UNIVERSITY OF NIŠ

Course Unit Descriptor	Faculty	Faculty of Mechanical Engineering

GENERAL INFORMATION	
Study Program	Energy and Process Engineering
Study Module (if applicable)	-
Course Title	Energy efficiency and ecology
Level of Study	☐Bachelor ☒Master's ☐ Doctoral
Type of Course	☐ Obligatory ☒ Elective
Semester	☐ Autumn ☒ Spring
Year of Study	I
Number of ECTS Allocated	6
Name of Lecturer/Lecturers	Branislav Stojanović, Dejan Mitrović, Živan Spasić
Teaching Mode	☒ Lectures ☒ Group tutorials ☐ Individual tutorials ☐ Laboratory work ☒ Project work ☒ Seminar ☐ Distance learning ☐ Blended learning ☐ Other

Purpose and Overview (max. 5 sentences)

Introduction to the issue of energy efficiency in production, transport and use of heat and electricity, as well as the impact on the environment.

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

- General introduction to energy efficiency and sustainable development, - Energy sources, - Energy policy and energy strategy. Energy Balance, - Energy efficiency Indicators, - Energy management in industry, - Preliminary energy balance, - Detailed energy balance, - Energy management in buildings, - Energy efficiency in water supply systems, - Energy efficiency of hydro and wind power, - Energy efficiency of compressed air systems, - Pollution and environmental protection

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	10	Written Examination	20

Practical Teaching	**10**	**Oral Examination**	**Max.50 (depending on Teaching Colloquia)**
Teaching Colloquia	**10**	**Overall Sum**	**100**
***Final examination mark is formed in accordance with the Institutional documents**			