

Suggested / Example Structure of BSc (Major in Decision Analytics) Curriculum (for students admitted to Year 1 in 2021 and before)

Year	One		Two		Three		Four	
Semester	One	Two	One	Two	One	Two	One	Two
Disciplinary Core	COMP1117 Computer Programming MATH1013 University Mathematics II	MATH2014 Multivariable Calculus and Linear Algebra STAT2601 Probability and Statistics I	STAT2602 Probability and Statistics II	COMP2119 Introduction to Data Structures and Algorithms STAT3600 Linear Statistical Analysis	MATH3904 Introduction to Optimization STAT3612 Statistical Machine Learning	COMP3278 Introduction to Database Management Systems		STAT4609 Big Data Analytics
Other			COMP2113 Programming Technologies (Pre-requisite of COMP2119)				Capstone (at least 6 credits) STAT3799 Directed Studies in Statistics STAT4710 Capstone Experience for Statistics Undergraduates STAT4766 Statistics Internship STAT4799 Statistics Project	
Disciplinary Elective					At least 12 credits (2 courses) selected from the following courses: COMP3250 Design and Analysis of Algorithms COMP3270 Artificial Intelligence COMP3323 Advanced Database Systems COMP3407 Scientific Computing MATH3408 Computational Methods and Differential Equations with Applications MATH3600 Discrete Mathematics MATH3601 Numerical Analysis MATH3901 Operations Research I STAT3620 Modern Nonparametric Statistics STAT3621 Statistical Data Analysis STAT3622 Data Visualization STAT3655 Survival analysis STAT4011 Natural language processing STAT4023 Medical image analysis STAT4601 Time-series Analysis STAT4602 Multivariate Data Analysis STAT4610 Bayesian Learning			
Science Foundation Courses	SCNC1111 Scientific Method and Reasoning	SCNC1112 Fundamentals of Modern Science						
Common Core	Six common core courses within the first three years							
Language	CAES1000 Core University English (offered in both semesters)		CAES9820 Academic English for Science Students or CAES9821 Professional & Technical Communication for Mathematical Sciences (offered in both semesters)		CSCI9001 Practical Chinese for Science Students (offered in both semesters)			

Note 1: If there are any courses (offered by SAAS or not) mutually exclusive to any Core courses, students must take the course stated in the curriculum to fulfil the degree requirement of the First Major. Course replacement should only be applied for the other Major(s) or Minor(s).

Note 2: This table is for students' reference only for planning their studies ahead. Course offering semester and availability are subject to changes. Some courses are offered in both semesters.

Note 3: Please read the Faculty of Science's Student Handbook and Syllabuses & Regulations for more details.