



## COURSE DATASHEET

<b>Semester:</b>	2014/15/2
<b>Course:</b>	Individual design project
<b>Code:</b>	VEMKVVM236T
<b>Responsible department:</b>	Institute of Chemical and Process Engineering
<b>Department code:</b>	MKVV2
<b>Responsible instructor:</b>	dr. Sándor Németh

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### Course objectives:

The Individual Design Project has an important role in the chemical engineering master program. The objectives of this form of instruction are that the students:

- get experience in the process of chemical engineering design ranging from the concepts to the elaboration of the detailed design,
- practise the application of chemical engineering knowledge learnt in different subjects at a level close to industrial practice as much as possible,
- approach the design problem in a straight forward and creative way,
- be able to write comprehensive, detailed technical reports,
- meet the accreditation requirements of IChemE

### Course content:

- 1/ Formulation of the design problem (product, unit, or control system or safety system)
- 2/ Literature
- 3/ Thermodynamic, physical and chemical properties
- 4/ Detailed design of product or unit or control system or safety system.
- 5/ Insert the new system into the technology.
- 6/ Starting and stopping. (optional)
- 7./ HAZOP study.
- 7/ Lifecycle analysis, study of environmental problems (in case of unit design)
- 8 Energetics analysis (in case of unit design)
- 9/ Costing and project evaluation
- 10/ Discussion

### Requirements, evaluation and grading:

The interim requirements are decided first of all by the supervisor and the consultants. The marks are determined, based on the instructors' assessment, in a grading conference.

### Required and recommended readings:

References can be found on the Moodle learning system.



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**Required and recommended readings:**