

MSc in Mechanical Engineering Modelling
Fluid Mechanics Specialization
2N-MW0-FM
compulsory subject

SUBJECT DATA SHEET AND REQUIREMENTS

last modified: 5th December 2013

TEAMWORK PROJECT

CSOPORTMUNKA PROJEKT

1	Code	Semester Nr. or fall/spring	Contact hours/week		Credit	Language	
(lect.+semin.+lab.)							
Е	BMEGEÁTMWTP	2.(1.*) fall	0+0+3	р	3	English	
*: in case of enrolment in fall 2. Subject's responsible:							
Name:		Title:		Affiliation (Department)			
Dr. Vik	Or. Viktor SZENTE assistant professor		Dept. of Fluid Mechanics				
3. Lecturer:							
Name:		Title:		Affiliation (Department)	:		
-		-		Dept. of Fluid Mechanic	S		

4. Thematic background of the subject:

Knowledge of the subjects of the MSc curriculum and specialisation.

5. Compulsory / suggested prerequisites:

Compulsory: -Suggested: -

6. Main aims and objectives, learning outcomes of the subject:

The aim of the course is to develop and enhance the capability for complex problem solving in group of 2-3 students under advisory management of their project supervisor and advisors. Each students' group project is guided by the supervisor and depending on the problem -if applicable- by advisor(s). They form the so-called evaluation team.

7. Method of education: lecture 0h/w, seminar 0h/w, laboratory 3h/w

Several experimental and/or numerical (CFD) teamwork project proposals will be announced by the supervisors on the registration week or before on the webpage of the Department. In course of the Teamwork Project the group of students will work on one selected challenging (theoretical and/or experimental and/or numerical) problem mainly of fluid mechanics.

8. Detailed thematic description of the subject:

Experimental and/or numerical (CFD) teamwork project proposals will be announced by the supervisors on the registration week or before for group of 2-3 students. The Teamwork Project proposals are defined as being complex problems for the 1st or 2nd semester, and also can be continued partly by a single student in course of the Final Project A or B (BMEGEÁTMWDA or BMEGEÁTMWDB) in the 3rd and 4th semester, hence resulting in a fully complex MSc Thesis of the student at the end of the curriculum. A so-called Evaluation Team (ET) is formed in that the group's supervisor + two advisors are participating, being the members of ET.

- 9. Requirements and grading
- a) in term-period: two oral presentation of results and one written project report.

1st evaluation team meeting: on the 6th week:

1 st presentation by one member of the team



2nd evaluation team meeting: on the 13th week: 2nd presentation by another member of the team Teamwork Project report: submission deadline: see on the Project Assignments (= 4PM on the last working day (Friday) of the semester: 14th week) in printed and electronic (CD/DVD) format. It is obligatory to use a common template for format: see detailed template on the subject's website. Document: max. 30 pages (body text from the Introduction and chapters to the Conclusion, including Figures, Tables, etc.). The Report must contain the signed original Project Assignment document and all data that is used in course of the project.

Evaluation team members assess the group's work, the presentations & the report in % mark.

The final grade (practical mark) is calculated based on the % marks (being the average value of the members marks) of the supervisor and the two advisors.

1st ETM its %mark counts as being the 20% of the final grade 2nd ETM its %mark counts as being the 35% of the final grade Report its %mark counts as being the 45% of the final grade

Minimum requirements: result of the teamwork project presentations and report must pass (each) the minimum 40%, i.e. "pass" (2) level, as a given in-formative final grade. The same practical mark is given for all team members.

- b) in examination period: -
- c) The students are subject to disciplinary measures against the application of unauthorized means at midterms, term-end exams and homework and the application of the 1/2013. (I.30.) Dean's Order must be followed.

10. Retake and repeat

Very late submission deadline: at 4PM on the day before the last day on the 15 th week of the semester. Any further movements are due to the Code of Studies and Exams of BME.

11. Consulting opportunities:

Consultation hours: by email appointments and as it is indicated on the department's website. Supervisor / advisors / evaluation team members are available in weekly consulting hours

- 12. Reference literature (compulsory, recommended):
 - Preliminary literature survey is essential part of the project start, but reference literature will be provided by the supervisor / advisors, too.
 - Downloadable materials: www.ara.bme.hu/oktatas/tantargy/NEPTUN/BMEGEATMWTP
- 13. Home study required to pass the subject:

Contact hours	42	h/semester
Home study for the courses	38	h/semester
Home study for the mid-semester checks	10	h/check
Preparation of mid-semester homework	-	h/homework
Home study of the allotted written notes	-	h/semester
Home study for the exam	=	h/semester
Totally:	90	h/semester

14. The data sheet and the requirements are prepared by:

Name:	Title:	Affiliation (Department):
Dr. Viktor SZENTE	assistant professor	Dept. of Fluid Mechanics