Recommended Study Pathway for BEng in Computer Science (for 2022-23 & 2023-24 intake)

1st Year Fall	Credits		1st Year Spring	Credits
U. Core English I	3		U. Core English II	3
MATH 1012/1013/1023/1020 (Calculus I/Honors Calculus I/Accelerated Calculus)	3-4		MATH 1014/1024 (Calculus II/Honors Calculus II)	3
Introductory Programming course: COMP 1021*/1022P*	3		CHEM 1008/1020 or LIFS 1901 or PHYS 1101/1112/1312	3—4
	9 - 10			9 - 10

2nd Year Fall	Credits		2nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3		MATH 2411 / MATH 2421 / MATH 2431 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3		/ IEDA 2520 (Prob.) / IEDA 2540 (Stat.)	3
COMP 2011 (Intro. to OOP)	4		COMP 2012 (OOP & Data Structure)	4
COMP 2711 (Discrete Math)	4		COMP 2611 (Computer Organization)	4
COMP 4900 (Academic and Professional Development)	0		COMP 1991 (Industrial Experience)	0
ENGG 2010 (Engineering Seminar Series)	0		COMP 4900 (Academic and Professional Development)	0
			ENGG 2010 (Engineering Seminar Series)	0
	14			12

3rd Year Fall	Credits		3rd Year Spring	Credits
COMP 3111 (Software Engineering)	4		COMP Area Elective #	3
COMP 3511 (Operating Systems)	3		COMP Area Elective	3
COMP 3711 (Design/Analysis Alg.)	3		COMP 1991 (Industrial Experience)	0
COMP 1991 (Industrial Experience)	0		COMP 4900 (Academic and Professional Development)	0
COMP 4900 (Academic and Professional Development)	0		ENGG 2010 (Engineering Seminar Series)	0
ENGG 2010 (Engineering Seminar Series)	0			
	10			6

4th Year Fall	Credits		4th Year Spring	Credits
COMP 4981/H (FYP/FYT)	3		COMP 4981/H (FYP/FYT continued)	3
LANG 4030 (Tech Comm. II)	3		COMP Other-Area Elective	3
COMP Area Elective	3		COMP 2000-level or above Elective	3
COMP Other-Area Elective	3		COMP 1991 (Industrial Experience)	0
COMP 1991 (Industrial Experience)	0		COMP 4900 (Academic and Professional Development)	0
COMP 4900 (Academic and Professional Development)	0			
	12			9

COMP students may use COMP 1021/1022P to fulfill the Engineering Introduction course requirement.
 # Students must take 3 COMP courses from one area and 2 courses from other area(s).

Note:
(1) The program requires a minimum of 120 credits for graduation.
(2) At least 99—108 credits should come from the following: 16—20 credits from Engineering Fundamental Courses, 35—40 credits from COMP Required Courses, 18 credits from COMP Electives, and 30 credits from UCore.

Recommended Normal Study Pathway for BEng in Computer Science
Plus One-Semester Leave (e.g., Exchange-Out/Internship) (for 2022-23 & 2023-24 intake)

1st Year Fall	*Credits*		*1st Year Spring*	*Credits*
U. Core English I	3		U. Core English II	3
MATH 1012/1013/1023/1020 (Calculus I/Honors Calculus I/Accelerated Calculus)	3-4		MATH 1014/1024 (Calculus II/Honors Calculus II)	3
Introductory Programming course: COMP 1021/1022P	3		CHEM 1008/1020 or LIFS 1901 or PHYS 1101/1112/1312	3—4
	9 – 10			9 - 10

2nd Year Fall	*Credits*		*2nd Year Spring*	*Credits*
LANG 2030 (Tech. Comm. I)	3		MATH 2411 / MATH 2421 / MATH 2431 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3		/ IEDA 2520 (Prob.) / IEDA 2540 (Stat.)	3
COMP 2011 (Intro. to OOP)	4		COMP 2012 (OOP & Data Structure)	4
COMP 2711 (Discrete Math)	4		COMP 2611 (Computer Organization)	4
COMP 4900 (Academic and Professional Development)	0		COMP 1991 (Industrial Experience)	0
ENGG 2010 (Engineering Seminar Series)	0		COMP 4900 (Academic and Professional Development)	0
			ENGG 2010 (Engineering Seminar Series)	0
	14			12

3rd Year Fall	*Credits*		*3rd Year Spring*	*Credits*
COMP 3111 (Software Engineering)	4		LEAVE	
COMP 3511 (Operating Systems)	3		(Assumption: no credits earned	
COMP 3711 (Design/Analysis Alg.)	3		from the leave)	
COMP Area Elective#	3			
COMP 1991 (Industrial Experience)	0			
COMP 4900 (Academic and Professional Development)	0			
ENGG 2010 (Engineering Seminar Series)	0			
	13			0

4th Year Fall	*Credits*		*4th Year Spring*	*Credits*
COMP 4981/H (FYP/FYT)	3		COMP 4981/H (FYP/FYT continued)	3
LANG 4030 (Tech Comm. II)	3		COMP Area Elective	3
COMP Area Elective	3		COMP Other-area Elective	3
COMP Other-Area Elective	3		COMP 2000-level or above Elective	3
COMP 1991 (Industrial Experience)	0		COMP 1991 (Industrial Experience)	0
COMP 4900 (Academic and Professional Development)	0		COMP 4900 (Academic and Professional Development)	0
	12			12

* COMP students may use COMP 1021/1022P to fulfill the Engineering Introduction course requirement.

 # Students must take 3 COMP courses from one area and 2 courses from other area(s).

Note:

(1) The program requires a minimum of 120 credits for graduation.

(2) At least 99—108 credits should come from the following: 16—20 credits from Engineering Fundamental Courses, 35—40 credits from COMP Required Courses, 18 credits from COMP Electives, and 30 credits from UCore.

Recommended Normal Study Pathway for BEng in Computer Science Plus a Minor
(for 2022-23 & 2023-24 Intake)

1st Year Fall	Credits		1st Year Spring	Credits
U. Core English I	3		U. Core English II	3
MATH 1012/1013/1023/1020 (Calculus I/Honors Calculus I/Accelerated Calculus)	3-4		MATH 1014/1024 (Calculus II/Honors Calculus II)	3
Introductory Programming course: COMP 1021*/1022P*	3		CHEM 1008/1020 or LIFS 1901 or PHYS 1101/1112/1312	3—4
	9 - 10			9 - 10

2nd Year Fall	Credits		2nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3		MATH 2411 / MATH 2421 / MATH 2431 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3		/ IEDA 2520 (Prob.) / IEDA 2540 (Stat.)	3
COMP 2011 (Intro. to OOP)	4		COMP 2012 (OOP & Data Structure)	4
COMP 2711 (Discrete Math)	4		COMP 2611 (Computer Organization)	4
COMP 4900 (Academic and Professional Development)	0		Minor Elective	3
ENGG 2010 (Engineering Seminar Series)	0		COMP 1991 (Industrial Experience)	0
			COMP 4900 (Academic and Professional Development)	0
			ENGG 2010 (Engineering Seminar Series)	0
	14			15

3rd Year Fall	Credits		3rd Year Spring	Credits
COMP 3111 (Software Engineering)	4		COMP Area Elective #	3
COMP 3511 (Operating Systems)	3		COMP Area Elective	3
COMP 3711 (Design/Analysis Alg.)	3		Minor Elective	3
Minor Elective	3		Minor Elective	3
COMP 1991 (Industrial Experience)	0		COMP 1991 (Industrial Experience)	0
COMP 4900 (Academic and Professional Development)	0		COMP 4900 (Academic and Professional Development)	0
ENGG 2010 (Engineering Seminar Series)	0		ENGG 2010 (Engineering Seminar Series)	0
	13			12

4th Year Fall	Credits		4th Year Spring	Credits
COMP 4981/H (FYP/FYT)	3		COMP 4981/H (FYP/FYT continued)	3
LANG 4030 (Tech Comm. II)	3		COMP Other-Area Elective	3
COMP Area Elective	3		COMP 2000-level or above Elective	3
COMP Other-Area Elective	3		Minor Elective	3
Minor Elective	3		COMP 1991 (Industrial Experience)	0
COMP 1991 (Industrial Experience)	0		COMP 4900 (Academic and Professional Development)	0
COMP 4900 (Academic and Professional Development)	0			
	15			12

COMP students may use COMP 1021/1022P to fulfill the Engineering Introduction course requirement.

 # Students must take 3 COMP courses from one area and 2 courses from other area(s).

Note:

(1) The program requires a minimum of 120 credits for graduation.

(2) At least 99—108 credits should come from the following: 16—20 credits from Engineering Fundamental Courses, 35—40 credits from COMP Required Courses, 18 credits from COMP Electives, and 30 credits from UCore.

(3) A minor consists of 18 credits or roughly six 3-credit courses.