

## Vue bloc du programme des cours

Or Th Pr Au Cr

### Bloc 1

Les cours de cette Finalité sont exclusivement réservés aux étudiants qui suivent l'ensemble du programme Erasmus Mundus sur les deux années de master. Les cours sont cependant accessibles aux étudiants Erasmus.

This Master's programme is organized by 7 European universities : more information.

#### Compulsory courses

**The first year, the student takes the general courses at one of the universities mentioned below, in accordance with the mobility scheme as approved by the Steering Committee.**

##### Universiteit Gent (Belgium)

For further information on the course programme offered

##### Dunarea de Jos University of Galati (UDJG, Roemenië)

|            |                                                             |    |   |   |   |   |
|------------|-------------------------------------------------------------|----|---|---|---|---|
| HULG9863-1 | <i>Ship Design and Structural Analysis</i> (anglais)        | Q1 | - | - | - | 5 |
| HULG9864-1 | <i>Computational Fluid Dynamics I</i> (anglais)             | Q1 | - | - | - | 4 |
| HULG9865-1 | <i>Analysis of Noise and Vibration</i> (anglais)            | Q1 | - | - | - | 4 |
| HULG9866-1 | <i>Advanced Shipbuilding Technology</i> (anglais)           | Q2 | - | - | - | 5 |
| HULG9867-1 | <i>Complements in Propulsion Dynamics</i> (anglais)         | Q2 | - | - | - | 5 |
| HULG9868-1 | <i>Offshore Units and Systems</i> (anglais)                 | Q2 | - | - | - | 5 |
| HULG9869-1 | <i>Structural Analysis and Hydroelasticity</i> (anglais)    | Q2 | - | - | - | 5 |
| HULG9870-1 | <i>Computational Fluid Dynamics II</i> (anglais)            | Q2 | - | - | - | 4 |
| HULG9871-1 | <i>Research and Design Internship 2 (Project)</i> (anglais) | Q2 | - | - | - | 7 |

#### Elective courses

Subscribe to 12 credit units from the following list. Subject to approval by the faculty of Dunarea de Jos University of Galati (UDJG, Roemenië).

*Remarque* : students with a background in naval architecture take the courses with reference a. Students without a background in naval architecture take the courses with reference b.

|            |                                                                 |    |   |   |   |   |
|------------|-----------------------------------------------------------------|----|---|---|---|---|
| HULG9872-1 | <i>Unconventional Materials (a)</i> (anglais)                   | Q1 | - | - | - | 5 |
| HULG9873-1 | <i>Research and Design Internship 1 (Project) (a)</i> (anglais) | Q1 | - | - | - | 7 |
| HULG9874-1 | <i>Ship Dynamics 1 (b)</i> (anglais)                            | Q1 | - | - | - | 5 |
| HULG9875-1 | <i>Ship Hydrostatics and Stability (b)</i> (anglais)            | Q1 | - | - | - | 4 |
| HULG9876-1 | <i>Ship Resistance (b)</i> (anglais)                            | Q1 | - | - | - | 3 |

Subscribe to 4 credit units from the following list. Subject to approval by the faculty of Dunarea de Jos University of Galati (UDJG, Roemenië).

*Remarque* : students with a background in naval architecture take the courses with reference a. Students without a background in naval architecture take the courses with reference b.

|            |                                                                       |    |   |   |   |   |
|------------|-----------------------------------------------------------------------|----|---|---|---|---|
| HULG9877-1 | <i>Project Management (a)</i> (anglais)                               | Q2 | - | - | - | 4 |
| HULG9878-1 | <i>The Marine Environmental Protection Technologies (a)</i> (anglais) | Q2 | - | - | - | 4 |
| HULG9879-1 | <i>Commissioning (a)</i> (anglais)                                    | Q2 | - | - | - | 5 |
| HULG9880-1 | <i>Ship Dynamics 2 (Manoeuvring) (b)</i> (anglais)                    | Q2 | - | - | - | 4 |

