



## SUBJECT DATASHEET

<b>Semester:</b>	2009/10/2
<b>Subject:</b>	Advanced chemical engineering
<b>Code:</b>	VEMKMUM112M
<b>Responsible department:</b>	Department of Chemical Engineering Science
<b>Responsible department code:</b>	MKMU
<b>Responsible lecturer:</b>	dr. Géza Horváth

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### Educational objectives:

The unification of students' knowledge with different backgrounds, preparation for VEMKFMM218M.

### Detailed content of the subject:

1. The description of operations, thermodynamic tools and limits 2. Continuous and periodic operations 3. Reology 4. Dimension analysis, similarities, analogies 5. Surface phenomena 6. Analysis of separation methods 7. The role and use of enthalpy 8. Mid-term paper 9. The qualification and storage of clean materials and mixtures 10. Ion exchange and adsorption 11. The limits of classical diffusion operations 12. Mixing and stirring 13. Basics of industrial chromatography 14. Most prevalent unit operations in the industry 15. End-term paper

### Requirements:

The lectures' materials.

### Required and suggested references:

Különböző tanszéki kiadványok a finomkémiai szakmérnöki kurzushoz.