| Year | Sem | Subject name | Weekly number of hours | | | | |
|------|-----|---|------------------------|----------|---------|---------|------|
| | | | Lecture | Tutorial | Labwork | Project | ECTS |
| 1 | 1 | Fundamentals of Data Science in Business and Engineering | 2 | | 1.5 | | 5 |
| 1 | 1 | Programming Essentials for Data Processing | 2 | | 1.5 | | 5 |
| 1 | 1 | Visual Analytics Techniques | 2 | | 1.5 | | 5 |
| 1 | 1 | Research activities 1 | | | | 12 | 10 |
| 1 | 1 | Python programming for business intelligence | 2 | | 1.5 | | 5 |
| 1 | 1 | R programming for business intelligence | | | | | |
| 1 | 1 | Design and management of educational programs | 2 | 1 | | | 5 |
| 1 | 2 | Introduction to Exploratory Data Analysis | 1.5 | | 1 | 1 | 5 |
| 1 | 2 | Predictive Modeling | 1.5 | | 1 | 1 | 5 |
| 1 | 2 | Neural Networks Essentials | 1.5 | | 1 | 1 | 5 |
| 1 | 2 | Advanced Visual Text Analytics | | | | | |
| 1 | 2 | Advanced Visual Data Mining Techniques | 1.5 | | 1 | 1 | 5 |
| 1 | 2 | Research activities 2 | | | | 12 | 10 |
| 1 | 2 | Educational psychology for adolescents, young people and adults | 2 | 1 | | | 5 |
| 1 | 2 | Advice and guidance | 1 | 2 | | | 5 |
| 2 | 1 | Research Design | 2 | | | 1.5 | 5 |
| 2 | 1 | Software Engineering Fundamentals | 2 | | 1.5 | | 5 |
| 2 | 1 | Forecasting and Decision Support Systems | 2 | | 1.5 | | 5 |
| 2 | 1 | Research activities 3 | | | | 12 | 10 |
| 2 | 1 | Optimization Concepts for Data Science | 2 | | 1.5 | | 5 |
| 2 | 1 | Data Ethics and Smart Service Design | - | | 2.0 | | 5 |

| 2 | 1 | Domain didactics and development in specialization didactics (secondary, post-secondary education) | 2 | 1 | | 5 |
|---|---|--|---|---|----|----|
| 2 | 1 | Intercultural education | 1 | 2 | | 5 |
| 2 | 2 | Ethics and academic integrity | 1 | | | 2 |
| 2 | 2 | Scientific Research, Research Practice and Preparation of Dissertation Thesis | | | 27 | 28 |
| 2 | 2 | Specialized pedagogical practice in pre-university education (secondary, post-secondary education) | | 5 | | |
| 2 | 2 | Exam - Level II | | | | 5 |