

Code: 33 „Resistance, Propulsion and Maneuvering of Ships and Marine Structures -part 1”

ECTS credits: 6

Number of hours per week: 2+0+1

Forms of assessments: Continuous assessment

Types of assessment: Continuous assessment mark - Achievement tests

Department, providing instruction on the discipline:

Department: *NAVAL ARCHITECTURE AND MARINE ENGINEERING*  
*FACULTY OF SHIPBUILDING*

Lecturer: Assoc. Prof. Dr. Stefan Kyulevcheliev

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**Annotation:**

This is the first part of the course dealing with resistance of ships and part of propellers related to geometry, hydrodynamic characteristics of propellers and their interaction with the hull’

**Main issues of the syllabus content:**

- Nature, causes of resistance. Components of resistance.
- Viscous resistance
- Wave resistance
- Influence of environmental factors on resistance.
- Relation between hull form and resistance
- Experimental methods of determining ship resistance.
- Geometrical characteristics of marine propellers.

**Content presentation:**

The content of the course is presented by lectures and laboratory exercises. The lectures elaborate the issues covered. The laboratory exercises give the students practical skills in determining the ship resistance.