

Year	Sem	Subject name	Weekly number of hours				ECTS
			Lecture	Tutorial	Labwork	Project	
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 – <i><u>optional</u></i> (The elective course may be chosen from among the mandatory courses of any other master program)	2		1.5		5
1	1	R programming for business intelligence – <i><u>optional</u></i> (The elective course may be chosen from among the mandatory courses of any other master program)					
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	Research activities 2				12	10
1	2	Advanced Visual Text Analytics – <i><u>optional</u></i> (The elective course may be chosen from among the mandatory courses of any other master program)	1.5		1	1	5
1	2	Advanced Visual Data Mining Techniques – <i><u>optional</u></i> (The elective course may be chosen from among the mandatory courses of any other master program)					
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 – <i>optional</i> (The elective course may be chosen from among the mandatory courses of any other master program)	2		1.5		5
2	1	Data Ethics and Smart Service Design – <i>optional</i> (The elective course may be chosen from among the mandatory courses of any other master program)					
2	2	Ethics and academic integrity	1				2
2	2	Scientific Research, Research Practice and Preparation of Dissertation Thesis				27	28