

20. Management of projects, innovation and start-ups

GENERAL INFORMATION ABOUT THE COURSE		
Course coordinator	Anica Hunjet, PhD, associate professor	
Course name	Management of projects, innovation and startups	
Study program	Mechanical Engineering	
Course status	Elective	
Year	2	
Semester	3	
Number of credits and teaching methods	ECTS student load coefficient	4
	Number of hours (lectures + seminars + exercises)	15 + 15 + 15

1. DESCRIPTION OF THE COURSE
1.1. Course objectives
<p>Familiarising students with fundamental technologies in the area of projects and project management. Students will adopt knowledge on a formal definition of projects, manner of initiating and running them, teamwork, formal tracking of project progress and start of the project lifecycle. Students will become familiar with the basic conditions of successful project management with a special emphasis on the effect of the project domain, business and communication aspect. Student will get involved in theoretical and practical preparations for participating in projects and they will be presented with basic aspects, problems and existing solutions relating to the management of different types of projects.</p>
1.2. Course enrolment prerequisites (<i>if applicable</i>)
None
1.3. Expected course learning outcomes
<p>After having listened to course lectures and passed the exam, students will be able to:</p> <ol style="list-style-type: none"> 1. Differentiate project roles in the terms of the organisation 2. Defining key stakeholders 3. Identifying basic conditions of successful project management 4. Selecting a suitable lifecycle project 5. Identifying project processes 6. Differentiate methods and techniques in project management 7. Project management tools

1.4. Course content							
<ol style="list-style-type: none"> 1. Introduction to the course definition of concepts and area of course goals, Innovative processes. 2. Fundamental concepts of project management, context of project management 3. Project lifecycle, basic processes and process groups 4. Project planning, project initiation 5. Schedule management 6. Project supervision and control, project closure 7. Interim exam 1 8. Guest lecturer 9. Economic implications of technological innovation, Systematisation of innovation 10. Dynamics of technological innovation, implications of competitiveness, market and technology dynamics 11. Methodology of innovation development 12. Social aspects of innovation, Market dynamics, definition of value chain 13. Development potential in estimating technological opportunities and management of development portfolio 14. Guest lecturer 15. Interim exam 2 							
1.5. Types of teaching		<input checked="" type="checkbox"/> Lectures <input checked="" type="checkbox"/> Seminars and workshops <input checked="" type="checkbox"/> Exercises <input type="checkbox"/> Distance learning <input type="checkbox"/> Field work			<input checked="" type="checkbox"/> Autonomous exercises <input type="checkbox"/> Multimedia and network <input type="checkbox"/> Laboratory <input type="checkbox"/> Mentor assistance <input type="checkbox"/> Other types		
1.6. Comments							
1.7. Student obligations (<i>attendance at classes, lectures, tutorials, seminars</i>)							
<ul style="list-style-type: none"> • Preparing for the lectures – researching the literature • Actively participating in lectures • Preparing for seminars – researching the literature and presentations from the lectures 							
1.8. Tracking student work (proportion of individual activities in terms of ECTS credits based on the total number of ECTS credits)							
Class attendance	1	Class attendance		Seminar paper	1	Experimental work	
Written exam	1	Written exam	0.5	Essay		Research	
Project		Continual assessment of knowledge		Written seminar paper		Practical work	0.5
Online activity							

**1.9. Grading and assessment of student work during the semester and for the final exam
(colloquium, written exam, oral exam)**

For each activity, a certain number of points is awarded. Points are recorded on the online system for evaluation and development of competences. The following activities are assessed.

1. Participation at lectures – 10%
2. Written exam – 40%
3. Oral part of the exam – 40%
4. Drafting the project task – 10%

1.10. Mandatory literature (relevant at the time of submitting the proposed study program)

- PMI (2008) A Guide to the Project Management Body of Knowledge
- H. Kerzner (2006), Project Management Case Studies, Wiley

1.11. Supplementary literature (relevant at the time of submitting the proposed study program)

- R.K.Wysocki: Effective Project Management: Traditional, Adaptive, Extreme, 2009, Wiley
- P. Sikavica, T. Hunjak, N. Begičević Ređep, T. Hernaus: Poslovno odlučivanje, Zagreb, Školska knjiga, 2013.

1.12. Manner of tracking quality to ensure the acquisition of exit knowledge, skills and competences

2. COMBINING THE LEARNING OUTCOMES, TEACHING METHODS AND ASSESSMENT OF THE LEARNING OUTCOMES

<i>2.1. Class participation</i>	<i>2.2. Student participation</i>	<i>2.3. Learning outcome</i>	<i>2.4. Assessment method</i>
Lectures	Listening to lectures and participating in discussions	1 – 3	Oral exam
Project work	Solving problem tasks		Assessing the assignment
Exercises	Exercises with practical assignments and real examples		Assessing the results obtained in the exercises