



# UNIVERSITY OF NIŠ

## Course Unit Descriptor

## Faculty

Faculty of Mechanical Engineering

### GENERAL INFORMATION

Study Program	<b>Engineering Management</b>		
Study Module (if applicable)	Management of innovation and product development		
Course Title	Success factors in product development		
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	Dušan S. Stamenković, Vladislav A. Blagojević, Aleksandar V. Miltenović		
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)

Students get basic knowledge of organisation and functioning of production systems and phases of product forming from design to production. Goal of success factors in product development is to get student to know with design for manufacturability and lightweight.

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

1) Structure of manufacturing systems and manufacturing types, additional processes in manufacturing, 2) Manual work and automatization work in manufacturing, 3) Production plants, production operations, relationships between production and products, 4) Responsibility in the production and organization of production, 5) Design for product manufacturability, , 6) Design for manufacturability in different phases of manufacturing process. Manufacturing technologies, 7) Technologies of shape forming, 8) Technologies of shape changes, 9) Technologies of joining. Coating technologies. Technologies of changing material properties, 10) Lightweight. Reasons for lightweight. Definition. Trends, 11) Materials for lightweight. Steel and non-steel materials, 12) Shaping, Principle of shaping. Design criteria: lifespan, structural safety, reliability, assembly.

### 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	65
Practical Teaching	0	Oral Examination	30
Teaching Colloquia	0	Overall Sum	100
*Final examination mark is formed in accordance with the Institutional documents			