



# UNIVERSITY OF NIŠ

<b>Course Unit Descriptor</b>	<b>Faculty</b>	
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## GENERAL INFORMATION

Study program	<b>Engineering management</b>
Study Module (if applicable)	pHD
Course title	PRODUCT LIFE CYCLE MANAGEMENT
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	Second
Number of ECTS allocated	10
Name of lecturer / lecturers	Saša S. Ranđelović
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 type="checkbox"/> Seminar <input type="checkbox"/> Distance learning <input type="checkbox"/> Blended learning <input type="checkbox"/> Other

## PURPOSE AND OVERVIEW (max. 5 sentences)

Education of students for the scientific analysis of the life cycle of modern products and the place and role of new technologies in this cycle. Consideration of all components of this cycle of technological, social, economic, human and the like. today is a task for the researchers in a multidisciplinary team in a new generation of products. Students get a clearer picture of the severity of such problem in the new circumstances globally. Qualifying students for scientific analysis of complex problems of creating new products. As part of the team he is ready to make decisions and take some responsibility for the technical side of the problem with the active consideration of all other factors necessary for success in the global marketplace.

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

**Theory:** 1. Products design, 2. From sustainable development to design for the environment, 3. The principles of product life cycle, design and product lifecycle management, 4. Assessment of product life cycle and cost analysis, design new product development function, 5. The impact of environmental aspects of the product development, 6. Engineering methods and estimates for durable product design, 7. Definition of the product based on optimal strategy lifecycle, 8. Ecological features and optimal material selection, 9. Methodological framework and analysis model to simulate the

product lifecycle 10. Case studies. automotive industry, processing of aluminum, plastics industry

#### 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	30	Written examination	
Practical teaching	50	Oral examination	20
Teaching colloquia		OVERALL SUM	100

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