

# Curriculum B-AM&TCS for cohort 2025

## First year

Course code	Name	EC	Division
<i>Q1.1A</i>			
202200141	Linear Structures 1	5	AM
202500460	Analysis 1	5	AM
202500331	Software Diamond	3	TCS
202500332	Information Diamond	3	TCS
202500333	Hardware Diamond	3	TCS
202500334	Cybersecurity and Law Diamond	3	TCS
<i>Q1.1B</i>			
202200236	Linear Structures 2	4	AM
202400660	Analysis 2	6	AM
202500342	Introduction to Programming	3	TCS
202500343	Advanced Programming	3	TCS
202500344	Software System Implementation Project	3	TCS
<i>Q1.2A</i>			
202001343	Signals and Transforms	5	AM
202001344	Probability Theory for AM	5	AM
202500346	Network Systems Part 1	3	TCS
202500347	Network Systems Part 2	3	TCS
202500348	Network Systems Part 3	3	TCS
202400362	Network Systems Project	3	TCS
<i>Q1.2B</i>			
202200241	Numerical Mathematics	5	AM
202200242	Differential Equations	5	AM
202500351	Secure Web Development	3	TCS
202500352	Databases	3	TCS
202400444	Data & Information Project (for AM-TCS)	4	TCS

## Second year

Course code	Name	EC	Division
<i>Q2.1A</i>			
202500380	Mathematical Statistics 1	7	AM
202500356	Computer Architecture and Organisation	4	TCS
202500357	Operating Systems	4	TCS
202500358	Computer Systems Project	4	TCS
<i>Q2.1B</i>			
202300026	Mathematical Statistics 2	5	AM
202300027	Linear Optimisation	5	AM
202500361	Intro to AI and Machine Learning	6	TCS
202500362	UX Design	6	TCS
<i>Q2.2A</i>			
202500366	Algorithmic Discrete Mathematics	3	AM/TCS
202500367	Algorithms and Data Structures	3	AM/TCS
202500368	Languages & Machines	3	AM/TCS
202500369	Algebra	3	AM/TCS
202001363	Implementation Project on Graph Isomorphism	3	AM/TCS
202300156	Modelling 2	4	AM
<i>Q2.2B</i>			
202200336	Markov Chains	4	AM
202200337	Stochastic Models	4	AM
202200338	Stochastic Simulation	4	AM
202200339	Project	3	AM
202300157	Modelling 3	4	AM

## Third year

Course code	Name	EC	Division
<i>Q3.1A</i>			
202300017	Analysis 3	5	AM
202400633	Reflection 2	3	AM
202200021	Machine Learning fo Datatypes	3.5	TCS
202200055	KKR & DQ	4.5	TCS
202200023	Explainable AI & Ethics	3	TCS
202200024	DS&AI Project	4	TCS
<i>Q3.1B</i>			
Minor selection <sup>ac</sup>		15	AM/TCS
<i>Q3.2A</i>			
202400631	Graph Theory	4	AM
202001048	Design Project Core	15	TCS
<i>Q3.2B</i>			
201500405	Complex Function Theory	3	AM
202400348	Reflection 3 <sup>c</sup>	2	AM
202001385	Bachelor's Assignment Double Degree <sup>bc</sup>	15	AM/TCS

<sup>a</sup>Before starting (part of) a minor, the student must have completed all first-year study units.

<sup>b</sup>The student can only start with the Bachelor's Assignment if they have fully passed at least eight quartiles of the complete programme, including year 1.

<sup>c</sup>Students have the option to do Reflection 3 and the Bachelor's Assignment Double Degree in quartile 1B and move the Minor to quartile 2B.