Budapesti Műszaki és Gazdaságtudományi Egyetem
Gépészmérnöki Kar
Áramlástan Tanszék
Mechanical Engineering Modelling (MSc)
Fluid Mechanics major (MSc)

Budapest University of Technology and Economics
Faculty of Mechanical Engineering
Department of Fluid Mechanics
Mechanical Engineering Modelling (MSc)
Fluid Mechanics major (MSc)

SUBJECT DATA SHEET AND REQUIREMENTS
(TANTÁRGY ADATLAP ÉS TANTÁRGYKÖVETELMÉNYEK)
Last modified / Utolsó módosítás: 2011.07.19.

Final Project
(Diplomatervezés 2.)

1.	*Code (kód)*	*Semester (szemeszter)*	*Requirements (követelmények)*	*Credit (kredit)*	*Language (nyelv)*
	BMEGEÁTMWD2	4.	lect./sem./lab. (**e**xam / **p**ract. / **s**ignat.) 0/0/15 (s)	19	English

2. Responsible person and Department (Tantárgyfelelős személy és Tanszék):

Name (Név):	*Status (beosztás):*	*Department (Tanszék):*
Dr. Jenő Miklós SUDA	assistant professor	Dept. Fluid Mechanics

3. Lecturer (A tantárgy előadója):

Name (Név):	*Status (beosztás):*	*Department (Tanszék):*
-	-	Dept. Fluid Mechanics

4. Thematic background of the subject (A tantárgy az alábbi témakörök ismeretére épít):

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5. Compulsory / suggested pre-requisites (Kötelező/ajánlott előtanulmányi rend):

	Subject name (tárgynév)	*Code (tárgykód)*
Compulsory pre-requisites:	Major Project	BMEGEÁTMWD1
Suggested pre-requisites:	-	-

6. Main objectives of the subject (A tantárgy célkitűzései):

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 project leader and depending on the problem -if applicable- by advisor(s). They form the so-called evaluation team.

7. Detailed thematic description of the subject (A tantárgy részletes tematikája):

Several experimental and/or numerical (CFD) final project proposals will be announced by the project leaders on the registration week or before.
The final project proposals are defined as being complex problems of fluid mechanics, that's solving started in the 3rd semester in course of the Major Project (BMEGEÁTMWD1) and is to be continued in course of the Final Project (BMEGEÁTMWD2) in the 4th semester, hence resulting in the Master Thesis of the student.

8. Mode of education of the subject (A tantárgy oktatásának módja):

In course of the Final Project one single student will work on the selected challenging problem of fluid mechanics.

9. Requirements (Követelmények):

1st evaluation team meeting:	on the 4th week:	1st project presentation by the student
2nd evaluation team meeting:	on the 8th week:	2nd project presentation by the student

3rd evaluation team meeting: on the 13th week: 3rd final project presentation by the student

Evaluation team members assess the students work, the 3 presentations & the report in %.
The final grade (practical mark) is calculated based on the % marks of the supervisor and the advisors.
1st ETM 10% of the final grade
2nd ETM 25% of the final grade
3rd ETM 30% of the final grade
Report 35% of the final grade

MSc Thesis = Final Project Report:
Submission deadline: the last working day on 16PM of the semester (14th week, on Friday 16h) in printed and electronic (CD/DVD) format. It is obligatory to use a common template for Thesis format: see detailed template on the website. Document length: approx. 70 pages (min. 50 – max. 100) pages (body text from Introduction and the chapters to the Conclusion, including Figures, Tables, etc.). The Thesis must contain the signed original Project Assignment document.

The calculated final grade is only an informative grade for the student and supervisor.

The supervisor gives a *Signature* as final mark when the students work passes the minimum 40%, i.e. "acceptable" level.

The Thesis then submitted to an opponent (e.g. expert of the given subject). The opponent person is selected by the supervisor of the student.

10. Consulting opportunities (Konzultációs lehetőségek):

Project leader / advisors / evaluation team members are available in weekly consulting hours.

11. Reference literature (Jegyzet, tankönyv, felhasználható irodalom):

– Website of the subject: http://www.ara.bme.hu/oktatas/tantargy/NEPTUN/BMEGEATMWD2

Preliminary literature survey is essential part of the project start, but reference literature will be provided by the project leader / advisors, too.

12. Home study required to pass the subject (A tantárgy elvégzéséhez szükséges tanulmányi munka):

15 contact hours / week, + home study 15 hours / week

13. The data sheet and the requirements are prepared by (A tantárgy tematikáját kidolgozta):

Budapest, 23rd of April 2012.

Name (név):	*Status (beosztás):*	*Department (Tanszék):*
Dr. Jenő Miklós SUDA	assistant professor	Dept. Fluid Mechanics