



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Mechanical Engineering		
Study Module (if applicable)	-		
Course Title	Refrigeration		
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	Bratislav D. Blagojević		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input checked="" type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input type="checkbox"/> Laboratory work	<input checked="" 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 to the basics and principles of refrigeration technologies, refrigeration plants elements and fundamentals of industrial refrigeration. Students are supposed to acquire knowledge to design refrigeration equipment and industrial refrigeration systems.

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

(1) Introduction. (2) Possibilities to achieve low temperatures. (3) Thermodynamic cycles with compressors and measures to increase refrigeration coefficient of performance. (4) Theoretic and real refrigeration cycles. (5) Working fluids. (6) Compressors. (7) Evaporators. (8) Condensers. (9) Other elements of refrigeration systems. (10) Fundamentals of industrial refrigeration. Food preparation and storage. Freezing technologies. (11) Fundamentals of industrial refrigeration plants design. (12) Refrigeration in process technique.

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	40

Practical Teaching	5	Oral Examination	30
Project work	20	Overall Sum	100

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