

Double bachelor programme Applied Mathematics and Technische Natuurkunde 24/25

B1 (cohort 2024/2025)

Course code	Name	Coord.	Lang- uage	EC
Semester 1 (Sem 1)				7,0
202300095	Lab Course	TN	NL	4,0
202300096	Programming and Dataprocessing	TN	NL	3,0
Quartile 01 (1A)				17
202200141	Linear Structures 1	AM	EN	5,0
202200143	Analysis 1	AM	EN	5,0
202100094	Dynamics and Relativity	TN	NL	4,5
202000675	Project Dynamics and Relativity	TN	EN	2,5
Quartile 02 (1B)				18
202200236	Linear Structures 2	AM	EN	4,0
202400660	Analysis 2	AM	EN	6,0
202000677	Thermodynamics	TN	EN	4,0
202000680	Project Thermodynamics	TN	NL	4,0
Quartile 03 (2A)				19
202001344	Probability Theorie	AM	EN	5,0
202001343	Signals and Transforms	AM	EN	5,0
202300196	Modeling 2 + Project AP	AM	EN	5,0
202000683	Instrumentation	TN	NL	4,0
Quartile 04 (2B)				19
202200241	Numerical Mathematics	AM	EN	5,0
202200242	Differential Equations	AM	EN	5,0
202000687	Quantum Matter	TN	NL	5,0
202000688	Geometrical Optics	TN	NL	2,5
202200097	Project Engineering Systems¹	TN	NL	1,5
Total EC first academic year				80,0

¹ Part of 202000688 Engineering Systems TN Mod04

B2 (cohort 2023/2024)

Course code	Name	Coord.	Lang- uage	EC
Quartile 05 (1A)				20,5
202300016	Mathematical Statistics 1	AM	EN	7,0
202300017	Analysis 3	AM	EN	5,0
202400597	Models	TN	EN	4,5
202000694	Classical Mechanics	TN	EN	4,0
Quartile 06 (1B)				20,0
202200094	Quantum Mechanics 1	TN	EN	5,0
202001485	Optics Theory	TN	EN	4,5
202300063	Optics Practicals	TN	EN	2,5
202200095	Hilbertruimte	TN	EN	3,0
202300027	Linear Optimization	AM	EN	5,0
Quartile 07 (2A)				19,5
202000701	Introduction Solid State Physics	TN	NL	7,0
202001362	Algebra	AM	EN	3,5
202000702	Statistical Physics	TN	NL	6,0
202300116	Introduction to Electrodynamics²	TN	EN	3,0
Quartile 08 (2B)				21,0
202300023	Fluid Physics Theory	TN	EN	4,5
202300024	Fluid Physics Practicals	TN	EN	2,5
202200336	Markov Chains	AM	EN	4,0
202000706	Electrodynamics	TN	EN	6,0
202200337	Stochastic Models	AM	EN	4,0
Total EC second academic year				81,0

² Part of 202000682 Electromagnetics TN Mod03

B3 (cohort 2022/2023)

Course code	Name	Coord.	Lang- uage	EC
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	Quartile 09 (1A)				20
	Minor Quartile 09				15
-	Free electives ⁵				5
	Quartile 10 (1B)				20
202001485	Minor Quartile 10	TN	EN		15
-	Free electives ⁵				5
	Quartile 11 (2A)				18,0
202300067	Preperation Bachelor's assignment	TN	NL		3,0
202300068	Statistics in Scientific Research	TN	NL		2,0
202400632	Introduction to PDE	AM			4,0
	Master oriëntation elective AM	AM			4,0
	Electives AP				5,0
					2.5/
202100223	Computational Physics	AP	EN		5.0
					2,5/
202100225	Remote Control of Experiments	AP	EN		5,0
202000710	Material Science	TN	EN		5,0
					3.0/
202100224	Machine Learning	AP	EN		5.0
202001413	Soft Matter Physics	AP	EN		5,0
202000711	Technical Optics	TN	EN		5,0
	Quartile 12 (2B)				20,0
201500405	Complex Function Theory	AM	EN		3,0
202400348	Reflection 3	AM	EN		2,0
202001433	Bachelor's Assignment AM-AP				15,0
	<i>General Aspects (50%)</i>				7,5
	<i>Sceintific Aspects (50%)</i>				7,5
Total EC third academic year					78,0

⁵ Elective courses at M-level. In case of doubt, consult the study advisor