1. GENERAL INFORMATION				
1.1. Course teacher	Full Professor Daria Karasalihović Sedlar, PhD		1.6. Year of the study	II.
1.2. Name of the course	Project management		1.7. ECTS credits	4
1.3. Associate teachers	Teaching Assistant Lucija Jukić, MSc		1.8. Type of instruction (number of hours L + E + S + e-learning)	28L+0E+28S+4e-learning
1.4. Study programme (undergraduate, graduate, integrated)	graduate		1.9. Expected enrolment in the course	10
1.5. Status of the course	☐ mandatory	☒ elective	1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%)	level 3, 6,67% on line
2. COUSE DESCRIPTION				
2.1. Course objectives	Students will learn to present the fundamental terms regarding investment projects in energy sector and project management, define the project and possible ways of project launching, describe the project life cycle, plan a project, manage the time schedule, describe the implementation, supervision, and control of the project, present the fundamentals of human resources management in energy sector, compare the risk assessment methods and finally, quantify the risk and uncertainty in energy projects.			
2.2. Enrolment requirements and/or entry competences required for the course	-			
2.3. Learning outcomes at the level of the programme to which the course contributes	Supervise projects in petroleum engineering and geoenergy engineering; Appraise projects in petroleum engineering and geoenergy engineering.			
2.4. Expected learning outcomes at the level of the course (3 to 10 learning outcomes)	Check the compatibility of the energy project with strategic goals of the company; Select the appropriate project life cycle; Distinguish the project management methods and technologies; Use the project management tools; Design a project in the energy sector; Apply the stakeholders' communication considering the project context and each stakeholder's role; Apply the risk assessment in energy projects.			
2.1. Course content (syllabus)	**1. Fundamental terms regarding investment projects in energy sector and project management:**			

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<table>
<tr><td></td><td colspan="9">Definition of the project, results of the project, project management; Projects characteristics; Examples of projects; Characteristics of project management;
2. Project in energy sector and possible ways of project launching:
Definition of the project scope; Viability and selection of a project; Cost-beenfit analysis: NPV, IRR, ROI….
3. Project life cycle in the energy sector:
Processes in a project life cycle: initialization, planning, execution, surveillance and control, closing; Project life cycle models: traditional, extreme, agile, Emertxe; linear, incremental, iterative adaptive;
4. Planning an energy project:
Planning processes; Work breakdown: completion check; Duration, resources and costs estimation: procedures of each activity duration estimation, determination of resources;
5. Time schedule management:
Elements of a time schedule; Making and analysis of a time schedule; Time schedule compression; Different scenarios analysis; Resources balancing; Gantt chart;
6. Execution, supervision and control of an energy project:
Execution processes; Supervision and control of the execution; Cost control;
7. Human resources management:
Hiring and work organization; Business decision making; Delegation; Conflict management; Communication management processes; Negotiation; Organizational culture;
8. Risk assessment methods and risk and uncertainty quantification:
Different ways of risk level quantification; Application of risk analysis methods.</td></tr>
<tr><td>2.2. Format of instruction:</td><td colspan="4">☒ lectures
☒ seminars and workshops
☐ exercises
☐ online in entirety
☒ partial e-learning
☐ field work</td><td colspan="3">☒ independent assignments
☒ multimedia and the internet
☐ laboratory
☐ work with mentor
☐ (other)</td><td colspan="2">2.3. Comments:
-</td></tr>
<tr><td>2.4. Student responsibilities</td><td colspan="9">Class attendance, independent assignments, application of project management on a selected case study, written exam.</td></tr>
<tr><td rowspan="5">2.5. Monitoring student work</td><td>Class attendance</td><td>YES</td><td></td><td>Research</td><td>YES</td><td></td><td>Oral exam</td><td></td><td>NO</td></tr>
<tr><td>Experimental work</td><td></td><td>NO</td><td>Report</td><td></td><td>NO</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>NO</td><td>Seminar paper</td><td></td><td>NO</td><td></td><td></td><td></td></tr>
<tr><td>Preliminary exam</td><td></td><td>NO</td><td>Practical work</td><td></td><td>NO</td><td></td><td></td><td></td></tr>
<tr><td>Project</td><td>YES</td><td></td><td>Written exam</td><td>YES</td><td></td><td>ECTS credits (total)</td><td colspan="2">4</td></tr>
<tr><td>2.10. Required literature (available in the library</td><td colspan="6">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
</table>

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and/or via other media)	*A guide to the project management body of knowledge* (2017.) - PMBOK GUIDE (SIXTH EDITION), Project Management Institute, Global standard.	NO	YES
2.11. Optional literature	-		
2.12. Other (as the proposer wishes to add)	-		

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