

## **Budapest University of Technology and Economics**

# Faculty of Transportation Engineering and Vehicle Enginee

1. Subject name	Theory o	f Ships III	•			
2. Subject name in Hungarian	Hajók elmélete III.					
3. Code	BMEKOVRM616	4. Evaluation type	exam grade	5. Credits	3	
6. Weekly contact hours	2 (9) Lecture	1 (5) Practice	0 (0) Lab			
7. Curriculum	Vehicle Engineering MSc (J)	8. Role	Specialization (sp) at Vehicle Engineering MSc (J)			
9. Working hours for fulfilling the requirements of the subject					90	
Contact hours	42	Preparation for seminars	8	Homework	15	
Reading written materials	10	Midterm preparation	0	Exam preparation	15	
10. Department	Department of Aeronautics and Naval Architectures					
11. Responsible lecturer	Dr. Simongáti Győző					
12. Lecturers	Dr. Simongáti Győző					
13. Prerequisites						
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#### 14. Description of lectures

Floatation and stability of damaged and grounded ships. Floodable length calculation. Deterministic and probabilistic methods for calculation of damaged stability. Stability of unconventional ships (such as split barges, floating cranes, etc.)

#### 15. Description of practices

Stability calculations of different vessel types.

#### 16. Description of labortory practices

#### 17. Learning outcomes

#### A. Knowledge

- know and understand the methods for damaged stability calculations,
- know and understand the methods for grounded ship flotation and stability calculations,
- know and understand the methods for calculation of floodable length,
- know and understand the methods for deterministic and probabilistic damaged stability calculations,
- know and understand the calculation methods for floating cranes, split barges,
- know the softwares supporting the above calculations,
- know and understand the rules and regulations for damaged stability calculations,
- know the methods for preparing damaged stability documentation.

#### B. Skills

- able to find and interpret relevant rules,
- able to perform damaged stability calculations and prapare documentation, and
- able to interpret the results of calculations from the designers point of view.

#### C. Attitudes

- interested, responsive, take care for the deadlines.
- D. Autonomy and Responsibility
  - the student makes responsible decisions,
  - asks for the professional opinions of others, and
  - takes care of the challenges responsibly.

#### 18. Requirements, way to determine a grade (obtain a signature)

Requirements for signature: 1 report and submission of the seminar report

1 exam measuring the theoretical knowledge

the final result is the average of the parts

### 19. Opportunity for repeat/retake and delayed completion

Second exam and delayed submission of the homework

20. Learning materials							
Related national and international scientific literature							
Effective date	10 October 2019	This Subject Datasheet is valid for	Inactive courses				