

## M.Sc. Data Science and Artificial Intelligence (DSAI)

1. S	Foundations of Data Analytics (FDA, 6 LP)	Epistemology, Ethics and Privacy (EEP, 6 LP)	Fundamentals DSAI (9 LP)	Domain Knowledge (9 LP)
2. S	Seminar DSAI (3 LP)	Fundamentals DSAI (15 LP)		Advanced Topics DSAI (6 LP)
3. S	Project DSAI (9 LP)		Advanced Topics DSAI (12 LP)	Domain Knowledge (9 LP)
4. S	Finale Module (Master's Thesis 30 LP)			

Core Modules – Mandatory Courses in DSAI		
InfM-FDA – 1 <sup>st</sup> semester	Foundations of Data Analytics (6 ECTS)	64-754 Lecture Foundations of Data Analytics 64-755 Exercises
InfM-EEP – 1 <sup>st</sup> semester	Epistemology, Ethics and Privacy (6 ECTS)	64-752 Lecture Epistemology, Ethics and Privacy 64-753 Exercises
InfM-Sem/DSAI – 2 <sup>nd</sup> semester	Seminar (3 ECTS)	64-xxx Seminar Data Science and Artificial Intelligence
InfM-Proj/DSAI – 3 <sup>rd</sup> semester	Project (3 ECTS)	64-xxx Project Data Science and Artificial Intelligence
<b>Required elective Modules – Fundamentals of DSAI – 24 ECTS out of the following modules:</b> Winter semester: InfM-ALG (9 ECTS) , InfM-STSP (9 ECTS), InfM-SWA (6 ECTS) Summer semester: InfM-DIS (9 ECTS), InfM-ML (9 ECTS), InfM-NN (6 ECTS) For further information please refer to STiNE – online course catalog		
InfM-STSP	Statistical Signal Processing (9 ECTS)	64-350 Lecture Statistical Signal Processing 64-351 Exercises
InfM-ALG	Algorithmics (9 ECTS)	64-330 Lecture Algorithmics 64-331 Exercises
InfM-SWA	Software Architecture (6 ECTS)	64-426 Lecture Software Architecture 64-427 Int. Seminar
<b>Required elective Modules – Advanced Topics of DSAI – 18 ECTS out of the following modules:</b> Winter semester: InfM-BAI, InfM-BKIM, InfM-CV 1, InfM-IR, InfM-NLP, InfM-OML, InfM-WV Summer semester: InfM-CV 2, InfM-LT, InfM-RT, InfM-SSV For further information please refer to STiNE – online course catalog		
<b>Domain Knowledge – 24 ECTS out of the following domains:</b> Biology, Chemistry, Earth System Sciences, Informatics, Mathematics, Physics Modules can be elected as offered, with a minimum of 24 ECTS in domains and free electives overall, including at least 6 ECTS from at least two different domains. Up to 6 ECTS can be acquired as free electives. For further information please refer to STiNE – online course catalog		

**Winter Semester 2024/25: 1<sup>st</sup> Semester**  
**M.Sc. Data Science and Artificial Intelligence (DSAI)**  
 STiNE Registration Period: 02.09.2024 am – 10.10.2024, 1 pm

	Monday	Tuesday	Wednesday	Thursday	Friday
8 – 10 am				64-351 Exercises Statistical Signal Processing Room F-132	
10 – 12 am	64-330 Lecture Algorithmics Room F-132	64-350 Lecture Statistical Signal Processing Room F-132	64-330 Lecture Algorithmics Room F-132	64-350 Lecture Statistical Signal Processing Room F-132	
		64-426 Lecture Software Architecture Room D-125/129			
12 – 2 pm	64-331 Exercises Algorithmics	64-427 Seminar Software Architecture Room G-228	64-331 Exercises Algorithmics		
2-4 pm		64-752 Lecture Epistemology, Ethics and Privacy Room C-221		64-754 Lecture Foundations of Data Analytics Room C-221	
4-6 pm		64-753 Exercises Epistemology, Ethics and Privacy Room C-221		64-755 Exercises Foundations of Data Analytics Room C-221	
6-8 pm					

For further information on Advanced Topics of DSAI and Domain Knowledge please refer to STiNE – online course catalog