

<b>Study Programme: Engineering Management</b>			
<b>Course Unit Title: Decision Making</b>			
<b>Course Unit Code: IM1212</b>			
<b>Name of Lecturer(s): Zoran Anišić</b>			
<b>Type and Level of Studies: bachelor</b>			
<b>Course Status (compulsory/elective): compulsory</b>			
<b>Semester (winter/ summer): summer</b>			
<b>Language of instruction: english</b>			
<b>Mode of course unit delivery (face-to-face/distance learning): face-to-face</b>			
<b>Number of ECTS Allocated: 5</b>			
<b>Prerequisites: none</b>			
<b>Course Aims:</b> The objective of the course is to effectively make business decisions and decision models in conditions of uncertainty and risk, using methods and techniques of multi-criteria and / or multi-point decision making.			
<b>Learning Outcomes:</b> Understanding the decision making process as the most important task for managers to make good business decisions. Understanding limitations that arise when deciding. Modeling decision and solving problems with quantitative methods, techniques, and software decision tools. Mastering decision support methods based on available company data and implementation of decisions made in a real environment.			
<b>Syllabus.</b> Definition of decision making. Decision styles. Defining the decision and the type of decisions. Decision making theories. Problem of rationality in decision making. Phases in the decision-making process. The circumstances in which it is decided. Deciding under conditions of uncertainty and risk. Group decision making. Modeling a decision problem. Quantitative Methods: Simplex Method, Transport Problem and Distribution Problems, Network Planning, Game Theory, Monte Carlo Technique, Network Planning, Inventory Management, Queuing Models, Multitributive Decision Making (PROMETHEE, AHP).			
<b>Required Reading:</b> Relevant literature in English, tbd			
<b>Weekly Contact Hours:2</b>	<b>Lectures: 2</b>	<b>Practical work: 2</b>	
<b>Teaching Methods:</b> Lectures are auditory, while the work on exercises is carried out partly auditory in the working groups of three students with the aim of solving decision problems, and partly in the computer lab with required software for the use of decision-making: Expert Choice, and Doctus DecisionLab.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Attendance			
Computer exercises			
Tests (4x)			

