

Recommended Study Pathway for BEng in Computer Science

1st Year Fall	Credits	1st 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

2nd Year Fall	Credits	2nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3	MATH 2411 / MATH 2421 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3	/ IELM 2510 (Appl. Stat. / Prob.)	
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 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/1022Q to fulfill the Engineering Introduction course requirement.

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

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 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)**

1st Year Fall	Credits	1st 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

2nd Year Fall	Credits	2nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3	MATH 2411 / MATH 2421 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3	/ IELM 2510 (Appl. Stat. / Prob.)	
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 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

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

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 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 Study Pathway for BEng in Computer Science
with an Option**

1st Year Fall	Credits	1st 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

2nd Year Fall	Credits	2nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3	MATH 2411 / MATH 2421 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3	/ IELM 2510 (Appl. Stat. / Prob.)	
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	Option 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
	10		9

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 Elective	3
COMP Other-area Elective	3	Option 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/1022Q to fulfill the Engineering Introduction course requirement.

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

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 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.

(4) An additional 6 credits are from Option courses.

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

1st Year Fall	Credits	1st 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

2nd Year Fall	Credits	2nd Year Spring	Credits
LANG 2030 (Tech. Comm. I)	3	MATH 2411 / MATH 2421 / ELEC 2600	4
MATH 2111 (Matrix Algebra)	3	/ IELM 2510 (Appl. Stat. / Prob.)	
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 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

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

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 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.

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