



## COURSE DATASHEET

<b>Semester:</b>	2016/17/1
<b>Course:</b>	Up-to-Date Methods in the Petroleum Industry
<b>Code:</b>	VEMKOLM114E
<b>Responsible department:</b>	Department of Hydrocarbon and Coal Processing
<b>Department code:</b>	MKOL
<b>Responsible instructor:</b>	Dr. Jenő Hancsók

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### Course objectives:

Presenting the base and modern processes of the refining industry.

### Course content:

1. Introduction. Energy, power plants.
2. Preparation of natural gas and crude oil in the field
3. Natural gas cleaning and processing. LNG, LPG, NGL.
4. Refineries.
5. Separation processes in the hydrocarbon industry
6. Conversion processes I. Hydrotreating.
7. Conversion processes II. Alkylation, oligomerization.
8. Conversion processes III. C4-C7 isomerization
9. Conversion processes IV. Fluid catalytic cracking
10. Conversion processes V. Hydrocracking
11. Production of base oils
12. Processing of residues.
13. Additives in crude oil refining
14. Refinery products and blending.

### Requirements, evaluation and grading:

Participation on the lectures is not compulsory. Scoring based on the following method: exam (written) + exam (oral)

### Required and recommended readings: