



University of Studies of Genoa  
Polytechnic school  
Department of Naval, Electrical, Electronic  
and of Telecommunications (DITEN)

## MSc Course in **YACHT DESIGN**

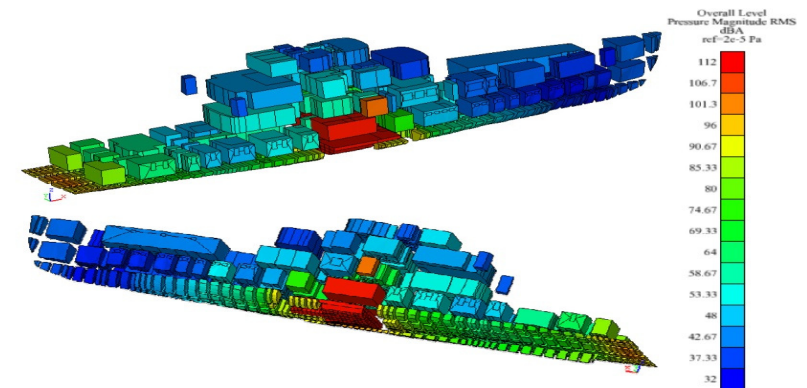
The Course is held in La Spezia  
at **Polo Universitario "G. Marconi"**

### Yacht Design Board of Study Secretary

Dr. **Luca Panico**  
Tel. 0039 0187 751265  
mdnautica@unige.it  
Polo Universitario "G. Marconi"  
Via dei Colli, 90 - 19121 La Spezia  
www.unispezia.it

### Chairman of the Board of Studies in Yacht Design

Prof. Ing. **Dario Boote**  
dario.boote@unige.it  
Dipartimento di Ingegneria Navale, Elettrica, Elettronica  
e delle Telecomunicazioni (DITEN)  
Via Montallegro, 1 - 16145 Genova  
www.politecnica.unige.it



### What the Yacht Design MSc graduated does

The MSc will supply you with the method of study and the basic scientific skills required to keep updated your training in time. This course will also provide you with the technical-professional skills for the working world, and will teach you to apply methods, techniques and tools which are today available, both as freelances and in the manufacturing and service companies, for production, advanced design, planning, scheduling and complex system management.

In the meantime you will be acquainted with the professional and ethical responsibilities that your work will require.

Particularly the occupational openings of the Yacht Design MSc graduated are: vessel and yacht building and refitting yards (building and refitting shipyards), pleasure craft sector operators, classification registers and surveying boards, design and consultancy professional studios and research institutes.

## What the Yacht Designer learns

To be an MSc Yacht Designer you will be required to have both the necessary know how as well as the skills to put them into practice. You will also need to be able to continuously update your training, to suit it to the steady scientific and technological development.

The know-how necessary to the Yacht Designer consists of really diversified elements belonging to different disciplinary sectors. That it is why the offered lectures regards common basic disciplines especially in Industrial Engineering Class (mathematics, physics, chemistry and informatics), indispensable to deal with successive studies and ship science disciplines, which will enable you to acquire skills regarding:

- naval architecture, that concerns hydrostatics (geometry, equilibrium, buoyancy) and hydrodynamics (motion resistance, propulsion, sea keeping);
- ship structures, that concerns hull and structure scantlings, (loads, drawing and scantling, robustness testing) and building methodologies;
- marine engineering, that concerns propulsion (engines compartment, shaft lines, propeller), boat services – particular installations and also auxiliary machineries;
- design, that concerns the distribution space criteria, ergonomics and aesthetics from the overall point of view and the individual yacht element as well.

The final thesis will allow you to apply knowledge and skills achieved and will offer you the opportunity of working in a shipyard or in a laboratory, where you might develop other operative basic skills to fill in your education, such as: behavior, relationship, group working.

Be advised that you can do a part of your study abroad, benefiting of specific athenaeum scholarship (Erasmus program) and agreement stipulated by the degree with many of the most prestigious European Universities.

## What the Yacht Design MSc offers

If you have the knowledge to accede (described in the next paragraph), and if you are going to follow lessons and exercitations, the Course will provide you to achieve, on time, learning objectives agreed upon by every interested part yourself, the ministry, the faculty, lecturers, industry agents, etc. These objectives establish things to learn, the requisite know-how, and the suggested behavior, that are necessary elements for an effective entry into the world of work or to attend a higher Degree.

As required by European guidelines, learning objectives related to, indeed, the following: applying knowledge and understanding, making judgments communication skills and learning skills.

## Skills required for access

All that is necessary to be admitted in Yacht Design MSc:

- hold a Degree, a MSc by law MD 509/1999, a MSc by law MD 270/2004, achieved at an Italian University or a Five Year Degree (before MD 509/1999) achieved at an Italian University or an equivalent;
- hold at least 40 CFU, or equivalent knowledge, achieved at any academic course (Degree, MSc, first and second level Master) in scientific sectors suitable for base educational activities in three years degree fields about industrial engineering class; (mathematics, chemistry, physics, informatics and statistics);
- hold at least 45 CFU, or equivalent knowledge, achieved at any academic course (Degree, MSc, first and second level Master) in scientific sectors suitable for educational activities in naval engineering class field; (naval architecture, ship hydrostatics, ship propulsion systems and ship plants).

Moreover the possess of a suitable beginning preparation is assessed through a test which should be passed, except for the exemption cases, before the enrollment.

You can find all information about the test, including the exemption cases, in the Faculty website: [www.politecnica.unige.it](http://www.politecnica.unige.it)

## Study programme A.A. 2019/2020

MSc Course in Yacht Design

### 1° year

- Yacht stability and dynamics (12):
  - *Yacht stability (6)* - 1<sup>st</sup> semester
  - *Yacht dynamics (6)* - 1<sup>st</sup> semester
- Yacht design studio workshop A (12):
  - *Applied industrial design 1 (6)* - 1<sup>st</sup> semester
  - *Theory of marine design 1 (6)* - 2<sup>nd</sup> semester
- Motor yacht design (6) - 1<sup>st</sup> semester
- Structural mechanics (6) - 2<sup>nd</sup> semester
- Mathematical physics (6) - 2<sup>nd</sup> semester
- Yacht construction technologies (6) - 2<sup>nd</sup> semester
- Two elective units between:
  - *Interior design (6)* - 1<sup>st</sup> semester
  - *Yacht navigation support system (6)* - 1<sup>st</sup> semester
  - *Sailing yacht aero-hydro-dynamics (6)* - 1<sup>st</sup> semester
  - *Operations management (6)* - 1<sup>st</sup> semester
  - *Integrated product support and lifecycle management (6)* - 2<sup>nd</sup> semester

### 2° year

- Ship structures and plants (12):
  - *Ship structures (6)* - 1<sup>st</sup> semester
  - *Ship propulsion plants (6)* - 1<sup>st</sup> semester
- Yacht design studio workshop B (12):
  - *Disegno industriale 3-1 (6)* - 1<sup>st</sup> semester
  - *Industrial design 3-2 (6)* - 1<sup>st</sup> semester
- Numerical marine hydrodynamics (6) - 1<sup>st</sup> semester
- Yacht rigging (6) - 2<sup>nd</sup> semester
- Heating ventilating and air conditioning (6) - 2<sup>nd</sup> semester
- Internship (6)
- Thesis (12)

### Note

Numbers between brackets indicate the University Formative credits (CFU)