



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Mechanical Engineering		
Study Module (if applicable)	-		
Course Title	Selected Topics in District Heating		
Level of Study	<input type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input checked="" type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input checked="" type="checkbox"/> Autumn	<input type="checkbox"/> Spring	
Year of Study	I		
Number of ECTS Allocated	2		
Name of Lecturer/Lecturers	Velimir P. Stefanović		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input checked="" 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)

Introduce students to the systems of central and district heating and studying the basic principles for the design elements and installation of central and district heating. After passing the exam, the student will be able to independently at my calculation methodology often used installations sistemia central and remote heating elements and installation engineering practice. Review of previous research in the world in the field of central heating system for hot water. professional journals and web-portal and in the field of central heating and district heating. Independent making seminar papers students will qualify for research in the doctoral thesis

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

1) Introduction, classification and application areas of central and district heating, 2) he basics of construction physics, 3) Calculation of the amount of heat for heating, 4) Heat consumption, 5) Sources of heat systems for central and district heating, 6) Hydraulic and thermal calculation of heat networks and systems centrally and district heating, 7) Hydraulic regime of central heating network and district heating, 8) Design and construction solutions of thermal networks of the central and district heating, 10) Accessories heat networks of the central and district heating, 11)Heat transmitter stations, 12) Domestic hot-water systems, central and district heating, 13) Renewable energy sources and their application in systems of central and district heating, 14) The energy efficiency of the central and district heating.

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	0	Written Examination	70
Practical Teaching	0	Oral Examination	Max. 30 (depending on Teaching Colloquia)
Teaching Colloquia	0	Overall Sum	100

***Final examination mark is formed in accordance with the Institutional documents**