

Courses in English - Winter semester 2024/2025 - 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
82-105-DS01- H-0822	Analysis 1 for Data Science	82-105-DS01- S-VL-0822.20242.001	Analysis 1 for Data Science	lecture (on-campus)	Bachelor	5
		82-105-DS01- S-UE-0822.20242.001	Analysis 1 for Data Science - Group 1	practice (on-campus)	Bachelor	
82-105-DS01- H-0822	Analysis 1 for Data Science	82-105-DS01- S-VL-0822.20242.001	Analysis 1 for Data Science	lecture (on-campus)	Bachelor	5
		82-105-DS01- S-UE-0822.20242.002	Analysis 1 for Data Science - Group 2	practice (on-campus)	Bachelor	
82-105-DS02- H-0822	Introduction to Programming	82-105-DS02- S-UE-0822.20242.001	Introduction to Programming - Group 1	practice (on-campus)	Bachelor	5
82-105-DS02- H-0822	Introduction to Programming	82-105-DS02- S-UE-0822.20242.002	Introduction to Programming - Group 2	practice (on-campus)	Bachelor	5
82-105-DS05- H-0822	Foundations of Data Science	82-105-DS05- S-UE-0822.20242.001	Foundations of Data Science	practice (on-campus)	Bachelor	10
		82-105-DS05- S-VL-0822.20242.001	Foundations of Data Science	lecture (on-campus)	Bachelor	
82-105-DS09- H-0822	Advanced Programming	82-105-DS09- S-UE-0822.20242.001	Advanced Programming	practice (on-campus)	Bachelor	5
82-105-DS11-H-0822	Optimization in Data Science	82-105-DS11- S-UE-0822.20242.001	Optimization in Data Science	practice (on-campus)	Bachelor	5
		82-105-DS11- S-VL-0822.20242.001	Optimization in Data Science	lecture (on-campus)	Bachelor	
82-105-DS13- H-0822	Deep Learning	82-105-DS13- S-UE-0822.20242.001	Deep Learning	practice (on-campus)	Bachelor	10
		82-105-DS13- S-VL-0822.20242.001	Deep Learning	lecture (on-campus)	Bachelor	
82-105-DS26- H-0923	Preliminary course "Mathematics for Data Science"	82-105-DS26- S-UE-0923.20242.001	Preliminary course "Mathematics for Data Science"	practice (on-campus)	Bachelor	0
		82-105-DS26- S-VL-0923.20242.001	Preliminary course "Mathematics for Data Science"	lecture (on-campus)	Bachelor	
82-105-L- MAT03-H-0512	Linear Algebra 1	82-105-L- MAT03-S-VL-0512.20242.002	Lineare Algebra I for Data Science	lecture (on-campus)	Bachelor	10
		82-105-L- MAT03-S-UE-0512.20242.001 or	Linear Algebra 1 for Data Science - Group 1 or	practice (on-campus)	Bachelor	
		82-105-L- MAT03-S-UE-0512.20242.002	Lineare Algebra I for Data Science - Group 2	practice (on-campus)	Bachelor	
82-105-L- MAT24-H-0610, 88-105-MAT49-H-0417, 88-149- SOZ117-H-0921	Introduction to Stochastics; Elements of Stochastics	82-105-L- MAT24-S-VL-0610.20242.001	Introduction to Stochastics	lecture (on-campus)	Bachelor	5
		82-105-L- MAT24-S-UE-0610.20242.001	Introduction to Stochastics	practice (on-campus)	Bachelor	

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82-105-MAT01- H-0512	Measure Theory	82-105- MAT01-S-VL-0512.20242.001	Measure Theory for Data Science	lecture (on-campus)	Bachelor	5
		82-105-MAT01- S-UE-0512.20242.001	Measure Theory	practice (on-campus)	Bachelor	
82-105-MAT19- H-0610	Introduction to Statistics; Mathematics	82-105- MAT19-S-VL-0610.20242.001	Introduction to Statistic	lecture (on-campus)	Bachelor	5
		82-105- MAT19-S-UE-0610.20242.001 or	Introduction to Statistic or - Group 1	practice (on-campus)	Bachelor	
		82-105- MAT19-S-UE-0610.20242.002	Introduction to Statistic - Group 2	practice (on-campus)	Bachelor	
82-105-MAT26- H-0417	Analysis III	82-105- MAT26-S-VL-0417.20242.001	Analysis III for Data Science	lecture (on-campus)	Bachelor	7
		82-105-MAT26- S-UE-0417.20242.001	Analysis III for Data Science	practice (on-campus)	Bachelor	
82-105-MAT29- H-0512	Introduction to Numerical Mathematics	82-105- MAT29-S-VL-0512.20242.001	Introduction to Numerical Mathematics	lecture (on-campus)	Bachelor	5
		82-105- MAT29-S-UE-0512.20242.001	Introduction to Numerical Mathematics	practice (on-campus)	Bachelor	