Course Unit Descriptor

Study Programme: Energy And Process Engineering
Course Unit Title: Membrane Processes and Equipment
Course Unit Code: M35I43
Name of Lecturer(s): Sokolović Dunja
Type and Level of Studies: Master Academic Degree
Course Status (compulsory/elective): elective
Semester (winter/ summer): winter
Language of instruction: english
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 4
Prerequisites: none
Course Aims:. The goal of this course is the introduction of the basic principles of membrane operation processes for the purpose of energy savings in the industry and the development of new "green" technologies.
Learning Outcomes: Training for the right selection and proper application of membrane process in the industry.
Syllabus. Classification of membrane operation by: the driving force, the organization of the flow of fluids, and other criteria. Analysis of the basic demands of membrane separation processes such as fractionation, concentration, etc.. Acquiring the principle of operation of certain membrane processes. Application of membranes in the industry for the purpose of energy saving and the development of new "green" technologies. Special emphasis on the use of membranes in the industry of our region.
Required Reading: Relevant literature in English, tbd

Weekly Contact Hours: 2	**Lectures: 2**	**Practical work: 0**

Teaching Methods: Lectures, computer tutorials, laboratory and computational exercises, auditory and industry practice and consultations. Interactive teaching. Seminar assignments, short presentations and projects are forms of pre-examination obligations that are done individually or in groups of two and /or more students, depending on the complexity of the task.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			