1. Subject name	**Ship design PhD**				
2. Subject name in Hungarian	Hajótervezés PhD				
3. Code	**BMEKORHD011**	4. Evaluation type	**exam grade**	5. Credits	**2**
6. Weekly contact hours	**2 (0) Lecture**	**0 (0) Practice**	**0 (0) Lab**		
7. Curriculum	**PhD Programme**	8. Role	**Specific course**		
9. Working hours for fulfilling the requirements of the subject					**60**
Contact hours	28	Preparation for seminars	10	Homework	12
Reading written materials	4	Midterm preparation	0	Exam preparation	6
10. Department	**Department of Aeronautics and Naval Architectures**				
11. Responsible lecturer	Dr. Simongáti Győző				
12. Lecturers	Dr. Simongáti Győző, Dr. Hargitai L. Csaba				
13. Prerequisites	**recommended: BMEKOVRM615 - Ship design**				

14. Description of lectures

The subject is able to evaluate independently the sub-tasks of ship design (definition of main dimensions, stability calculation, resistance calculation, drive design, maneuverability, structural design, etc.). They will be able to establish novel relationships in a deeper context of ship design and will be familiar with the scientific dilemmas, problems and current solutions to each subtask.

15. Description of practices

16. Description of labortory practices

17. Learning outcomes

A. Knowledge

- know and understand the up to date problematics of stability calculations, problems of determination of thrust deduction factor and wake fraction, ship motion simulation methods, prediction methods for fuel consumption, new, modern application of CFD in ship design.

B. Skills

- able to understand and use the results of scientific publications, bale to use others knowledge for his/her own research project, able to write own publication.

C. Attitudes

- interested, responsive, independent, take care for the deadlines.

D. Autonomy and Responsibility

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

The pre-condition of the exam is the submission and acception of the own work. The exam is oral.

19. Opportunity for repeat/retake and delayed completion

according to the TVSZ

20. Learning materials

1. Hajók Kézikönyv
2. Dr. Benedek Z. – Hajók 1-3.
3. D. J. Eyres – Ship constuction
4. Young Bay – Marine structural design
5. Dr. Deseő Z. – Hajótestek szilárdsági kérdései

6. J S Carlton – Marine Propellers and Propulsion, Second Edition, 2007
7. Schneekluth, Bertram: Ship design for efficiency and economy. Butterworth Heinemann, 1998.

Effective date	27 November 2019	**This Subject Datasheet is valid for**	Inactive courses