

POLITECNICO DI MILANO



Decree Index no. 3127 Prot. no. 42027
Date 30.06.2015
Title III Class V
UOR SOFPL

HAVING REGARD TO the Statute of the Politecnico di Milano;
HAVING REGARD TO Ministerial Decree No. 509 dated 3.11.1999;
HAVING REGARD TO Ministerial Decree No. 270 dated 22.10.2004;
HAVING REGARD TO the University's Educational Rules;
HAVING REGARD TO the Politecnico di Milano Specialising Master regulations, issued with Rector's Decree No. 2235, dated 05.08.2013;
HAVING OBTAINED the favourable opinion of the Academic Senate at its meeting of 22.06.2015, regarding the establishment and activation of Specialising Master proposals, including the 1st level Specialising Master in "Yacht Design";

HEREBY DECREES

The 1st level Specialising Master in "Yacht Design" has been established and activated for the 2016/2017 academic year.

ART. 1

Features of Master program

The 1st level Specialising Master in "Yacht Design" has been established and activated at the Department of Design of the Politecnico di Milano.

The course will be delivered by the Politecnico di Milano POLI.design Consortium, and the School of reference is the School of Design.

The Specialising Master Director and contact person for the School is Professor Andrea Ratti. The Vice Director is Professor Silvia Piardi.

The Specialising Master Board is made up of the Politecnico di Milano professors Silvia Piardi, Andrea Ratti, Matteo Oreste Ingaramo, Fabio Vittorio Fossati and Arianna Bionda, and of Massimo Musio Sale of the University of Genoa and Andrea Vallicelli of the University of Chieti.

ART. 2

Training goals and employment opportunities

The Politecnico di Milano Specialising Master in Yacht Design provides the tools for managing the design and construction of sailing and motor boats, from project brief to definition of general plans, hydrostatic and hydrodynamic calculations, fitting-out of interiors, deck and board equipment, boat systems, production in the yard and control of executive stages. Participation in the Specialising Master allows students to achieve the following training goals:

- development of planning skills, in particular problem setting and problem solving skills in the leisure boat market;
- development of specialised technical skills; acquisition of principles and procedures of construction methods and techniques;
- development of skills related to production organisation and shipyard management;
- development of the ability to work in a group and to present oneself with authority in the professional world;
- ability to manage conflicts in the team and to encourage creativity.

The need to train people to work in the yachting sector is based on the rapid and exponential growth recorded by this sector in recent years. This growth has been further encouraged by the issuing of provisions to encourage the development of this market (from simplifying procedures for port construction, to reducing the tax burden on recreational boats over 10 m. etc.). For this reason, the sector shows today a strong professional vocation, with regard both to the skills necessary to the design of recreational boats, their components, and accessories, and to the management of the different stages of the production process.

In particular, the sector is going through a stage of strong growth and development in quantitative and economic terms, although full maturity has not yet been reached. This lag is explained partly by the current lack of executives able to manage and direct this phase of change.

Students attending the master programme will find employment at yacht design practices or yards and in ancillary industries. The potential fields of professional involvement are: technical office; engineering; project management; production control; quality control; fitting-out; styling; customisation; after sales.

The course will be held in English.

ART. 3 Teaching content and organisation

The 1st level Specialising Master in “Yacht Design” will begin in February 2016 and will end in February 2017.

Teaching hours are allocated as follows:

	Lectures and project input (No. hours)	SSD	Exercises and project practice (No. hours)	Experiment, design and computer workshops (No. hours)	ECTS total	Total hours of study
Teaching unit 1:						
Yacht Design: principles, methods, tools and rules	32	ICAR/12 ICAR/13 ICAR/18	4	0	4	102
Teaching unit 2:						
Design and representation	32	ICAR/17 ING-IND/15 INF/01	16	16	6	136
Teaching unit 3:						
Naval architecture	32	ING-IND/01 ING-IND/04 ING-IND/13	8	24	5	132
Teaching unit 4:						
Shipbuilding	40	ING-IND/02 ING-IND/04 ING-IND/22	8	24	6	156
Teaching unit 5:						
On-board systems and propulsion equipment	32	ING-IND/11	0	0	4	96
Teaching unit 6:						
Interior design	40	ICAR/12 ICAR/13 ICAR/16	8	16	6	148

Teaching unit 7:						
Production process and corporate organisation	32	ICAR/13 ING-IND/35	12	20	5	134
Teaching unit 8:						
Empowerment	16	SPS/07 SPS/08	4	0	2	54
Teaching unit 9:						
Design workshop	40	ICAR1/3 ICAR/16	12	12	6	150
Teaching unit 10: Internship		--				
Internship				392	16	392
TOTAL	296		72	112	60	1500
TOTAL hours teaching						872
TOTAL hours personal study						628

1) **Yacht Design**

principles, methods, tools and rules of boat design.

