

Study program / course: Mechanical Engineering				
Type and level of study: Master academic studies				
Course: Welded and cast structures				
Lecturers: Nikolić, R. Ružica				
Status of course: Elective for module M2, III semester				
Number of ECTS: 6				
Prerequisite: Passed exam: Metal Structures				
The course objective Getting students acquainted with properties and types of the welded and cast structures. Enabling students to calculate and design both types of structures.				
The course outcome Students are able to calculate and design welded and cast structures.				
Syllabus				
Theoretical study Area of application, properties and types of the welded structures. Technologicity of the welded structures. Design and mass reduction of the welded structures. Possible ways and causes of failures. Area of application, properties and types of the cast structures. Technologicity of the cast structures. Casting and notion of castability. Casting alloys. Casting of the colored metals alloys. Design of the cast structures.				
Practical classes Problems solving, homeworks, tests and colloquia. (Same areas as for theoretical lecturing)				
Recommended reading				
1. Perović, Z., "Welded structures", University of Montenegro, Podgorica, 2002. (In Serbian)				
2. Kovač, R., "Technology of cast pieces manufacturing", University of Novi Sad, Novi Sad, 2002. (In Serbian)				
3. Milosavljevic M., M. Radojkovic, B. Kuzmanovic, <u>Steel Structures Fundamentals</u> , The Civil Engineering Book, Belgrade, 1986. (In Serbian)				
The number of hours of active teaching:				Other classes:
Theory: 37	Practical classes: 30	Other forms of teaching: Consultations 6	Research study:	Final test 2
Methods of teaching Lecturing, Practical work, consultations (group and individual)				
Evaluation of knowledge				
Pre-final exam obligations	Points	Final exam*	Points*	
Activities during the classes:	10		30	
Tests:	20			
Colloquium (a):	40			
Homeworks:	30			
* The final test is taken only by candidates that are not satisfied with their score on colloquia. In that case, only the score on final test is counted for the final grade.				