

Sample Study Plan for BEng(CompSc) with Minor in **Mathematics** [for intakes of 2017 and before]

		Semester 1		Semester 2	
Year 1 (60 cu)	<b>UG5 Requirements</b> (12 + 12 cu)  General Engineering (18 + 18 cu)	MATH1851 / MATH1853 ENGG1111 ENGG1202 / ENGG120x <b>CAES1000</b> <b>UCC</b>	Calculus and ordinary differential equations / Linear algebra, probability and statistics Computer programming and applications Introduction to computer science / General Engineering course * <b>Core University English</b> <b>University Common Core</b>	MATH1851 / MATH1853 PHYS1050 ENGG1202 / ENGG120x <b>UCC</b> <b>UCC</b>	Calculus and ordinary differential equations / Linear algebra, probability and statistics Physics for engineering students Introduction to computer science / General Engineering course * <b>University Common Core</b> <b>University Common Core</b>
Year 2 (60 cu)	<b>UG5 Requirements</b> (6 + 12 cu)  CS Core (12 + 12 cu)  <b>CS Electives</b> (6 + 0 cu)  MATH requirement (6 + 6 cu)	COMP2121 COMP2123 <b>COMP2396</b> MATH2101 / MATH2211 <b>UCC</b>	Discrete mathematics Programming technologies and tools <b>Object-oriented programming and Java #</b> Linear algebra I / Multivariable calculus  <b>University Common Core</b>	COMP2119 COMP2120  MATH2101 / MATH2211 <b>UCC</b> <b>UCC</b>	Introduction to data structures and algorithms Computer organization  Linear algebra I / Multivariable calculus  <b>University Common Core</b> <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)  MATH requirement (6 + 6 cu)	COMP3230 COMP3278 COMP3297 <b>CENG9001</b> MATHxxxx	Principles of operating systems Introduction to database management systems Software engineering <b>Practical Chinese for engineering students</b> MATH2012 or MATH2241 or an advanced level disciplinary elective course in lieu of MATH1013	COMP3234 COMP3250 COMP3311 <b>CS Elective</b> MATH Elective	Computer and communication networks Design and analysis of algorithms Legal aspects of computing <b>Elective course in computer science</b> <b>Elective course in mathematics</b>
	Summer (6 cu)	COMP3412	Internship		
Year 4 (54 cu)	<b>UG5 Requirements</b> (6 + 0 cu)  Capstone Experience (12 cu)  <b>Electives</b> (12 + 12 cu)  MATH requirement (6 + 6 cu)	COMP4801 <b>CAES9542</b> <b>CS Elective</b> <b>CS Elective</b> MATH 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 mathematics	COMP4801 <b>CS Elective</b> <b>Free Elective</b>  MATH Elective	Final year project <b>Elective course in computer science</b> <b>Elective course in any disciplines</b>  Elective course in mathematics

\* 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  
 ENGG1207      Foundation of biochemistry for medical engineering

# Academic Advisor's recommendation of CS elective course