philippe COMPÈRE	15	15	-	3
OCEA0029-1	<i>Production techniques of marine fishes, molluscs and crustaceans</i> - Gilles LEPOINT	10	10	-	2
OCEA0030-1	<i>Sea Climatology and meteorology</i> - Michel ERPICUM	30	-	-	3
ESHY0070-1	<i>Dynamics of lower atmospherical layers and air-sea interactions</i> - Louis FRANÇOIS	30	15	-	4
MECA0053-3	<i>Geophysical fluid dynamics</i> - Jean-Marie BECKERS	30	30	-	6
MECA0055-1	<i>Numerical methods applied to the environment</i> - Jean-Marie BECKERS	30	30	-	6
GEOLO256-1	<i>Geochemistry of sediments and interstitial waters.</i> - Nathalie FAGEL	15	15	-	3
GEOLO225-3	<i>Analytical Geochemistry</i> - Nathalie FAGEL	10	10	-	2
OCEA0042-1	<i>Introduction to marine Micropaleontology and palynology Holder</i> - Emmanuelle JAVAUX	20	-	-	2
GEOLO257-1	<i>Marine sedimentology</i> - Frédéric BOULVAIN - [3d FW]	20	-	[+]	2
GCIV0612-1	<i>Behavior of Marine Structures</i> - Jean MARCHAL	30	30	-	6
GCIV2062-1	<i>Free surface flow</i> - Michel PIROTON	15	10	-	2
GEOG0621-1	<i>Supplements to Marine Geomorphology</i> - André OZER	15	15	-	3
OCEA0041-1	<i>Biology of marine mammals</i> - Ecotoxicology - Krishna DAS	15	-	-	4
	- pathology and necropsies - Freddy COIGNOUL, Thierry JAUNIAUX	15	10	-	
OCEA0033-1	<i>Global changes and sea environment</i> - Anne MOUCHET	15	15	-	2
OCEA0034-1	<i>Study of the sea environment in a global perspective of sustainable development</i> - Jacques NIHOUL	10	20	-	2
ENVT0727-1	<i>Hygiene, health and safety on the work place</i> - Sylvie GOBERT	15	10	-	2
ENVT0728-1	<i>Techniques of sampling in marine ecology</i> - Sylvie GOBERT	15	10	-	2
OCEA0035-1	<i>Data acquisition and analysis, complements</i> - Aida ALVERA	15	10	-	2
OCEA0044-2	<i>Ecology of the coral reefs</i> - Mathieu POULICEK	20	20	-	4

Exceptionally, and with the agreement of the council of studies in Oceanology, one or several courses can be chosen in another program( for instance, in relation with the student's final dissertation,...)

#### Option Modelling Marine Environments

OCEA0023-1	<i>Ecological modelling</i> - Marilaure GRÉGOIRE, Jean-Henri HECQ	15	30	-	3
OCEA0036-1	<i>Structures and applications of marine hydrodynamic models</i> - Alexander BARTH	15	15	-	3
BIOC0701-1	<i>Biogeochemistry 1</i> - Bruno DELILLE, Anne MOUCHET	20	-	-	2
MECA0055-4	<i>Numerical methods applied to the environment (Partim I)</i> - Jean-Marie BECKERS	15	15	-	3

Choose courses totalling 19 ECTS from the following :

MECA0053-3	<i>Geophysical fluid dynamics</i> - Jean-Marie BECKERS	30	30	-	6
OCEA0037-1	<i>Oceanic and atmospheric waves</i> - Jean-Marie BECKERS	30	-	-	3
ESHY0070-1	<i>Dynamics of lower atmospherical layers and air-sea interactions</i> - Louis FRANÇOIS	30	15	-	4
OCEA0030-1	<i>Sea Climatology and meteorology</i> - Michel ERPICUM	30	-	-	3
BIOC0702-1	<i>Biogeochemistry 2</i> - Bruno DELILLE, Anne MOUCHET	20	-	-	2
ZOOL0220-1	<i>Planctonology</i> - Jean-Henri HECQ	15	30	-	3
OCEA0026-1	<i>Marine ecotoxicology</i> - Krishna DAS	15	15	-	3
OCEA0028-1	<i>Impact study in a sea environment: theory and practice</i> - Pierre LEJEUNE	10	20	-	3
OCEA0040-1	<i>Coastal engineering</i> - Jean MARCHAL	30	30	-	6
GCIV2062-1	<i>Free surface flow</i> - Michel PIROTON	15	10	-	2
OCEA0034-1	<i>Study of the sea environment in a global perspective of sustainable development</i> - Jacques NIHOUL	10	20	-	2
OCEA0035-1	<i>Data acquisition and analysis, complements</i> - Aida ALVERA	15	10	-	2
OCEA0033-1	<i>Global changes and sea environment</i> - Anne MOUCHET	15	15	-	2
MECA0055-5	<i>Numerical methods applied to the environment (Partim II)</i> - Jean-Marie BECKERS	15	15	-	3

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