

Courses in English - Summer semester 2026 - Mathematics and Data Science

Please note: This table lists all courses available in English. A degree program consists in different modules which are needed for a successful graduation. Within a module different courses about several topics are offered. In some cases courses do not have the same title as the module. We recommend you to inform you beforehand which modules and courses belong together. You earn your ECTS-credits by finishing the module – not the course. You can get more information (also regarding ECTS) by clicking on the module number.

Module number	Module title	Course Number	Course title	Course type	Study level	ECTS per module
88-105-DS02-H-0825	Principles of Data Science	88-105-DS02-S-UE-0825.20261.001	Principles of Data Science	practice (on-campus)	Master	10
		88-105-DS02-S-VL-0825.20261.001	Principles of Data Science	lecture (on-campus)	Master	
82-105-DS03-H-0822	Data Lab	82-105-DS03-S-PR-0822.20261.001	Data Lab	project work / workshop (on-campus)	Bachelor	5
06-021-DS11-H-0616	Theoretical and Empirical Modelling	06-021-DS11-S-SE-0616.20261.001	Theoretical and Empirical Modelling	seminar (online & on-campus)	PhD	5
82-105-DS12-H-0822	Statistical Learning	82-105-DS12-S-UE-0822.20261.001	Statistical Learning - Group 1 or	practice (on-campus)	Bachelor	5
		82-105-DS12-S-UE-0822.20261.002	Statistical Learning - Group 2	practice (on-campus)	Bachelor	
		82-105-DS12-S-VL-0822.20261.001	Statistical Learning	lecture (on-campus)	Bachelor	
82-105-DS06-H-0822	Foundations of Machine Learning	82-105-DS06-S-UE-0822.20261.001	Foundations of Machine Learning	practice (on-campus)	Bachelor	10
		82-105-DS06-S-VL-0822.20261.001	Foundations of Machine Learning	lecture (on-campus)	Bachelor	
82-105-DS07-H-0822	Hands-on Machine Learning and Data Science	82-105-DS07-S-UE-0822.20261.001	Hands-on Machine Learning and Data Science	practice (on-campus)	Bachelor	10
		82-105-DS07-S-VL-0822.20261.001	Hands-on Machine Learning and Data Science	lecture (on-campus)	Bachelor	
82-105-DS10-H-0822	Analysis 2 for Data Science	82-105-DS10-S-UE-0822.20261.001	Analysis 2 for Data Science - Group 1 or	practice (on-campus)	Bachelor	5
		82-105-DS10-S-UE-0822.20261.002	Analysis 2 for Data Science - Group 2 or	practice (on-campus)	Bachelor	
		82-105-DS10-S-UE-0822.20261.003	Analysis 2 for Data Science - Tutorium	practice (on-campus)	Bachelor	
		82-105-DS10-S-VL-0822.20261.001	Analysis 2 for Data Science	lecture (on-campus)	Bachelor	
82-105-DS18-H-0922	Seminar in Signal and Data Processing for B.Sc.	82-105-DS18-S-SE-0922.20261.001	Seminar in Signal and Data Processing for B.Sc.	seminar (on-campus)	Bachelor	5
82-105-DS19-H-0922	Seminar in Machine Learning and related topics for B.Sc.	82-105-DS19-S-SE-0922.20261.001	Seminar in Machine Learning and related topics for B.Sc.	seminar (on-campus)	Bachelor	5
82-105-DS20-H-0922	Seminar in Data Assimilation for B.Sc.	82-105-DS20-S-SE-0922.20261.001	Seminar in Data Assimilation for B.Sc.	seminar (on-campus)	Bachelor	5
82-105-DS21-H-0922	Seminar in Computational Mathematics for B.Sc.	82-105-DS21-S-SE-0922.20261.001	Bachelorseminar in Computational Mathematics for B.Sc.	seminar (on-campus)	Bachelor	5
82-105-DS24-H-0922	Introduction to Data Assimilation	82-105-DS24-S-UE-0922.20261.001	Introduction to Data Assimilation	practice (on-campus)	Bachelor	5
		82-105-DS24-S-VL-0922.20261.001	Introduction to Data Assimilation	lecture (on-campus)	Bachelor	
82-105-L-MAT25-H-0512, 82-105-MAT20-H-0512	Probability Theory (for prospective teachers); Probability Theory	82-105-MAT20-S-UE-0512.20261.001	Probability Theory	practice (on-campus)	Bachelor	5
		82-105-MAT20-S-VL-0512.20261.001	Probability Theory	lecture (on-campus)	Bachelor	
82-105-MAT25-H-0512	Linear Algebra 2 and Analytic Geometry	82-105-MAT25-S-UE-0512.20261.001	Linear Algebra 2 for DS Exercise or	practice (on-campus)	Bachelor	10
		82-105-MAT25-S-UE-0512.20261.002	Linear Algebra 2 for DS Tutorial or	tutorial (on-campus)	Bachelor	
		82-105-MAT25-S-UE-0512.20261.003	Linear Algebra 2 for DS Exercise	practice (on-campus)	Bachelor	
		82-105-MAT25-S-VL-0512.20261.001	Linear Algebra 2 for DS Lecture	lecture (on-campus)	Bachelor	
82-105-MAT30-H-0512	Introduction to Scientific Computing	82-105-MAT30-S-UE-0512.20261.001	Introduction to Scientific Computing	practice (on-campus)	Bachelor	5
		82-105-MAT30-S-VL-0512.20261.001	Introduction to Scientific Computing	lecture (on-campus)	Bachelor	
88-105-DS06-H-0825	Data, Ethics and Law	88-105-DS06-S-VL-0825.20261.001	Data, Ethics and Law	lecture (on-campus)	Master	5