EMship key points

- An interdisciplinary combination of technical, scientific and management skills obtained through a worldwide unique qualification programme supported by six leading European universities, offering excellent career opportunities to graduates.
- Four different specializations offered during the third semester, after a one-year common core.
- The opportunity to experience a variety of academic and cultural environments through a mobility scheme covering three different countries.
- An international network of associated universities and industries.

Language

All the lectures will be in English.

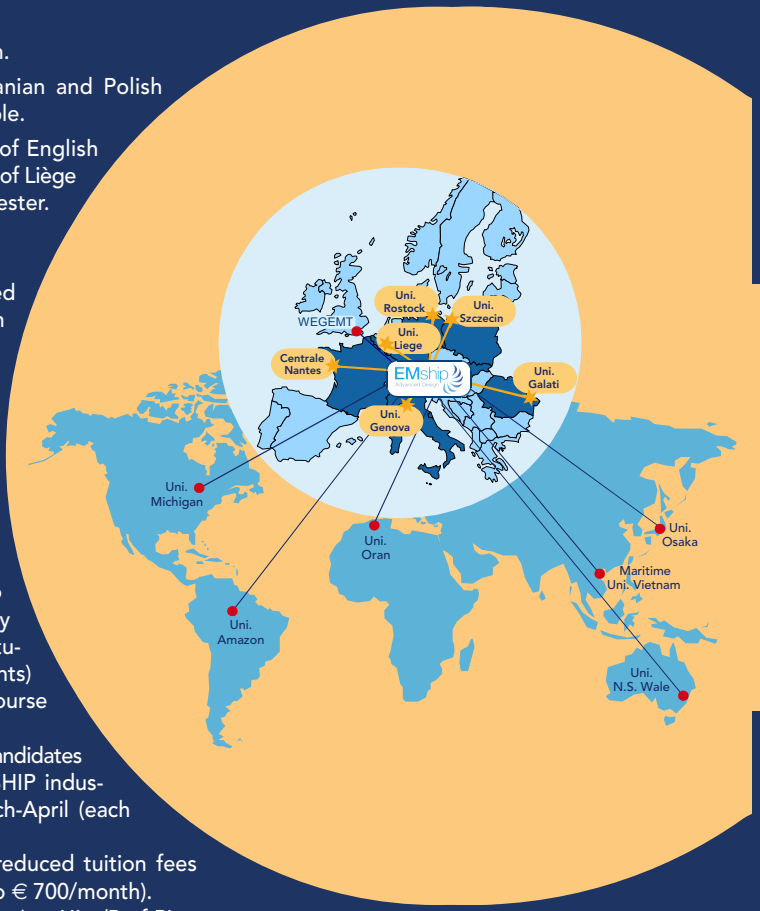
French, Italian, German, Romanian and Polish language courses will be available.

A four weeks compact Course of English will be available at the University of Liège before the start of the first semester.

Scholarships

In addition to the self supported students paying the full tuition fees, selected students may receive various scholarships:

- ERASMUS MUNDUS scholarship: online application only from Sept. to Dec. (each year) using website www.emship.eu. Excellent applicants from outside EU as well as from EU countries will be granted scholarships covering the tuition fees, travel to and from Europe and a monthly living allowance of € 500 (EU students) or € 1.000 (non-EU students) during the full duration of the course (18 months).
- INDUSTRIAL Scholarship: best candidates may be supported by the EMSHIP industrial partners. Application March-April (each year) to ULg/Prof Rigo.
- ACADEMIC Scholarship: for reduced tuition fees and/or living expenses (€ 400 to € 700/month). Application March-May (each year) to ULg/Prof Rigo.



Tuition fees

For the cycle of 90 credits (18 months):
€ 9.450 for non European students
€ 4.950 for EU Students

Application

see **http://www.emship.eu**
and follow the application procedure

Contact
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Education and Culture
ERASMUS MUNDUS

Master of Engineering

Integrated Advanced Ship Design

EMship
Advanced Design

Erasmus Mundus
Master Course

www.emship.eu

Université de Liège · Centrale Nantes · Università degli Studi di Genova · Universität Rostock Traditio et Innovatio · Universitas Galatiensis · Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Presentation of EMship

The objective of the EMship Master Course is to provide an outstanding university program in Naval Architecture, Ship Design and Shipbuilding through a 1.5 year - 90 ECTS Credits - Master Course.

