



| 1. GENERAL INFORMATION | | | |
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| 1.1. Course teacher | Full Professor Daria Karasalihović Sedlar, PhD | 1.6. Year of the study | II. |
| 1.2. Name of the course | Natural gas trade | 1.7. ECTS credits | 4 |
| 1.3. Associate teachers | Teaching Assistant Ivan Smajla, MSc | 1.8. Type of instruction (number of hours L + E + S + e-learning) | 28L+0V+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 | <input type="checkbox"/> mandatory | <input checked="" type="checkbox"/> elective | 1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%) level 3, 6,67% online |
| 2. COUSE DESCRIPTION | | | |
| 2.1. Course objectives | Understanding the lectures, exercises, and knowledge from mandatory literature according to subject units, application of the acquired knowledge to problem solving in the area of natural gas trading. | | |
| 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 | Appraise projects in petroleum engineering and geoenergy engineering; Analyse energy markets. | | |
| 2.4. Expected learning outcomes at the level of the course (3 to 10 learning outcomes) | Explain the relations between supply and demand on regional natural gas markets; Compare the price of natural gas on European markets; Compare the characteristics of each natural gas trading platform; Suggest a natural gas supply route; Suggest the selection of storage and dynamics of natural gas storage; Calculate the overall costs of natural gas supply; Compare the costs of natural gas transport via different routes; Compare the costs of natural gas storage in different storage types; Estimate the optimal moment for natural gas trading; Create a plan for natural gas trading for a longer period. | | |
| 2.5. Course content (syllabus) | Introduction to natural gas trading; European natural gas markets; Natural gas trade platforms; Capacity reservation platforms; Platforms for examination of natural gas storage status in EU; ENTSOG Transparency platform; AGSI+ platform; Reservation of transport capacity; Reservation of storage capacity; Natural gas purchase on European markets; Natural gas transport via interconnections; Optimization of transport cost and storage for a temperature-dependent consumer; Storage and withdrawal | | |

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| | of natural gas; Portfolio management – nominations and daily deviation; Balancing the transport system; End consumer natural gas price calculation; Virtual trading point trade in Croatia; LNG trade. | | | | | | | | | |
| 2.6. Format of instruction: | <input checked="" type="checkbox"/> lectures <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> exercises <input type="checkbox"/> online in entirety <input checked="" type="checkbox"/> partial e-learning <input checked="" type="checkbox"/> field work | | | | <input checked="" type="checkbox"/> independent assignments <input checked="" type="checkbox"/> multimedia and the internet <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other) | | 2.7. Comments: - | | | |
| 2.8. Student responsibilities | Class attendance, independent assignments, independent making and presentation of a project, oral exam | | | | | | | | | |
| 2.9. Monitoring student work | Class attendance | YES | | Research | YES | Oral exam | YES | | | |
| | Experimental work | | NO | Report | | NO | | | | |
| | Essay | | NO | Seminar paper | | NO | | | | |
| | Preliminary exam | | NO | Practical work | YES | | | | | |
| | Project | YES | | Written exam | | NO | ECTS credits (total) | 4 | | |
| 2.10. Required literature (available in the library and/or via other media) | Title | | | | | Number of copies in the library | Availability via other media | | | |
| | Transparency Platform User Manual, ENTSOG | | | | | NO | YES | | | |
| 2.11. Optional literature | | | | | | | | | | |
| 2.12. Other (as the proposer wishes to add) | Internet sources: https://transparency.entsog.eu/#/map , https://agsi.gie.eu/#/ , https://www.montelnews.com/de/ , https://platform.prisma-capacity.eu/#/start | | | | | | | | | |