

## Sample Study Plan for BEng(CompSc) with Minor in Statistics [4-Year Curriculum]

		Semester 1		Semester 2	
Year 1 (60 cu)	<b>UG5 Requirements</b> (18 + 6 cu) General Engineering (12 + 24 cu)	MATH1851 / MATH1853 PHYS1050 <b>CAES1000</b> <b>UCC</b> <b>UCC</b>	Calculus and ordinary differential equations / Linear algebra, probability and statistics Physics for engineering students <b>Core University English</b> <b>University Common Core</b> <b>University Common Core</b>	MATH1851 / MATH1853 ENGG1111 ENGG1202 ENGG120x <b>UCC</b>	Calculus and ordinary differential equations / Linear algebra, probability and statistics Computer programming and applications Introduction to computer science 1 General Engineering course * <b>University Common Core</b>
Year 2 (60 cu)	<b>UG5 Requirements</b> (12 + 6 cu) CS Core (12 + 12 cu) <b>CS Electives</b> (0 + 6 cu) STAT requirement (6 + 6 cu)	COMP2121 COMP2123 STAT1603 / STAT2601^ <b>UCC</b>  <b>UCC</b>	Discrete mathematics Programming technologies and tools Introductory statistics / Probability and statistics I  <b>University Common Core</b>  <b>University Common Core</b>	COMP2119 COMP2120 <b>COMP2396</b>  STAT2602^ / STAT2603 / STAT2605 <b>UCC</b>	Introduction to data structures and algorithms Computer organization <b>Object-oriented programming and Java #</b>  Probability and statistics II / Data management with SAS / Introduction to demographic and socio-economic statistics <b>University Common Core</b>
Year 3 (66 cu)	<b>UG5 Requirements</b> (6 + 0 cu) CS Core (18 + 18 cu) <b>CS Electives</b> (0 + 6 cu) STAT requirement (6 + 6 cu)	COMP3230 COMP3278 COMP3297 <b>CENG9001</b> STAT Elective	Principles of operating systems Introduction to database management systems Introduction to software engineering <b>Practical Chinese for engineering students</b> Elective course in actuarial studies	COMP3234 COMP3250 COMP3311 <b>CS Elective</b> STAT Elective	Computer and communication networks Design and analysis of algorithms Legal aspects of computing <b>Elective course in computer science</b> Elective course in actuarial studies
	Summer (6 cu)	COMP3412	Internship		
Year 4 (54 cu)	<b>UG5 Requirements</b> (6 + 0 cu) Capstone Experience (12 cu) <b>CS Electives</b> (12 + 6 cu) STAT requirement (6 + 12 cu)	COMP4801 <b>CAES9542</b> <b>CS Elective</b> <b>CS Elective</b> STAT Elective	Final year project <b>Technical English for computer science</b> <b>Elective course in computer science</b> <b>Elective course in computer science</b> Elective course in actuarial studies	COMP4801 <b>CS Elective</b> STAT Elective STAT Elective	Final year project <b>Elective course in computer science</b> Elective course in actuarial studies Elective course in actuarial studies

\* List of General Engineering Courses:

ENGG1201    Engineering for sustainable development  
 ENGG1203    Introduction to electrical and electronic engineering  
 ENGG1204    Industrial management and logistics

ENGG1205    Introduction to mechanical engineering  
 ENGG1206    Introduction to biomedical engineering

# Academic Advisor's recommendation of CS elective course

^ Students may need to take MATH1013 to satisfy the pre-requisite requirement of STAT2601