

Incoming student mobility

Name of UNIOS University Unit: Mechanical Engineering Faculty in Slavonski Brod

COURSES OFFERED IN FOREIGN LANGUAGE FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS

Department or Chair within the UNIOS Unit	Department of Energetics
Study program	Mechanical Engineering
Study level	Graduate (master)
Course title	Heat Exchangers
Course code (if any)	D 767
Language of instruction	English
Brief course description	The course focuses on the selection and thermohydraulic design of heat exchangers. The content of the course: Classification of heat exchangers. The relevant non- dimensional numbers of recuperators. Calculation of recuperators using ϵ , NTU – method. The calculation of recuperators using LMTD – method. The calculation of evaporators and condensers as a special case of recuperators. The achieved minimal temperature differences of the streams. Comparison of the recuperators using effectiveness as a criterion. Some solutions of recuperators with multi-passes of the streams. Calculation of the pressure drop of the streams passing through recuperators. Analysis and discussion of the overall heat transfer coefficient value including fouling factor. The thermal design methods for double pipe, shell and tube and compact heat exchangers.
Form of teaching	Lectures and exercises. During the teaching session tests are provided to assess the knowledge.
Form of assessment	Written and oral exam. Partial exams during semester can replace written exam.
Number of ECTS	5
Class hours per week	2 hours of lectures + 2 hours of exercises
Minimum number of students	5

ERASMUS+

EU programme for education, training, youth and sport

Period of realization	Winter semester
Lecturer	Full Prof. Dr. Marija Živić