



## COURSE DATASHEET

<b>Semester:</b>	2016/17/1
<b>Course:</b>	Up-to-Date Reaction Engineering
<b>Code:</b>	VEMKFMM258R
<b>Responsible department:</b>	Department of Chemical Engineering Science
<b>Department code:</b>	MKMU
<b>Responsible instructor:</b>	Dóra Rippelné Dr. Pethő

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### Course objectives:

Novel trends in chemical and biochemical reaction engineering

### Course content:

1. Reaction in the chemical industry. The production, reactor development.
2. Reactor classification, batch, plug flow, mixed flow reactors
3. Reactors as a unit operation equipment
4. One step, two step reactions
5. Multiphase reactors
6. Heterogeneous catalysis
7. Packed, fluidised bed reactors
8. Deactivation of the catalyst
9. G-F, F-F reactors
10. G-S reactions
11. Reactor configuration and flow pattern

### Requirements, evaluation and grading:

One exam must be written and one oral examination. Reports qualification > 2

### Required and recommended readings: