Recommended Study Pathway for BEng in Computer Science

1 st Year Fall	Credits	1 st Year Spring	Credits
U. Core English I	3	U. Core English II	3
U. Core QR: MATH 1013/1023 (Calculus I/Honors Calculus I)	3	U. Core QR: MATH 1014/1024 (Calculus II/Honors Calculus II)	3
Introductory Programming course: COMP 1021*/1022P*/1022Q**	3	U. Core S&T: CHEM 1004/1010/1020 or LIFS 1901 or PHYS 1001/1112/1152/1312	2—3
ENGG 1010 (Academic Orientation)	0	ENGG 1010 (Academic Orientation)	0
	9		8—9

2 nd Year Fall	Credits		2 nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3	Ш	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

3 rd Year Fall	Credits	3 rd 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

4 th Year Fall	Credits		4 th 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 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	Ш		
	12			9

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

** COMP 1022Q was last offered in 2019-20 and was deleted subsequently.

^: For COMP entrants of 2014-15 or after.

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

- (1) The program requires a minimum of 120 credits for graduation.
 (2) At least 105—112 credits should come from the following: 15—18 credits from Engineering Fundamental Courses, 36—40 credits from COMP Required Courses, 18 credits from COMP Electives, and 36 credits from UCore.
 (3) A maximum of 6 credits may be double counted between UCore and Major.

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

1 st Year Fall	Credits	1 st Year Spring	Credits
U. Core English I	3	U. Core English II	3
U. Core QR: MATH 1013/1023 (Calculus I/Honors Calculus I)	3	U. Core QR: MATH 1014/1024 (Calculus II/Honors Calculus II)	3
Introductory Programming course: COMP 1021*/1022P*/1022Q**	3	U. Core S&T: CHEM 1004/1010/1020 or LIFS 1901 or PHYS 1001/1112/1152/1312	2—3
ENGG 1010 (Academic Orientation)	0	ENGG 1010 (Academic Orientation)	0
	9		8—9

2 nd Year Fall	Credits	2 nd 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

3 rd Year Fall	Credits	3 rd 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

4 th Year Fall	Credits	4 th 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 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.

** COMP 1022Q was last offered in 2019-20 and was deleted subsequently.

^: For COMP entrants of 2014-15 or after.

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

- (1) The program requires a minimum of 120 credits forgraduation.
 (2) At least 105—112 credits should come from the following: 15—18 credits from Engineering Fundamental Courses, 36—40 credits from COMP Required Courses, 18 credits from COMP Electives, and 36 credits from UCore.
 (3) A maximum of 6 credits may be double counted between UCore and Major.

Recommended Normal Study Pathway for BEng in Computer Science Plus a Minor

1 st Year Fall	Credits		1 st Year Spring	Credits		
U. Core English I	3		U. Core English II	3		
U. Core QR: MATH 1013/1023 (Calculus I/Honors Calculus I)	3		U. Core QR: MATH 1014/1024 (Calculus II/Honors Calculus II)	3		
Introductory Programming course: COMP 1021*/1022P*/1022Q**	3		U. Core S&T: CHEM 1004/1010/1020 or LIFS 1901 or PHYS 1001/1112/1152/1312	2—3		
ENGG 1010 (Academic Orientation)	0		ENGG 1010 (Academic Orientation)	0		
	9			8—9		

2 nd Year Fall	Credits		2 nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3		MATH 2411 / MATH 2421 / MATH 2431 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3	Ш	/ 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
		П	COMP 4900 (Academic and Professional Development)	0
			ENGG 2010 (Engineering Seminar Series)^	0
	14			15

3 rd Year Fall	Credits		3 rd 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	П	COMP 4900 (Academic and Professional Development)	0
ENGG 2010 (Engineering Seminar Series)^	0		ENGG 2010 (Engineering Seminar Series)^	0
	13			12

4 th Year Fall	Credits	4 th 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 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.
 ** COMP 1022Q was last offered in 2019-20 and was deleted subsequently.
- ^: For COMP entrants of 2014-15 or after.
- # Students must take 3 COMP courses from one area and 2 courses from other area(s).
- (1) The program requires a minimum of 120 credits for graduation.
 (2) At least 105—112 credits should come from the following: 15—18 credits from Engineering Fundamental Courses, 36—40 credits from COMP Required Courses, 18 credits from COMP Electives, and 36 credits from UCore.
- (3) A maximum of 6 credits may be double counted between UCore and Major.