

#### Cycle view of the study programme

B1	Or	Th	Pr	Au	Cr
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#### Compulsory course within the focus (B1 : 6Cr)

OCEA0057-7	<i>Marine Ecology</i> (english language) - <i>Marine ecology</i> - [5h Mon. WS] - <i>Introduction to marine ecosystems modelling</i> - Marilaure GRÉGOIRE - <i>Marine ecology fieldtrip</i> - [6d FW]	B1   TA 10   -   [+] 15   15   - -   -   [+]	<b>6</b>
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#### Optional courses within the focus (B1 : 24Cr)

Courses totaling 24 credits have to be chosen among : (B1 : 24Cr)

##### Framework : global ocean environment

OCEA0055-5	<i>Biogeochemical Cycles in the Ocean</i> (english language) - <i>Biogeochemistry 1</i> - <i>Biogeochemistry 2 (Advanced Marine Geochemistry)</i>	B1   Q1 20   -   - 20   -   -	<b>6</b>
OCEA0056-1	<i>Marine Plant Biology and Ecology</i> (english language) - <i>Marine phanerogames ecology</i> - <i>Techniques of sampling in marine ecology</i>	B1   Q1 15   10   - 15   10   -	<b>6</b>
OCEA0082-1	<i>Carbon, nutrient, greenhouse gases dynamics in marine ecosystems and geological oceanography</i> (english language) - <i>Carbon, nutrient, greenhouse gases dynamics in marine ecosystems</i> - <i>Alberto BORGES</i> - <i>Marine sediment geochemistry</i> - Nathalie FAGEL	B1   Q1 20   5   - 15   15   - 15   15   -	<b>6</b>
OCEA0059-1	<i>Remote Sensing of the Oceans</i> (english language) - <i>Introduction to satellite oceanography</i> - Aida ALVERA AZCARATE - <i>Advanced satellite oceanography</i> - Aida ALVERA AZCARATE	B1   Q1 15   15   - 15   15   -	<b>6</b>

##### Scientific challenges & opportunities : marine environment protection & resources protection

OCEA0225-1	<i>Professional practice in marine / environmental sectors</i> (english language)	B1   Q2   -   -   -   -	<b>6</b>
OCEA0080-1	<i>Biochemistry, Physiology and Aquariology</i> (english language) - <i>Physiology and biochemistry of the marine animals</i> - Philippe COMPÈRE - <i>Aquariology</i> - Carole ROUGEOT	B1   Q1 15   15   - 15   -   -	<b>6</b>
OCEA0062-6	<i>Ecotoxicology and Biodegradation of Marine Pollutants, Marine ecotoxicology</i> (english language) - [15h Mon. WS]	B1   Q1   15   -   [+]	<b>6</b>
OCEA0063-1	<i>Biology of Marine Mammals</i> (english language) - <i>Part I : Ecology and Ecotoxicology</i> - <i>Part II : pathology and necropsies</i>	B1   Q1 15   -   - 15   10   -	<b>6</b>
OCEA0064-1	<i>Functional and Molecular Marine Microbiology, Molecular approaches to the diversity of marine microorganisms</i> (english language) - Annick WILMOTTE	B1   Q1   25   25   - 25   25   -	<b>6</b>

##### Data analysis : interpretation of environmental data

OCEA0081-1	<i>Numerical Methods in Geophysics - Part 2</i> (english language) - JeanMarie BECKERS	B1   Q1   15   30   -   -	<b>6</b>
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#### Compulsory Courses (B1 : 30Cr)

STFE9002-1	<i>Master thesis</i> - COLLÉGIALITÉ	B1   TA   -   -   -   -	<b>30</b>
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