

## ANNEX 1

# DEGREE PROGRAM DIDACTIC REGULATIONS

## NAVAL ARCHITECTURE AND MARINE ENGINEERING

### CLASS LM-34

**School: Politecnica e delle Scienze di Base (Polytechnic and Basic Sciences)**

**Department: Ingegneria Industriale (Industrial Engineering)**

**Didactic Regulations in force since the academic year 2025-2026**

## STUDY PLAN

### KEY

#### Type of Educational Activity (TAF):

**B** = Characterising

**C** = Related or Supplementary

**D** = At the student's choice

**E** = Final examination and language knowledge

**F** = Further training activities

Year I									
Title Course	SSD	Module	CREDITS	Hours	Type Activities	Course Modalities	TAF	Disciplinary area	Mandatory/ optional
Probability and Statistics	SECS-S/02	single	6	48	Frontal lesson	In-person	C	Related or supplementary training activities	Mandatory
Ship Equipment	ING-IND/02	single	9	72	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
Naval Architecture	ING-IND/01	Architettura Navale I	9	72	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
		Architettura Navale II	6	48	Frontal lesson	In-person			
Ship Seakeeping	ING-IND/01	single	9	72	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
Ship Propulsion	ING-IND/02	single	9	72	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
Characterizing training activities chosen by the student from table A (I o II semester)	ING-IND/01 ING-IND/02 ING-IND/15	See table A	0-6	0-48	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Characterizing optional, can be included in the first or second year

Training activities autonomously chosen by the student (see note a)			0-12	0-96		In-person	D		Autonomously chosen, can be included in the first or second year
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Year II									
Title Course	SSD	Module	CRE DITS	Hours	Type Activities	Course Modalities	TAF	Disciplinary area	Mandatory/ optional
Marine Auxiliary Plants	ING-IND/02	single	9	72	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
Marine Electrical Systems	ING-IND/33	single	9	72	Frontal lesson	In-person	C	Related or supplementary training activities	Mandatory
Ship Structural Design and Ship Safety	ING-IND/02	Costruzioni Navali II	12	48	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
		Sicurezza della Nave e Normativa		48	Frontal lesson	In-person	B		
Ship Design	ING-IND/01	single	6	48	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Mandatory
Characterizing training activities chosen by the student from table A (I o II semester)	ING-IND/01 ING-IND/02 ING-IND/15	See table A	6-0	48-0	Frontal lesson	In-person	B	Naval Architecture and Marine Engineering	Characterizing optional, can be included in the first or second year
Training activities autonomously chosen by the student (see note a)			12-0	96-0			D		Autonomously chosen, can be included in the first or second year
Training activities Art. 10 Coma 5 MD 270/2004 (Further knowledge - see note b)		single	6	48		Internship	F		Mandatory
Training activities Art. 10 Coma 5 MD 270/2004 (Further knowledge - see note b)		single	3	24		further linguistic knowledge	E		Mandatory
Final test			9				E		Mandatory

## Note

- a) If the courses are chosen from Tables A or B, the study plan is automatically approved, but it must still be submitted to the Didactic Coordination Commission. In other cases, the study plan must be approved by the CCD.
- b) Further training activities include 3 credits for further linguistic knowledge and 6 of internship.

Students who have certification of knowledge of a European Union language at least at B2 level at the time of enrollment can request recognition of the 3 CFU required for Further Linguistic Knowledge.

Further knowledge can be acquired through intramoenia internship or extramoenia internship. The latter is carried out in companies, research centers or other public and/or private bodies and aims to acquire specialist knowledge with the support of personnel involved in the design, production and management of production or research plants, in order to have a first approach to the working world.

The intramoenia internship can be carried out in university research laboratories to acquire specialist knowledge by working alongside teaching and research staff in conducting research and development activities. In all cases, the activity can be preparatory to the thesis work and the fulfillment of these tasks must be certified through the acquisition of the AC form countersigned by the teacher responsible for the internship activity or by the supervisor of the degree thesis.

The training activities of the art. 10 paragraph 5 Ministerial Decree 270/2004 (further knowledge) can also be acquired by the student by following seminars accredited by the CdS in Naval Architecture and Marine Engineering.

**Table A: training activities characterizing Naval Architecture and Marine Engineering chosen by the student**

Year I/II								
Title Course	SSD	Module	CRED TS	Hours	Type Activities	TAF	Disciplinary area	Mandatory/ optional
Design for Additive Manufacturing	ING-IND/15	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Geometric Modeling of Free Shapes	ING-IND/15	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Ship Stability II	ING-IND/01	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Experimental Methods in Naval Architecture	ING-IND/01	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Hull Design	ING-IND/01	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Automatic Management of Marine Plants	ING-IND/02	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Innovative fuels and technologies for marine applications	ING-IND/02	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Naval Vessels	ING-IND/02	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Offshore Constructions	ING-IND/02	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Design of eco sustainable ships	ING-IND/01	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional
Numerical Methods for Naval Architecture	ING-IND/01	single	6	48	Frontal lesson	B	Naval Architecture and Marine Engineering	optional

**Table B: Training activities autonomously chosen by the student**

Year I/II								
Title Course	SSD	Module	CRED TS	Hours	Type Activities	TAF	Disciplinary area	Mandatory/ optional
Structural Mechanics II	ICAR/08	single	6	48	Frontal lesson	D		optional
Economics and business organization	ING-IND/35	single	6	48	Frontal lesson	D		optional
Heating, Ventilating, Air Conditioning Systems	ING-IND/10	single	9	72	Frontal lesson	D		optional
Navigation Systems for Maritime Surveillance	ING-IND/05	single	6	48	Frontal lesson	D		optional
Mathematical Methods for Engineering	MAT/05	single	9	72	Frontal lesson	D		optional
Design Machine	ING-IND/14	single	6	48	Frontal lesson	D		optional
Environmental Sustainability of Maritime Transport	CHIM/07	Analisi della sostenibilità ambientale del trasporto navale	12	48	Frontal lesson	D		optional
	ING-IND/09	Gestione della sostenibilità ambientale del trasporto navale		48		D		
Design Principles For Wind And Ocean Renewable Energy Systems	ING-IND/03	single	6	48	Frontal lesson	D		optional
Hydrodynamics II	ICAR/01	single	6	48	Frontal lesson	D		optional
Energy Sustainability in Smart Transportation and Infrastructures	ING-IND/10	single	9	72	Frontal lesson	D		optional

List of propaedeuticities

Title Course	Propaedeuticities	Is a propaedeuticity for
Naval Architecture		Ship Design
		Marine Auxiliary Plants
		Hull Design
		Numerical Methods for Naval Architecture
Ship Seakeeping	Probability and Statistics	
Ship Propulsion		Marine Auxiliary Plants
Marine Auxiliary Plants	Naval Architecture	Design of eco sustainable ships
	Ship Propulsion	
Hull Design	Naval Architecture	
Ship Design	Naval Architecture	
Design of eco sustainable ships	Marine Auxiliary Plants	
Numerical Methods for Naval Architecture	Naval Architecture	