

Semester			Module	Module Code	Credit Points	Type of Assessment	
FT	PT I	PT II					
1. Semester (Level 4)	1. Semester	1. Semester	Introduction to Artificial Intelligence	LIBFEXDLBDSEAIS	15	Exam	
			Introduction to Programming with Python	LIBFEXDLBDSIPWP	15	Exam	
		2. Semester	2. Semester	Mathematics: Analysis	LIBFEXDLBDSMFC	15	Exam
				Statistics - Probability and Descriptive Statistics	LIBFEXDLBDSSPDS-01	15	Exam
2. Semester (Level 4)	2. Semester	3. Semester	Collaborative Work	LIBFOARPDLCSCW	15	Oral Assignment + Reflection Paper	
			Fundamentals of Data Protection and Cyber Security	LIBFEXDLBCSIDPITS	15	Exam	
		3. Semester	4. Semester	Mathematics: Linear Algebra	LIBFEXDLBDSMFLA	15	Exam
				Statistics - Inferential Statistics	LIBFEXDLBDSSIS	15	Exam
3. Semester (Level 5)	3. Semester	5. Semester	Introduction to Academic Work for IT and Tech	LIBFAWDLBIAWITT	15	Advanced Workbook	
			Object Oriented and Functional Programming with Python	LIBFPDLBDSOOFPP	15	Portfolio	
		4. Semester	6. Semester	Machine Learning - Supervised Learning	LIBFWACSDLBDSMLSL	15	Written Assessment: Case Study
				Machine Learning - Unsupervised Learning and Feature Engineering	LIBFWACSDLBDSMLUSL	15	Written Assessment: Case Study
4. Semester (Level 5)	5. Semester	7. Semester	Introduction to NLP	LIBFAWDLBAIINLP	15	Advanced Workbook	
			Project: AI Excellence with Creative Prompting Techniques	LIBFOPRRPDLPKIEKPT_E	15	Oral Project Report + Reflection Paper	
		8. Semester	Elective A1		15		
			Elective A2		15		
5. Semester (Level 6)	6. Semester	9. Semester	Neural Nets and Deep Learning	LIBFWAWADLBDSNNDL	15	Written Assessment: Written Assignment	
			Ethical Considerations in Data Science	LIBFWAREDLBDSSECDS	15	Written Assessment: Research Essay	
		10. Semester	Elective B1		15		
			Elective B2		15		
6. Semester (Level 6)	7. Semester	11. Semester	Elective C1		15		
			Elective C2		15		
		12. Semester	Bachelor Thesis	LIBFBTDLBBT	30	Bachelor Thesis	
Total			360				

Electives			
Elective A <i>Intercultural and Ethical Decision-Making</i> <i>Project: Edge AI</i> <i>Data Science Software Engineering</i> <i>User Experience</i> <i>Introduction to Robotics</i> <i>Introduction to Computer Vision</i> Internship I Internship II		Elective B <i>Advanced Data Analysis</i> <i>Project: Data Analysis</i> <i>IT Service Management</i> <i>Project: IT Service Management</i> <i>International Marketing</i> <i>Online Marketing</i> <i>Supply Chain Management I</i> <i>Supply Chain Management II</i> <i>Cloud Programming</i> <i>Cloud Computing</i> <i>Production Engineering</i> <i>Automation and Robotics</i>	
Data Analysis & Business Intelligence IT Operations & Project Management International Marketing & Sales Supply Chain Management & Industry 4.0 Cloud Programming and Computing & Data Engineering Production Engineering, Automation and Robotics & Autonomous Driving		Elective C <i>Business Intelligence</i> <i>Project: Business Intelligence</i> <i>IT Project Management</i> <i>IT Architecture Management</i> <i>Applied Sales I</i> <i>Applied Sales II</i> <i>Product Development in Industry 4.0</i> <i>Project: Smart Product Solutions</i> <i>Data Engineering</i> <i>Project: Data Engineering</i> <i>Self-Driving Vehicles</i> <i>Seminar: Current Topics and Trends in Self-Driving Technology</i>	

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FT: Full-Time, 36 months
PT I: Part-Time I, 48 months
PT II: Part-Time II, 72 months

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The sequence of the modules is to be strictly followed

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Electives: You can choose two elective modules from each elective area. You can freely choose these modules or follow our suggested combinations to stay in a specific subject area (only relevant for elective areas B and C). In total, a subject area consists of four elective modules.