



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Mechanical Engineering		
Study Module (if applicable)	Management of innovation and product development		
Course Title	PRODUCT DEVELOPMENT METHODS		
Level of Study	<input type="checkbox"/> Bachelor	<input checked="" type="checkbox"/> Master's	<input 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	7		
Name of Lecturer/Lecturers	Anđelković R. Boban		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input checked="" 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 methods used in product development. Methods related to product planning, clarification of the task, finding solutions, identification parameters of working ability of the product, making decisions and choice of solutions.

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

Basic concepts of product development, complexity, systems, models and strategies in product development. Models, the basic principles and methods of PD. Design and analysis of the target in PD. Planning objectives in practice. Method requires clarification. Correlations between requests. Documentation requirements. Structuring problems in PD. Methods of structuring problems. Description of the system on an abstract level. The integration of available human resources and development. Determination of the product. Creating ideas for finding solutions. Methods for generating new ideas to find solutions (methods of evolutionary analogy method, Brainstorming, Brain writing(635), functional decomposition, synectic, the method catalog, the method of morphological matrix). Methods for finding solutions. Decision making in PD.

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	0
Practical Teaching	0	Oral Examination	50
Teaching Colloquia	45	Overall Sum	100

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