This program is supported by the European Commission under the Erasmus Mundus funding scheme.

Admission criteria

In order to be eligible, candidates will have to hold a BSc or a Master degree, corresponding either to a 5-year education program (300 ECTS), or to a 4-year education program completed with one year of professional experience.

Candidates with specific CVs are also invited to apply:

- Engineering officers with 3-5 years sea service planing a career onshore.
- Students seeking complementary education in deep sea transport, mega/ motor yachts, sailing pleasure crafts and also in safer and cleaner navigation.
- Engineers searching for advanced education in hydrodynamics in ship design, ship production, CAD, information technology and ship structures.

EMship directly relates to the future needs of the European and international marine industry.

Study Program

Consortium

The consortium is composed of six European institutions with a long standing tradition in the diverse fields of Ship Design and Marine engineering:

- **University of Liège** (Belgium) coordinator of the program http://www.anast.ulg.ac.be
- **Ecole Centrale de Nantes** (France) http://www.ec-nantes.fr
- **Dunarea de Jos University of Galati** (Romania) http://www.ugal.ro
- **University of Genoa** (Italy) http://www.unige.it
- **University of Rostock** (Germany) http://www.schiffbauforschung.de
- **West Pomeranian University of Technology** (Poland) http://www.wtm.zut.edu.pl

The consortium includes six associated partners from prestigeous universities worldwide:

- **University of Michigan** (USA)
- **University of Osaka** (Japan)
- **Federal University of Amazon** (Brazil)
- **VIMARU Maritime University** (Vietnam)
- **University of New South Wales** (Australia)
- **University of Sciences and Technology of Oran** (Algeria)

A Strategic Advisory Board consisting of high level decision markers of leading European maritime companies and representatives from the associated universities worldwide will actively contribute to the continuous quality improval.

The mobility scheme involves 3 semesters in 3 countries (within a selection of 6 countries):

The first and second semesters (60 credits) are dedicated to general lectures in Ship Design:

1st semester: University of Liège (Belgium) **Ship design, theory, structures & production** *25 ECTS credits*		**2nd semester: Ecole Centrale de Nantes (France)** **Ship hydrodynamics** *25 ECTS credits*	
Modules	*ECTS*	*Modules*	*ECTS*
Ship theory (static, dynamic and propulsion)	6	Water wave and sea state models for ship design	5
Ship structures and ship production	8	Seakeeping: theory & numerical modeling	5
Ship project & ship design	6	CFD for ship hydrodynamics	6
Electricity, ship equipment & diesel engines	2	Multi-objective optimisation for ship design	4
Design of high speed vessels	3	Experimental ship hydrodynamics	5
End of 2nd semester: Ecole Centrale de Nantes (France), *10 ECTS Credits* **Initiation of research & developpement, preparation to the final project and technical visits**			

The third semester (30 credits) is dedicated to advanced lectures:

University of Galati (Romania) **Maneuvering & propulsion** *10 ECTS credits*		**University of Genoa (Italy)** **Sailing & motor yachts** *10 ECTS credits*	
Modules	*ECTS*	*Modules*	*ECTS*
Ship maneuvering	5	Theory and design of motor yachts	5
Ship propulsion	5	Theory and design of sailing yachts	5

University of Rostock (Germany) **CAD, Ship production, information technology** *10 ECTS credits*		**West Pomeranian University ot Technology (Poland)** **Advanced ship structures** *10 ECTS credits*	
Modules (choose 2 amongst 3)	*ECTS*	*Modules*	*ECTS*
Information technology in ship design and production	5	Advanced ship structural mechanics	4
Ship production	5	Advanced ship production technology	3
Ocean engineering	5	Advanced ship structural design	3

MASTER THESIS AND INTERNSHIP, *20 ECTS credits*
Internship and master thesis with industry, coordinated by the university visited during the third semester

EMship Graduates will be awarded a Double Master Degree from University of Liège (Belgium) and Ecole Centrale de Nantes (France) and a diploma from the visited university for the third semester.