

# Bachelor of Science in Naval Engineering



#### **Applicant Profile**

If you want to study Naval Engineering, you must be interested in ship design and construction, or in organizing maritime cargo and passenger transportation. Additionally, you must have skills in mathematics, physics, and chemistry, and be willing to use engineering technology tools.



#### **Program Educational Objectives**

After 4 years of study, you will be able to:

- Participate in significant ship and maritime systems projects throughout the various phases of their life cycle.
- Contribute to the development of the maritime and industrial sectors by leading multidisciplinary teams, promoting innovation, and ensuring compliance with national and international regulations.
- Carry out technical and managerial activities while demonstrating ethical conduct and social, economic, and environmental responsibility in the maritime sector.



### **Employability**

As a Naval Engineer from ESPOL, you will be able to work in various areas of the industry: shipyards and dry docks, design offices, shipbuilding and maintenance companies, port administration, and maritime service providers. You will be able to hold the following positions:

- Heads of ship design, maintenance, and construction departments.
- Maritime transportation planners and coordinators.
- Marine supervisors or surveyors.
- Managers in engineering, naval design, and maritime projects.
- Technical advisors for marine equipment.

# **Curriculum Structure**

LEVEL 100 - I	SINGLE VARIABLE CALCULUS	PHYSICS: MECHANICS	PROBLEM SOLVING
	ARTS, SPORTS AND LANGUAGES ELECTIVE COURSES	GENERAL CHEMISTRY	ENGLISH I
LEVEL 100 - II	VECTOR CALCULUS	PHYSICS: ELECTRICITY AND MAGNETISM	PROGRAMMING FUNDAMENTALS
	COMMUNICATION	MATERIALS IN MARINE ENVIRONMENT	ENGLISH II
LEVEL 200 - I	DIFFERENTIAL EQUATIONS AND LINEAR ALGEBRA	NUMERICAL METHODS	STATISTICS
	VECTOR MECHANICS	ENGLISH III	
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LEVEL 200 - II	THERMODYNAMICS	LINES PLAN AND SHIP HYDROSTATICS	SOLID MECHANICS
	SUSTAINABILITY SCIENCE	ENGLISH IV	
LEVEL 300 - I	MARINE MACHINERY I	SHIP STABILITY	FLUID MECHANICS
	SHIP STRUCTURES	HUMANITIES ELECTIVE COURSES	ENGLISH V



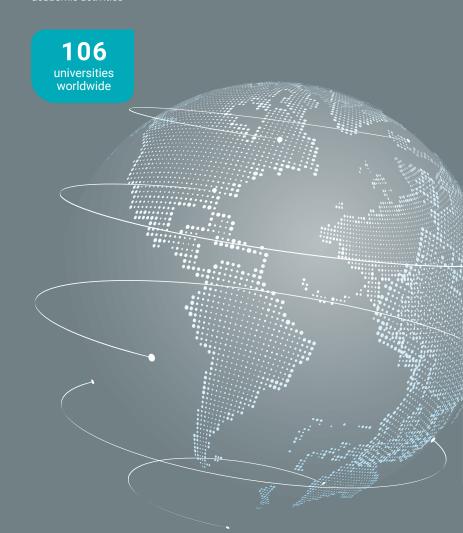


Thanks to our agreements, our students have the great opportunity to complete internships at prestigious companies and enhance their academic training with studies abroad.



ESPOL, through its Foreign Relations Office, promotes and develops ties with international cooperation agencies and academic and research institutions. These ties generate mobility opportunities for the entire polytechnic community and contribute to the excellence that characterizes us.

More than 165 agreements allow our students to undertake stays abroad, including semester-long or annual exchanges, pre-professional internships, research internships, and participation in conferences, competitions, and other academic activities



#### **Accredited Program**



Engineering Accreditation Commission





## Did you know?

The Naval Engineering Program offers you the opportunity to grow as a professional through international internships, collaborating on experimental tests for new structural designs and engineering materials, or working in virtual or hydrodynamic test tanks at universities around the world.

> www.fimcm.espol.edu.ec www.admision.espol.edu.ec