2) **Design and representation**

acquisition of manual and computer tools representing the project; acquisition of specific skills on dedicated software.

3) **Naval architecture**

acquisition of the skills needed to manage, during the design stage, know-how relating to: hull geometry, boat statics, resistance to motion, hydrodynamics, hydraulic modelling, fluid dynamics and aero dynamics, turbulence modelling.

4) **Shipbuilding:**

knowledge of the main construction methods, of the properties and characteristics of the materials used in the boats. Understanding and ability to identify innovations with regard to: material technologies and sciences, construction technique.

5) **On-board systems and propulsion equipment**

ability to understand the issues related to environmental management and acquisition of criteria for the choice of: motor and sail propulsion equipment, steering and monitoring equipment, equipment and fittings for deck, systems and on-board instruments.

6) **Interior design**

acquisition of design skills with strong focus on expressiveness with regard to: distribution of space and functional organisation, historic evolution of interior design methods, quality of finishing materials, methods of mock-up for monitoring choices.

7) **Production process and corporate organisation**

methods and technologies of production of different boat elements and components: organization of production process.

8) **Empowerment**

during the structuring of the educational programme an empowerment module will be developed, to train participants on the rationale and dynamics of change at the organisational and personal level, teamwork, relational dynamics and entry in the job market.

9) **Workshop**

integrated design exercise on topics identified during class.

10) **Internship**

to be carried out at a yacht-building site, company or professional practice.

ART. 4
Admission requirements

The Specialising Master in Yacht Design is open to applicants who have a university degree (Laurea, equivalent to a Bachelor of Science) under the old or the new educational system or a Laurea Magistrale (equivalent to a Master of Science) under the new educational system in Architecture, Engineering and Industrial Design, and in related economic disciplines, and to applicants with equivalent qualifications.

The Board shall admit applicants who have qualifications in disciplines other than those specified above, if the Master may complete the training of the applicant or the professional skills and experience shown by same.

The number of students admitted is 30.

The selection will be made by the Board.

ART. 5
Prerequisites

The application may be submitted from the day following the date of this Decree to **29 January 2016**.

*** Italian/foreign citizens with qualifications obtained in Italy**

Application on plain paper for admission to the Specialising Master containing self-certifications relating to:

- Personal identity (name and surname, date and place of birth, nationality and residence).
- Academic qualifications, indicating the marks obtained in each examination.
- A brief CV, including the title of the thesis submitted and the name of the supervisor, as well as any scientific articles published, stating the names of any co-authors.
- A brief CV detailing the applicant's work experiences to date.
- A copy of the student's identity document.

*** Italian/EU citizens with foreign qualifications**

Application on plain paper for admission to the Specialising Master containing:

- Self-certification relating to personal identity (name and surname, date and place of birth, nationality and residence)
- Photocopy of the academic certificate plus to certificate detailing the marks obtained for each examination (upon enrolment, the official certificate must be submitted, together with the legalized translation into Italian and to declaration of equivalence from the local Italian Diplomatic authorities).
- A brief CV, including the title of the thesis submitted and the name of the supervisor, as well as any scientific articles published, stating the names of any co-authors.
- A brief CV detailing the applicant's work experiences to date.
- A copy of the student's identity document.

The application form must contain the following statement: "I authorize the processing of my personal data by the Politecnico di Milano, pursuant to Legislative Decree. N. 196 of 30.6.2003".

The application form may be found on the website <http://www.polidesign.net/myd> and must be sent to:

Consorzio universitario Polidesign - Politecnico di Milano

Specialising Master in Yacht Design

Via Durando 38/a - 20158 Milan

Tel. 02/2399.5911

E-mail: formazione@polidesign.net

Pursuant to article 75 of Presidential Decree 445/2000, if the Administration finds, on the basis of appropriate checks, that non-truthful statements have been made by the applicant, this shall forfeit any benefits obtained on the basis of the false declarations made.

