

## Cycle view of the study programme

B1 Or Th Pr Au Cr

### Compulsory Courses (B1 : 60Cr)

#### University of Liège - ANAST

#### Ship and Offshore Design, Structure and Production

CNAV0013-2	<i>Ship theory and offshore (static, dynamic and propulsion)</i> (english language) - André HAGE, Philippe RIGO	B1	Q1	50	30	-	<b>6</b>
CNAV0014-2	<i>Ship and offshore structures and production (including 7 days technical visit)</i> (english language) - JeanDavid CAPRACE, Luc COURARD, Philippe RIGO - [7d FW]	B1	Q1	40	60	[+]	<b>8</b>
CNAV0012-2	<i>Ship and offshore design, Project (including 2 days technical visit)</i> (english language) - André HAGE - [2d FW]	B1	Q1	30	40	[+]	<b>6</b>
CNAV0016-2	<i>Electricity, Ship Equipments &amp; Diesel Motors</i> (english language) - Pierre DEWALLEF, André HAGE, Philippe NGENDAKUMANA - [1d FW]	B1	Q1	20	20	[+]	<b>2</b>
CNAV0015-2	<i>Design of small crafts and high speed vessels</i> (english language) - André HAGE	B1	Q1	40	-	-	<b>3</b>

#### Ecole centrale de Nantes ECN

#### Marine Hydrodynamics

HULG0337-1	<i>Water waves and sea state models</i> (english language) - G. DUCROZET	B1	Q2	20	10	-	<b>5</b>
HULG0338-1	<i>Seakeeping : Theory and numerical modelling</i> (english language) - P. FERRANT, L. GENTAZ	B1	Q2	20	15	-	<b>5</b>
HULG0339-1	<i>CFD for marine structures</i> (english language) - L. GENTAZ, D. LE TOUZE	B1	Q2	30	35	-	<b>6</b>
HULG0340-1	<i>Multi-objective optimisation for ship design</i> (english language) - P.E. GUILLERM, D. LE TOUZE	B1	Q2	20	20	-	<b>4</b>
HULG0341-1	<i>Experimental marine structures hydrodynamics</i> (english language) - F. BONNEFOY, P. FERRANT	B1	Q2	20	20	-	<b>5</b>

#### Nantes ; by ECN and ULg

HULG0342-1	<i>Initiation to research and development, and advanced seminars</i> (english language) - P. FERRANT, L. GENTAZ, André HAGE, Philippe RIGO	B1	Q2	60	90	-	<b>10</b>
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### Optional courses (B2 : 30Cr)

#### Select one of the following modules in UGAL, UNIGE, URO, ZUT or ICAM) (B2 : 30Cr)

#### University of Galati - UGAL (Romania) (B2 : 30Cr)

#### Manoeuvring and Propulsion

HULG0370-1	<i>Ship manoeuvrability</i> (english language) - N...	B2	Q1	-	-	-	<b>5</b>
HULG0371-1	<i>Ship propulsion</i> (english language) - N...	B2	Q1	-	-	-	<b>5</b>
ATFE2007-1	<i>Internship and master thesis</i> - COLLÉGIALITÉ	B2	Q1	-	-	-	<b>20</b>

#### University of Genoa (Italy) - UNIGE (B2 : 30Cr)

#### Sailing Yacht and Pleasure Motor Yacht

HULG0372-1	<i>Motor yacht design</i> (english language) - N...	B2	Q1	-	-	-	<b>5</b>
HULG0373-1	<i>Sailing yacht design</i> - N...	B2	Q1	-	-	-	<b>5</b>
ATFE2007-1	<i>Internship and master thesis</i> - COLLÉGIALITÉ	B2	Q1	-	-	-	<b>20</b>

#### University of Rostock (Germany) - URO (B2 : 30Cr)

**CAD, Information, Technology and Marine Structures**

ATFE2007-1	<i>Internship and master thesis - COLLÉGIALITÉ</i>	B2	Q1	-	-	-	<b>20</b>
HULG0376-1	<i>Information technology in ship design and production (english language) - N...</i>	B2	Q1	-	-	-	<b>4</b>
HULG0377-1	<i>Sea loads on offshore structures (english language) - N...</i>	B2	Q1	-	-	-	<b>3</b>
HULG9068-1	<i>Advanced analysis of marine structures (english language) - N...</i>	B2	Q1	-	-	-	<b>3</b>

**University of West Pomeranian University of Technology (Poland) - ZUT (B2 : 30Cr)**

**Composite Materials: Production and Recycling**

HULG0374-1	<i>Advanced mechanics of ship and offshore structures (english language) - N...</i>	B2	Q1	-	-	-	<b>4</b>
HULG0375-1	<i>Advanced production technology of ship and offshore structures (english language) - N...</i>	B2	Q1	-	-	-	<b>3</b>
HULG9069-1	<i>Advanced design of ship and offshore structures - N...</i>	B2	Q1	-	-	-	<b>3</b>
ATFE2007-1	<i>Internship and master thesis - COLLÉGIALITÉ</i>	B2	Q1	-	-	-	<b>20</b>

**School of Mechanical and Manufacturing Engineering (France) - ICAM (B2 : 30Cr)**

**Composite Materials : Production and Recycling**

HULG0432-1	<i>Marine composite structure analysis (english language) - N...</i>	B2	Q1	-	-	-	<b>4</b>
HULG0433-1	<i>Manufacturing and recycling of marine composite structures (english language) - N...</i>	B2	Q1	-	-	-	<b>6</b>
ATFE2007-1	<i>Internship and master thesis - COLLÉGIALITÉ</i>	B2	Q1	-	-	-	<b>20</b>