

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 Production Engineering
Study program	Mechanical Engineering
Study level	Graduate (master)
Course title	Welding
Course code (if any)	D 851
Language of instruction	English
Brief course description	Students are introduced to topics dealing with possible failure modes of welded joints and with possibilities of failure prevention. Description of failure examples and potential risks of failures are elaborated. Examples of welded joints collapse on welded structures are analyzed in order to determine failures mode and causes, as well as activities that need to be done in order to assure reliability against failure. Failures in welded joints happen due to the fact that welding weakens base materials. However, failures are defined as occurrences above acceptance criteria which can be detected by appropriate nondestructive tests. Mechanisms and factors of welded joints weakening are explained (weakening of base metal due to welding). Furthermore, weld joint classes and weldability of commonly used materials are elaborated. Weldability of materials is explained from the metallurgical, operative and constructive aspects. Special emphasis is put on conditionally and hardly weldable materials and on welding of dissimilar materials.
Form of teaching	Lectures, practical and auditory exercises
Form of assessment	Written exam and/or oral exam
Number of ECTS	5
Class hours per week	2 hours of lectures + 2 hours of exercises

ERASMUS+

EU programme for education, training, youth and sport

Minimum number of students	5
Period of realization	Summer semester
Lecturer	Full Prof. Dr. Ivan Samardžić, EWE