



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Engineering Management		
Study Module (if applicable)	-		
Course Title	Energetics		
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	III		
Number of ECTS Allocated	7		
Name of Lecturer/Lecturers	Mića V. Vukić, Živojin M. Stamenković		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input type="checkbox"/> Laboratory work	<input type="checkbox"/> Project work	<input 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 with the most modern types of HVAC, thermal power, hydropower, pump stations and processing plants and principles of their work.

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

1) Fuels. Combustion. 2) Conventional and renewable energy sources. 3) Real gases and steam properties and changes of state. Processes in refrigeration systems and heat pumps. 4) Heat transfer: Conduction, Convection, Radiation. 5) HVAC systems. 6) Thermal Power Plants. 7) District heating. 8) Fluid flow transport. 9) Hydro Power Plants. 10) Hydro equipment. 11) Compressors and fans. 12) Hydraulic Power Transmission.

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	-

Practical Teaching	5	Oral Examination	30
Teaching Colloquia	60	Overall Sum	100

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