

Sample Study Plan for BEng(CompSc) with Minor in Computational & Financial Mathematics [for 2018-19 intake]

		Semester 1		Semester 2	
Year 1 (60 cu)	UG5 Requirements (18 cu) Engineering (42 cu)	MATH1851 / MATH1853 ENGG1300 / ENGG1310 ENGG1330 CAES1000 / ENGG1320 CC	Calculus and ordinary differential equations / Linear algebra, probability and statistics Fundamental mechanics / Electricity and electronics Computer programming I Core University English / Engineers in the modern world University Common Core	MATH1851 / MATH1853 ENGG1300 / ENGG1310 ENGG1340 CAES1000 / ENGG1320 CC	Calculus and ordinary differential equations / Linear algebra, probability and statistics Fundamental mechanics / Electricity and electronics Computer programming II Core University English / Engineers in the modern world University Common Core
Year 2 (60 cu)	UG5 Requirements (24 cu) CS Core (24 cu) CF requirement (12 cu)	COMP2121 COMP2396 MATH2101 / MATH2211 CC CC	Discrete mathematics Object-oriented programming and Java Linear algebra I / Multivariable calculus University Common Core University Common Core	COMP2119 COMP2120 MATH2101 / MATH2211 CC CC	Introduction to data structures and algorithms Computer organization Linear algebra I / Multivariable calculus University Common Core University Common Core
Year 3 (60 cu)	UG5 Requirements (6 cu) CS Core (30 cu) Electives (12 cu) CF requirement (12 cu)	COMP3230 COMP3278 COMP3297 CENG9001 MATH3601 / MATH3906	Principles of operating systems Introduction to database management systems Software engineering Practical Chinese for engineering students Numerical analysis / Financial calculus	COMP3234 COMP3250 CS Elective CS Elective MATHxxxx	Computer and communication networks Design and analysis of algorithms Elective course in computer science Elective course in computer science MATH2012 or MATH2241 or an advanced level disciplinary elective course in lieu of MATH1013
	Summer# (0 cu)	COMP3410	Internship		
Year 4 (60 cu)	UG5 Requirements (6 cu) Capstone Experience (12 cu) Electives (24 cu) CF requirement (18 cu)	COMP4801 CAES9542 CS Elective CS Elective MATH3601 / MATH3906	Final year project Technical English for computer science Elective course in computer science Elective course in computer science Numerical analysis / Financial calculus	COMP4801 CS Elective CS Elective CF Elective CF Elective	Final year project Elective course in computer science Elective course in computer science Elective course in actuarial studies Elective course in actuarial studies

Student can take the Internship course in the 2nd summer provided they can identify a suitable summer placement (which is approved by the department).