### Bloc 2

#### Compulsory courses

**The second year, the student takes the general courses at University of Liège (ULiège, Belgium)**

|            |                                                           |    |   |   |   |           |
|------------|-----------------------------------------------------------|----|---|---|---|-----------|
| ATFE9013-1 | <i>Master's Dissertation</i> (anglais) - Thomas ANDRIANNE | TA | - | - | - | <b>30</b> |
|------------|-----------------------------------------------------------|----|---|---|---|-----------|

**Compulsory courses within the focus**

|            |                                                         |    |    |    |   |          |
|------------|---------------------------------------------------------|----|----|----|---|----------|
| MECA0533-1 | <i>Technology of offshore wind structures</i> (anglais) | Q1 | 26 | 26 | - | <b>5</b> |
|------------|---------------------------------------------------------|----|----|----|---|----------|

|            |                                                                                                         |    |    |    |     |          |
|------------|---------------------------------------------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0534-1 | <i>Fluid structures interactions of offshore environment</i> (anglais) - Thomas ANDRIANNE - [12h Labo.] | Q1 | 20 | 16 | [+] | <b>5</b> |
|------------|---------------------------------------------------------------------------------------------------------|----|----|----|-----|----------|

|            |                                               |    |    |    |   |          |
|------------|-----------------------------------------------|----|----|----|---|----------|
| MECA0535-1 | <i>Structural health monitoring</i> (anglais) | Q1 | 26 | 26 | - | <b>5</b> |
|------------|-----------------------------------------------|----|----|----|---|----------|

**Elective courses**

Subscribe to 15 credit units from the following list of ULiège's focus.

|            |                                                                                                   |    |    |    |     |          |
|------------|---------------------------------------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0010-1 | <i>Uncertainty quantification and stochastic modeling</i> (anglais) - Maarten ARNST - [28h Proj.] | Q1 | 16 | 16 | [+] | <b>5</b> |
|------------|---------------------------------------------------------------------------------------------------|----|----|----|-----|----------|

|            |                                                                                                                  |    |    |    |     |          |
|------------|------------------------------------------------------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0027-1 | <i>Structural and multidisciplinary optimization</i> (anglais) - Pierre DUYSINX, Patricia TOSSINGS - [18h Proj.] | Q1 | 30 | 12 | [+] | <b>5</b> |
|------------|------------------------------------------------------------------------------------------------------------------|----|----|----|-----|----------|

|            |                                                             |    |    |    |   |          |
|------------|-------------------------------------------------------------|----|----|----|---|----------|
| MECA0502-1 | <i>Mechanics of composites</i> (anglais) - Michaël BRUYNEEL | Q1 | 26 | 26 | - | <b>5</b> |
|------------|-------------------------------------------------------------|----|----|----|---|----------|

|            |                                                                                       |    |    |    |     |          |
|------------|---------------------------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0058-1 | <i>Fracture mechanics, damage and fatigue</i> (anglais) - Ludovic NOELS - [75h Proj.] | Q1 | 30 | 10 | [+] | <b>5</b> |
|------------|---------------------------------------------------------------------------------------|----|----|----|-----|----------|

|            |                                                                             |    |    |    |     |          |
|------------|-----------------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0036-2 | <i>Finite Element Method</i> (anglais) - JeanPhilippe PONTHOT - [40h Proj.] | Q2 | 26 | 26 | [+] | <b>5</b> |
|------------|-----------------------------------------------------------------------------|----|----|----|-----|----------|

|            |                                                                                                |    |    |    |     |          |
|------------|------------------------------------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0062-1 | <i>Vibration testing and experimental modal analysis</i> (anglais) - Loïc SALLES - [30h Proj.] | Q1 | 26 | 26 | [+] | <b>5</b> |
|------------|------------------------------------------------------------------------------------------------|----|----|----|-----|----------|

|            |                                                                  |    |    |    |     |          |
|------------|------------------------------------------------------------------|----|----|----|-----|----------|
| MECA0029-1 | <i>Theory of vibration</i> (anglais) - Loïc SALLES - [30h Proj.] | Q1 | 26 | 26 | [+] | <b>5</b> |
|------------|------------------------------------------------------------------|----|----|----|-----|----------|