

Sample Study Plan for BEng(CompSc) with Minor in Computational & Financial Mathematics [for 2018-19 to 2020-21 intakes]

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

** Students should consult Faculty of Science Temporary Academic Advisor for the exemption from MATH1013.