

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

SUBJECT DATA SHEET AND REQUIREMENTS

last modified: 5th December 2013

FINAL PROJECT A

DIPLOMATERVEZÉS A

1 Code	Semester Nr. or fall/spring	Contact hours/week	Requirements p/e/s	Credit	Language
		(lect.+semin.+lab.)			
BMEGEÁTMWD	A 3.	0+13+0	р	15	English
	spring(fall*)				
	*: in case of enrolment in fal				
2. Subject's responsible	j:				
Name:	Title:	Aff	lliation (Department)	:	
Dr. Jenő Miklós SUDA	assistant profe	essor Dep	t. of Fluid Mechanics	S	
3. Lecturer:					
Name:	Title:	Aff	iliation (Department)	:	
-	-	Dep	ot. 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 of the students under advisory management of their project leader and advisors. Each student's 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 13h/w, laboratory 0h/w

Several experimental and/or numerical (CFD) final project proposals will be announced by the supervisors on the registration week or before on the webpage of the Department. In course of the Final Project A one single student will work on one selected challenging (theoretical and/or experimental and/or numerical) problem of fluid mechanics.

8. Detailed thematic description of the subject:

Experimental and/or numerical (CFD) major project proposals will be announced by the supervisors on the registration week or before. The Final Project A proposals are defined as being complex problems for the 3 rd semester and also can be continued in course of the Final Project B (BMEGEÁTMWDB) in the 4 th semester, hence resulting in the MSc Thesis of the student. A so-called Evaluation Team (ET) is formed in that the student'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 project presentation by the student



2nd evaluation team meeting: on the 13th week: 2 nd project presentation by the student

Final Project A 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 student'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: students work must pass the minimum 40%, i.e. "pass" (2) level, as a given informative final grade.

- 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/BMEGEATMWDA
- 13. Home study required to pass the subject:

Contact hours	182	h/semester	
Home study for the courses	248	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:	450	h/semester	

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

Name:	Title:	Affiliation (Department):
Dr. Jenő Miklós SUDA	assistant professor	Dept. of Fluid Mechanics