

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

		Semester 1		Semester 2	
Year 1 (60 cu)	UG5 Requirements (18 + 6 cu) General Engineering (12 + 24 cu)	MATH1851 / MATH1853 PHYS1050 CAES1000 UCC UCC	Calculus and ordinary differential equations / Linear algebra, probability and statistics Physics for engineering students Core University English University Common Core University Common Core	MATH1851 / MATH1853 ENGG1111 ENGG1202 ENGG120x UCC	Calculus and ordinary differential equations / Linear algebra, probability and statistics Computer programming and applications Introduction to computer science 1 General Engineering course * University Common Core
Year 2 (60 cu)	UG5 Requirements (12 + 6 cu) CS Core (12 + 12 cu) CS Electives (0 + 6 cu) AS requirement (6 + 6 cu)	COMP2121 COMP2123 MATH1013 UCC UCC	Discrete mathematics Programming technologies and tools University mathematics II University Common Core University Common Core	COMP2119 COMP2120 COMP2396 STAT2601 / STAT2901 UCC	Introduction to data structures and algorithms Computer organization Object-oriented programming and Java # Probability and statistics I / Probability and statistics: foundations of actuarial science University Common Core
Year 3 (66 cu)	UG5 Requirements (6 + 0 cu) CS Core (18 + 18 cu) CS Electives (0 + 6 cu) AS requirement (6 + 6 cu)	COMP3230 COMP3278 COMP3297 CENG9001 AS Elective	Principles of operating systems Introduction to database management systems Introduction to software engineering Practical Chinese for engineering students Elective course in actuarial studies	COMP3234 COMP3250 COMP3311 CS Elective AS Elective	Computer and communication networks Design and analysis of algorithms Legal aspects of computing Elective course in computer science Elective course in actuarial studies
	Summer (6 cu)	COMP3412	Internship		
Year 4 (54 cu)	UG5 Requirements (6 + 0 cu) Capstone Experience (12 cu) CS Electives (12 + 6 cu) AS requirement (6 + 12 cu)	COMP4801 CAES9542 CS Elective CS Elective AS Elective	Final year project Technical English for computer science Elective course in computer science Elective course in computer science Elective course in actuarial studies	COMP4801 CS Elective AS Elective AS Elective	Final year project Elective course in computer science 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