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	MATH1013	COMP1117	COMP2113	COMP2118	MATH3900	SDST3612	SDST4610	SDST4609	
Core	University	Computer	Programming	Data Structures and	Optimization for	Statistical Machine	Bayesian Learning	Big Data Analytics	
	Mathematics II	Programming	Technologies	Algorithms Essentials	AI and Data	Learning			
					Analytics			SDST4611	
	SDST1600		SDST2601	SDST2602	SDST3600			High-Dimensional	
	Statistics: Ideas and		Probability and	Probability and	Linear Statistical			Statistical Learning	
	Concepts		Statistics I	Statistics II	Analysis				
Disciplinary Elective		List A (for general study)			At least 24 credits (4 courses) selected from the following courses:				
		MATH2012	MATH2014	COMP3251 Algorithm Design COMP3252 Algorithm Design and Analysis					
		Fundamental	Multivariable		COMP3232 Algorithm Design and Analysis COMP3278 Introduction to Database Management Systems				
		Concepts of	Calculus and		COMP3407 Scientific Computing				
		Mathematics	Linear Algebra			odern Nonparametric Sta atistical Data Analysis	itistics		
		1714tirematics	Emeai riigeora			ata Visualization			
		or			SDST4011 Natural Language Processing SDST4023 Medical Image Analysis SDST4601 Time-Series Analysis				
		List B (for advanced study)							
		MATH2101	MATH2211			ultivariate Data Analysis			
		Linear Algebra I	Multivariable		SDST4612 In	terpretable Machine Lear			
			Calculus		D = D = 10=0	ausal Inference esearch Methods in Statis	tics		
Capstone						ected from the following			
Capstone					SDST3799 Directed Studies in Statistics				
					SDST4710 Capstone Experience for Statistics Undergraduates			ates	
					SDST4766 Statistics Internship				
0.1	. == == 1001				SDST4799 St	atistics Project (12 cre	dits)	1	
Other Courses	AILT1001			AILT2001					
Courses	Artificial Intelligence			Artificial Intelligence					
Common	Literacy I (3 credits)			Literacy II (3 credits)					
Core	Six common core courses (36 credits) within the first three years								
Language	CAES1001 Academic Communication in English (0 credits)		CAES9821 Professional & Technical Communication for Statistical Sciences			I9001			
					Practical Chinese for Science Students				
					(to be co	onfirmed)			
	(offered in both semesters)		(offered in both semesters)		(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 <u>no calculus background</u> in high school)

Year	One		Two		Three		Four		
Semester	One	Two	One	Two	One	Two	One	Two	
Disciplinary Core	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			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 and Other Courses	AILT1001 Artificial Intelligence Literacy I (3 credits) MATH1011 University Mathematics I		AILT2001 Artificial Intelligence Literacy II (3 credits)		At least 6 credits sel SDST3799 E SDST4710 C SDST4766 S	t 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									
Language	CAES1001 Academic Communication in English (0 credits) (offered in both semesters)		CAES9821 Professional & Technical Communication for Statistical Sciences (offered in both semesters)		Practical Chinese (to be c	for Science Students onfirmed) ooth semesters)			

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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.