* **Non-EU citizens residing abroad**

Non-EU citizens residing abroad must submit:

- **Application** on plain paper for admission to the Specialising Master
- **Copy of the passport**, demonstrating citizenship
- **Copy of the degree certificate in the original language**
- **Translation of the degree certificate** into Italian (alternatively, the translation may be provided in English, French or Spanish)
- **Transcript** with the list of exams in the original language
- **Translation of the transcript** into Italian (alternatively, the translation may be provided in English, French or Spanish)

All documentation must be sent to the Politecnico di Milano

e-mail: master@polimi.it

fax: +39/ 02.2399.2565

Servizio Offerta Formativa e Post Laurea

Master e Corsi di perfezionamento

Piazza Leonardo da Vinci 32 Padiglione Nord
20133 Milan

by the closing date of this selection call, as required by the MIUR notice no. 602 of 18.05.2011.

Upon receiving applications for admission tests from the above-mentioned students, Corporate and Continuing Education (Master's Degree and Advanced Studies Programmes) will verify their actual participation and, if the candidates pass the aforementioned admission procedure, will communicate the outcome to the relevant Diplomatic authorities in order to prepare the documentation for enrolment in the Master (Declaration of Equivalence) and issue a national long-stay visa.

Non-EU citizens residing in Italy may personally deliver the documents listed above.

REGISTRATION METHOD:

QUALIFICATIONS OBTAINED IN ITALY

Students admitted to the Master course must submit an application for enrolment using the specific form provided, complete with revenue stamp. Students may certify their own educational qualifications earned in Italy by filling in the space provided on the registration form.

Non-EU citizens, in addition to the above documentation, **must submit a copy of their residence permit**.

QUALIFICATIONS OBTAINED ABROAD

Students admitted to the Master course must submit an application for enrolment using the specific form provided, complete with revenue stamp.

The academic qualifications obtained must be documented by presenting:

- **declaration of equivalence** issued by the local Italian diplomatic authorities (Italian Embassy or Italian Consulate) on letterhead paper complete with original stamp;
- **official translation** of the academic certificate into Italian, legalized with an original stamp by the local Italian diplomatic authorities (Italian Embassy or Italian Consulate);
- **original academic certificate** or true copy thereof; if the student does not possess this documentation, he or she should replace it with the original degree certificate.

Non-EU citizens, in addition to the above documentation **must submit a personal identity certificate** issued by the local Italian diplomatic authorities (Italian Embassy or Italian Consulate) and a **copy of the residence permit**.

Students born in a non-EU nation who declare EU citizenship must attach to copy of an identity document demonstrating EU citizenship. Students who fail to present to copy of an identity document demonstrating EU citizenship will be required to present to copy of their residence permit.

In order to be admitted to the Master's final examination, students must submit - within 30 days of the exam date - an appropriate application to the Politecnico di Milano on legal cap paper.

After completing the course and on passing the final exam, students in possession of foreign qualification should personally collect the original degree certificate filed with Corporate and Continuing Education (Master's Degree and Advanced Studies Programmes) of the Politecnico di Milano, after forwarding a request to the office at least one week before the scheduled date of collection. The true copy of the academic certificate will not be returned.

Any uncollected original degree certificates will be forwarded by post, under the responsibility of the student.

ART. 6 Certifications and awards

CERTIFICATION ISSUED

After completing the course and on passing the final exam, the 1st level Specialising Master in "Yacht Design" certification will be issued.

STUDENT OBLIGATIONS

Attendance of at least 75% of the course activities is required.

Withdrawal from the course must be submitted in writing. The training period cannot be suspended for any reason.

ASSESSMENT PROCEDURE

The assessment procedure involves course tests and a final exam. The final exam will consist in submitting and discussing a report prepared during the Master course.

ART. 7
Tuition fees and contributions

The total cost of the course is €11.000,00 per student.

- Registration fee in the Politecnico di Milano: €500.00 per student.
- Master tuition fees: €10.500,00 per student

The Politecnico di Milano registration fee will not be refunded in any case.

Registration and tuition fees can be paid on the current account No.:
10075/08 - CIN H - ABI 05696 - CAB 01620 - Banca Popolare of Sondrio, Agenzia 21, Via Bonardi No. 4 -
in the name of Consorzio POLI.design

IBAN IT19 H056 9601 6200 0001 0075 X08
BIC/SWIFT:POS0IT22

Giving as description of payment **Master YACHT**

FOR CLARIFICATIONS AND FURTHER INFORMATION, PLEASE CONTACT:

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Via Durando 38/a – 20158 Milano
Tel. +39/02/2399.5911
Fax: +39 0223995970
email: formazione@polidesign.net

Milan, 30.06.2015

THE RECTOR
(Prof. Giovanni Azzone)
Signed Giovanni Azzone