



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Mechanical Constructions, Development and Engineering		
Study Module (if applicable)	-		
Course Title	Virtual Product Development		
Level of Study	<input type="checkbox"/> Bachelor	<input checked="" type="checkbox"/> Master's	<input type="checkbox"/> Doctoral
Type of Course	<input checked="" type="checkbox"/> Obligatory	<input type="checkbox"/> Elective	
Semester	<input type="checkbox"/> Autumn	<input checked="" type="checkbox"/> Spring	
Year of Study	I		
Number of ECTS Allocated	6		
Name of Lecturer/Lecturers	Banić S. Milan, Mijajlović M. Miroslav		
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)

To enable the students to independently perform product development by usage of virtual product development methods and tools.

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

Industrial Product Development - process and organisation. Virtual Product Development. Management of Product Development. Innovations management. Team Work in Product Development. Characteristics-Properties Modelling / Property-Driven Development (CPM/PDD). Integration of CAx Tools in Product Development Process. Information Sharing in Product Development. Simulation in Product Development. Optimisation in Product Development. Digital mock-up (DMU), Virtual Prototype (VP) and Virtual Validation. Virtual and Augmented Reality. Rapid Prototyping and Rapid Tooling. PDM / PLM - Product Data / Lifecycle Management. Determination of Product Price.

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	20

Practical Teaching	45	Oral Examination	30
Teaching Colloquia	-	Overall Sum	100

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