## THE UNIVERSITY OF HONG KONG DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE

Suggested / Example Structure of BSc (Major in Decision Analytics) Curriculum (for students admitted to Year 1 in 2022 and thereafter)

	Vear One		Two		iree		Four
One	Two	One	Two	One	Two	One	Two
COMP1117 Computer Programming MATH1013 University Mathematics II	MATH2014 Multivariable Calculus and Linear Algebra STAT2601 Probability and Statistics L	<b>STAT2602</b> 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
	Suitsites I	COMP2113 Programming Technologies (Pre-requisite of COMP2119)				STAT4710 Cap Sta STAT4766 Sta	ected Studies in Statistic pstone Experience for tistics Undergraduate tistics Internship
	At least 12 credits (2 courses) selected from the following courses:						
				COMP3250 COMP3251 <sup>4</sup> COMP3252 <sup>4</sup> COMP3270 COMP3270 STAT3010 STAT3620 STAT3621 STAT3621 STAT3622 STAT3655 STAT4011 STAT4023 STAT4601 STAT4602 STAT4610	Algorithm Design		
and Reasoning							
CAES1000 Core University English (offered in both semesters)		Academic English for Science Students or <b>CAES9821</b> Professional & Technical Communication for Mathematical Sciences (for 2022-23 cohort) / Statistical Sciences (for 2023-24		Practical Chinese for Science Students (offered in both semesters)			
	COMP1117 Computer Programming MATH1013 University Mathematics II Scientific Method and Reasoning CAES Core Univer	COMP1117   MATH2014     Computer   Multivariable     Programming   Calculus and     MATH1013   Linear Algebra     University   STAT2601     Mathematics II   Probability and     Statistics I   Statistics I     Mathematics II   Statistics I     Secondary   Scondary     Scientific Method   Fundamentals of     and Reasoning   Modern Science     Six of CAES1000   Core University English	COMP1117   MATH2014   STAT2602     Programming   Multivariable   Probability and     MATH1013   Linear Algebra   Statistics II     University   STAT2601   Probability and     Mathematics II   Probability and   Statistics I     View   Statistics I   COMP2113     Programming   Technologies   (Pre-requisite of COMP2119)     Scnct111   Scnct112   COMP2119)     Scientific Method and Reasoning   Fundamentals of Modern Science   Six common core courses     Catestion   Six common core courses   Six common core courses     Core University English (offered in both semesters)   or CA   Professional & Tech for Mathematical S cohort / Statistical S cohort / Statistical S	COMP1117   MATH2014   STAT2602   COMP2119     Computer   Multivariable   Probability and   Introduction to     MATH1013   Linear Algebra   Statistics II   Introduction to     Mathematics II   STAT2601   STAT3600   Linear Statistical     Mathematics II   Statistics I   COMP2113   STAT3600   Linear Statistical     Mathematics II   Statistics I   COMP2113   Programming   Technologies   (Pre-requisite of COMP2119)     Vere requisite of COMP2119)   Scontific Method   Scontific Method   Modern Science   Six common core courses within the first three or CAES1000     Core University English (offered in both semesters)   Six common core courses within the first communication for Mathematical Sciences (for 2022-23	COMP1117   MATH2014   STAT2602   COMP2119   MATH3904     Programming   Calculus and   Statistics II   Introduction to   Optimization     MATH1013   Linear Algebra   STAT2601   STAT3600   Statistical   Machine Learning     Mathematics II   Probability and Statistics I   COMP2113   STAT3600   Statistical   Machine Learning     Programming   Technologies   (Pre-requisite of COMP2119)   COMP2119   At least 12 credits (2 con COMP2250     Value   SCNC1111   SCNC1112   At least 12 credits (2 con COMP3252*   COMP3252*     SCNC1111   SCNC1112   Six common core courses within the first three years   STAT3600     Six common core courses within the first three years   Six common core courses within the first three years   CAES1000     Core University English (offered in both semesters)   Academic English for Science Students or CAES9820   Proctaca Chinese for 2022-23 cohort) / Statistical Sciences (for 2022-24 cohort and thereafter)   Practical Chinese for 2022-24 cohort and thereafter)	COMP1117 Computer Programming MATH1013 University Mathematics II MATH2014 Multivariable Calculus and Linear Algebra STAT2602 Probability and Statistics II COMP2119 Introduction to Data Structures and Algorithms MATH3904 Introduction to Optimization COMP3278 Introduction to Optimization   MATH1013 University Mathematics II STAT2601 Probability and Statistics I STAT3600 Interaction STAT3600 Linear Statistical Analysis STAT3612 Statistical Machine Learning Management Systems   Mathematics II COMP2113 Programming Technologies (Pre-requisite of COMP219) At least 12 credits (2 courses) selected from the foll COMP3251 Algorithm Design and Analysis At least 12 credits (2 courses) selected from the foll COMP3251 Algorithm Design and Analysis   SENC1111 Scientific Method and Reasoning SCNC1112 Fundamentals of Modern Science Six common core courses within the first three years Statistical Integer STAT3600 STAT3600 STAT3602 STAT3602 STAT3603 Design and Analy STAT3600 STAT360 STAT3603 Statistical Integer STAT3603   SCNC1111 Scientific Method and Reasoning Stat common core courses within the first three years Stat3603 STAT3600 STAT3600 STAT3602 Stat3603 STAT3600 STAT3602 STAT3600	COMP1117     MAT12014     STAT2602     COMP2119     MAT113904     COMP2278     Introduction to Introduction to Data Statistical     Introduction to Data Statistical     COMP2278     Introduction to Data Statistical       MAT11013     STAT2601     Statistica II     Data Statistical Analysis     STAT3602     Statistical Analysis     Mathematics II     Statistical Analysis     STAT3602     Statistical Statistical     Management Statistical Analysis     Statistical Analysis     Mathematics II     Comp2113     Statistical Analysis     Mathematics II     Statistical Machine Learning     Mathematics II     Statistical Analysis     Statistical Analysis     Statistical Analysis     Statistical Statistical Statistical COMP3207     Dististical Statistical

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.

Note 4: It is recommended that students opt for COMP3251 Algorithm design instead of COMP3252 Algorithm design and analysis when selecting elective courses between COMP3251 and COMP3252.