## Curriculum B-AM for cohort 2022 and later

## First year

Course code	Name	$\mathbf{EC}$	Coordinator
202200140	Structures and Models		dr. Meinsma
202200141	Linear Structures 1	5	
202200142	Modelling and Programming 1	5	
202200143	Analysis 1	5	
202200235	Structures and Systems		dr. De Jong
202200236	Linear Structures 2	4	
202400660	Analysis 2	6	
202200238	Systems Theory	5	
202001342	Signals and Uncertainty		dr. Meinsma
202001343	Signals and Transforms	5	
202001344	Probability Theory for AM	5	
202200239	Modelling and Programming 2	5	
202200240	Numerical Math & Differential Equations		dr. Schlottbom
202200241	Numerical Mathematics	5	
202200242	Differential Equations	5	
202200243	Modelling and Programming 3	5	

## Second year

Course code	Name	EC	Coordinator
202300015	Statistics and Analysis		prof. Schmidt-Hieber
202300016	Mathematical Statistics 1	7	
202300017	Analysis 3	5	
202300018	Reflection 1	3	
202300025	Statistics and Optimisation		dr. Timmer
202300026	Mathematical Statistics 2	5	
202300027	Linear Optimisation	5	
202300028	Nonlinear Optimisation and Learning	5	
202001359	Discr. Structures & Efficient Algorithms		prof. Uetz
202001360	Algorithmic Discrete Mathematics	5	
202001361	Languages & Machines	3.5	
202001361	Algebra	3.5	
202001362	Implementation Project on Graph Isomorphism	3	
202200335	Mod. & Analysis of Stochastic Processes		dr. Scheinhardt
202200336	Markov Chains	4	
202200337	Stochastic Models	4	
202200338	Stochastic Simulation	4	
202200339	Project	3	

## Third year

	Name	EC	
	Modules 9 and 10		
	minor profile <sup>a</sup>	30	
202400630	Preparation BSc Thesis and Electives		dr. Timmer
202400631	Graph Theory	4	
202400632	Introduction to PDE	4	
202400633	Reflection 2 <sup>b</sup>	3	
	Master Orientation Elective (1 of 3):		
202400634	Mathematics behind Data-Driven Methods	4	
202400635	Topics in Sequential Decision-Making	4	
202400636	Model Reduction	4	
202001378	Finalising Bachelor's Thesis		dr. Timmer
201500405	Complex Function Theory	3	
202400348	Reflection 3 <sup>c</sup>	2	
202001379	Bachelor's Assignment <sup>c</sup>	10	

<sup>&</sup>lt;sup>a</sup>Sequence requirement 1: students may only start participating in (part of) these study units once they have gained at least 75 EC.

<sup>&</sup>lt;sup>b</sup>Sequence requirement 2: students may only participate in this study unit once they have passed all the study units of the first two years.

 $<sup>^{</sup>c}$ Sequence requirement 3: students may only participate in these study units once they have passed the study unit Reflection 2.