

## Specification for the book of courses

<b>Study program</b>		Electrical Engineering and Computer Science		
<b>Module</b>		Control Systems		
<b>Type and level of studies</b>		Undergraduate Academic Studies		
<b>The name of the course</b>		Entrepreneurship for Engineers		
<b>Lecturer (for lectures)</b>		Milojković T. Marko		
<b>Lecturer/associate (for exercises)</b>		Spasić D. Miodrag		
<b>Lecturer/associate (for OFE)</b>				
<b>Number of ECTS</b>	3	<b>Course status (obligatory/elective)</b>	Elective	
<b>Prerequisites</b>				
<b>Course objectives</b>	Introduction to the concept of entrepreneurship, from the invention, through the business model, to the creation of a successful market product. Introduction to the procedures for protection of intellectual property rights and procedure for patent application.			
<b>Course outcomes</b>	After the course, students will gain basic knowledge of how to set up a start-up company based on a developed business model from a selected engineering idea. Students will learn how to adequately present their ideas and provide the necessary funding. Also, students will get familiar with searching patent base and procedure to file a patent application.			
<b>Course outline</b>				
<b>Theoretical teaching</b>	Innovation. Phases in the innovation process. Activities oriented towards the product development process. Market research. Developing a business model (Customers and proposed value, Product distribution channels, Income flows, Key resources, Key activities, Key partners, Cost structure, Business model validation, Customer profile, Value map, Customer pains, Customer gains, Overlapping of problems and solutions. Planning and control of finances. Basic revenue models.). Validation of the business model. Start-up. Methods of financing start-ups. Pitch-presentation. Marketing. Intellectual property. Patents and patent documentation.			
<b>Practical teaching (exercises, OFE, study and research)</b>	Designing canvas business model (customer segment, proposed value, customer relationships, revenue flow, key resources, key activities, key partners, cost structure). Creating a cash flow tables. Pitch presentation and creation of multimedia promotional material. Patent Search. Patent Application.			
<b>Textbooks/references</b>				
1	Steve Blank, The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company, K & S Ranch; 1 edition (2012)			
2	Alexander Osterwalder and Yves Pigneur, Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, 2010			
3	Guy Kawasaki, The Art of the Start 2.0: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything (2015)			
4				
5				
<b>Number of classes of active education per week during semester/trimester/year</b>				
<b>Lectures</b>	<b>Exercises</b>	<b>OFE</b>	<b>Study and research work</b>	<b>Other classes</b>
2	1	0	0	0
<b>Teaching methods</b>	Lectures, Practical classes, Consultations			
<b>Grade (maximum number of points 100)</b>				
<b>Pre-exam duties</b>	<b>Points</b>	<b>Final exam</b>		<b>Points</b>
<b>Activity during lectures</b>	10	<b>Written exam</b>		
<b>Exercises</b>	10	<b>Oral exam</b>		40
<b>Colloquia</b>				
<b>Projects</b>	40			