

## Yacht Design Board of Study Secretary Dott. Luca Panico

Tel. 0187 751265 luca.panico@unige.it

Campus Universitario della Spezia Viale Nicolò Fieschi, 16/18 – 19123 La Spezia campus-laspezia.unige.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







#### MSc Course in

## YACHT DESIGN

The Course is held at Campus Universitario della Spezia

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

# 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 known-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.

A.A. 2023/2024 - Study programme

MSc Cours<mark>e in Y</mark>acht Design

## <mark>1° year</mark>

• Yacht stability and dynamics 12 CFU:

- o Yacht stability 6 CFU
- o Yach<mark>t dynam</mark>ics 6 CFU
- Yacht design studio workshop A 12 CFU
- Motor yacht design 6 CFU
- Structural mechanics 6 CFU
- Mathematical physics 6 CFU
- Yacht construction technologies 6 CFU
- Two elective units between:
  - o Interior design 6 CFU
  - o Yacht navigation support system 6 CFU
  - o Sailing yacht aero-hydro-dynamics 6 CFU
  - o Project management for yacht production 6 CFU
  - o Integrated product support and lifecycle management 6 CFU

## 2° year

• Ship structures and plants 12 CFU:

- o Ship structures 6 CFU
- o Ship propulsion plants 6 CFU
- Yacht design studio workshop B 12 CFU:
  - o Disegno industriale 3-1 6 CFU
  - o Industria<mark>l design 3-2 6 CFU</mark>
- Numerical marine hydrodynamics 6 CFU
- Yacht rigging 6 CFU
- Heating ventilating and air conditioning 6 CFU
- Internship 6 CFU
- Thesis 12 CFU