

# **UNIVERSITY OF PANNONIA**

# COURSE DATASHEET

**Semester:** 2014/15/1

Course: Process engineering tools

Code: VEMKFOM358T

Responsible department: Department of Process Engineering

**Department code:** MKFO

Responsible instructor: dr. Lajos Nagy

# Course objectives:

Introduction to process engineering problems and tools

#### Course content:

Introduction to process engineering problems Information sources, models and tools of process engineering Classification of process engineering tools Models and using of models for problem solving Tools for solving process engineering problems Using Matlab for solving process engineering problems Operating of flow sheeting simulators Structure of Aspen Plus Elements of Aspen Plus Operation of dynamics simulators Structure of Aspen Dynamics Midterm examination Case study II. Case study II.

### Requirements, evaluation and grading:

Required and suggested references: AspenPlus Users Guide. Matlab and Simulink Users Guide. Bequette, B. W.: Process Dynamics: Modeling, Analysis, and Simulation, Prentice Hall, London Requirements: Completing two midterm examinations. Possibilities for repeating the subject: Repeated examination on the course content. Accepted equivalent subjects: Learning efforts necessary to satisfy the requirements of the subject: Learning of the course material.

### Required and recommended readings:

AspenPlus Felhasználói Kézikönyv. Matlab and Simulink Felhasználói Kézikönyv. Bequette, B. W.: Process Dynamics: Modeling, Analysis, and Simulation, Prentice Hall, London