



# UNIVERSITY OF NIŠ

**Course Unit Descriptor**

**Faculty**

Faculty of Mechanical Engineering

## GENERAL INFORMATION

Study Program	<b>Mechanical Engineering</b>		
Study Module (if applicable)	-		
Course Title	Boilers		
Level of Study	<input checked="" type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input type="checkbox"/> Autumn	<input checked="" type="checkbox"/> Spring	
Year of Study	IV		
Number of ECTS Allocated	6		
Name of Lecturer/Lecturers	Branislav V. Stojanović, Jelena N. Janevski, Dragica R. Milenković		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input type="checkbox"/> Laboratory work	<input checked="" type="checkbox"/> Project work	<input checked="" type="checkbox"/> Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> Other

## Purpose and Overview (max. 5 sentences)

Introduction to boilers used in the energy sector and industry, furnaces and combustion, mass and energy balances, basic elements and calculations, problems at work.

## Syllabus (brief outline and summary of topics, max. 10 sentences)

1) Division of boilers, 2) Fuels and Combustion, 3) Material and heat balance of the boiler, 4) Firebox and devices for combustion, 5) Heating surface, 6) The thermal calculation of the boiler, 7) Heat transfer in the boiler, 8) Aerodynamics air and gas tract, 9) Hydraulic processes in boiler, 10) Boiler steels and calculating strength.

## Language of Instruction

- Serbian (complete course)       English (complete course)       Other \_\_\_\_\_ (complete course)
- Serbian with English mentoring       Serbian with other mentoring \_\_\_\_\_

## Assessment Methods and Criteria

Pre exam Duties	Points	Final Exam	Points
Activity During Lectures	5	Written Examination	50
Practical Teaching	10	Oral Examination	Max. 35 (depending on Teaching Colloquia)

Teaching Colloquia	35	Overall Sum	100
<b>*Final examination mark is formed in accordance with the Institutional documents</b>			