BStat (Professional Core in Decision Analytics) Suggested Study Plan A

Year	One		Two		Three		Four	
Semester	One	Two	One	Two	One	Two	One	Two
Disciplinary Core Courses	**MATH1013** University Mathematics II **SDST1600** Statistics: Ideas and Concepts	**COMP1117** Computer Programming	**COMP2113** Programming Technologies **SDST2601** Probability and Statistics I	**COMP2118** Data Structures and Algorithms Essentials **SDST2602** Probability and Statistics II	**MATH3900** Optimization for AI and Data Analytics **SDST3600** Linear Statistical Analysis	**SDST3612** Statistical Machine Learning	**SDST4610** Bayesian Learning	**SDST4609** Big Data Analytics **SDST4611** High-Dimensional Statistical Learning
Disciplinary Elective Courses		*List A (for general study)* **MATH2012** Fundamental Concepts of Mathematics	**MATH2014** Multivariable Calculus and Linear Algebra		At least 24 credits (4 courses) selected from the following courses: **COMP3251** Algorithm Design **COMP3252** Algorithm Design and Analysis **COMP3278** Introduction to Database Management Systems **COMP3407** Scientific Computing **SDST3620** Modern Nonparametric Statistics **SDST3621** Statistical Data Analysis **SDST3622** Data Visualization **SDST4011** Natural Language Processing **SDST4023** Medical Image Analysis **SDST4601** Time-Series Analysis **SDST4602** Multivariate Data Analysis **SDST4612** Interpretable Machine Learning **SDST4613** Causal Inference **SDST7609** Research Methods in Statistics		
		or						
		List B (for advanced study) **MATH2101** Linear Algebra I	**MATH2211** Multivariable Calculus					
Capstone Experience Courses					At least 6 credits selected from the following courses: **SDST3799** Directed Studies in Statistics **SDST4710** Capstone Experience for Statistics Undergraduates **SDST4766** Statistics Internship **SDST4799** Statistics Project (12 credits)			
Other Courses	**AILT1001** Artificial Intelligence Literacy I (3 credits)		**AILT9019** AI Literacy for Computing and Data Science (3 credits)					
Common Core Courses	Six common core courses (36 credits) within the first three years							
Language Courses	**CAES1001** Academic Communication in English (0 credits) (offered in both semesters)		**CAES9821** Professional & Technical Communication for Statistical Sciences (offered in both semesters)		**CDSC9001** Practical Chinese for Computing and Data Science Students (to be confirmed) (offered in both semesters)			

Note 1: This suggested study plan is for students' reference only. Students can choose another subclass if a course is also offered in different semesters/time slots. However, students are reminded to check the course pre-requisites when planning their studies ahead, whilst course offering semester and availability are subject to changes every year. Please refer to the Student Handbook, Regulations and Syllabus for more details.

Note 2: Students may also choose to take more Disciplinary Core or Elective courses as free electives than the number stipulated above within the allowed course load.

Note 3: If there are any courses mutually exclusive to any Disciplinary Core courses, students must take the course stated in the curriculum to fulfil the degree requirement of the Professional Core. Course replacement should only be applied for the other Major(s) or Minor(s).

Note 4: Please refer to the Student Handbook for details about exemption of language courses if applicable.

BStat (Professional Core in Decision Analytics) Suggested Study Plan B (for students who had no calculus background in high school)

Year	One		Two		Three		Four	
Semester	One	Two	One	Two	One	Two	One	Two
Disciplinary Core Courses	**SDST1600** Statistics: Ideas and Concepts	**COMP1117** Computer Programming **MATH1013** University Mathematics II	**COMP2113** Programming Technologies	**COMP2118** Data Structures and Algorithms Essentials **SDST2601** Probability and Statistics I	**MATH3900** Optimization for AI and Data Analytics **SDST2602** Probability and Statistics II	**SDST3600** Linear Statistical Analysis	**SDST3612** Statistical Machine Learning **SDST4610** Bayesian Learning	**SDST4609** Big Data Analytics **SDST4611** High-Dimensional Statistical Learning
Disciplinary Elective Courses			**MATH2012** Fundamental Concepts of Mathematics	**MATH2014** Multivariable Calculus and Linear Algebra	At least 24 credits (4 courses) selected from the following courses: **COMP3251** Algorithm Design **COMP3252** Algorithm Design and Analysis **COMP3278** Introduction to Database Management Systems **COMP3407** Scientific Computing **SDST3620** Modern Nonparametric Statistics **SDST3621** Statistical Data Analysis **SDST3622** Data Visualization **SDST4011** Natural Language Processing **SDST4023** Medical Image Analysis **SDST4601** Time-Series Analysis **SDST4602** Multivariate Data Analysis **SDST4612** Interpretable Machine Learning **SDST4613** Causal Inference **SDST7609** Research Methods in Statistics			
Capstone Experience Courses and Other Courses	**AILT1001** Artificial Intelligence Literacy I (3 credits) **MATH1011** University Mathematics I		**AILT9019** AI Literacy for Computing and Data Science (3 credits)		At least 6 credits selected from the following courses: **SDST3799** Directed Studies in Statistics **SDST4710** Capstone Experience for Statistics Undergraduates **SDST4766** Statistics Internship **SDST4799** Statistics Project (12 credits)			
Common Core Courses	Six common core courses (36 credits) within the first three years							
Language Courses	**CAES1001** Academic Communication in English (0 credits) (offered in both semesters)		**CAES9821** Professional & Technical Communication for Statistical Sciences (offered in both semesters)		**CDSC9001** Practical Chinese for Computing and Data Science Students (to be confirmed) (offered in both semesters)			

Note 1: This suggested study plan is for students' reference only. Students can choose another subclass if a course is also offered in different semesters/time slots. However, students are reminded to check the course pre-requisites when planning their studies ahead, whilst course offering semester and availability are subject to changes every year. Please refer to the Student Handbook, Regulations and Syllabus for more details.

Note 2: Students may also choose to take more Disciplinary Core or Elective courses as free electives than the number stipulated above within the allowed course load.

Note 3: If there are any courses mutually exclusive to any Disciplinary Core courses, students must take the course stated in the curriculum to fulfil the degree requirement of the Professional Core. Course replacement should only be applied for the other Major(s) or Minor(s).

Note 4: Please refer to the Student Handbook for details about exemption of language courses if applicable.