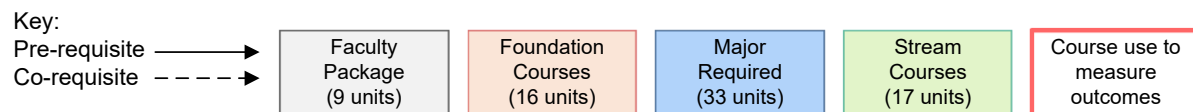
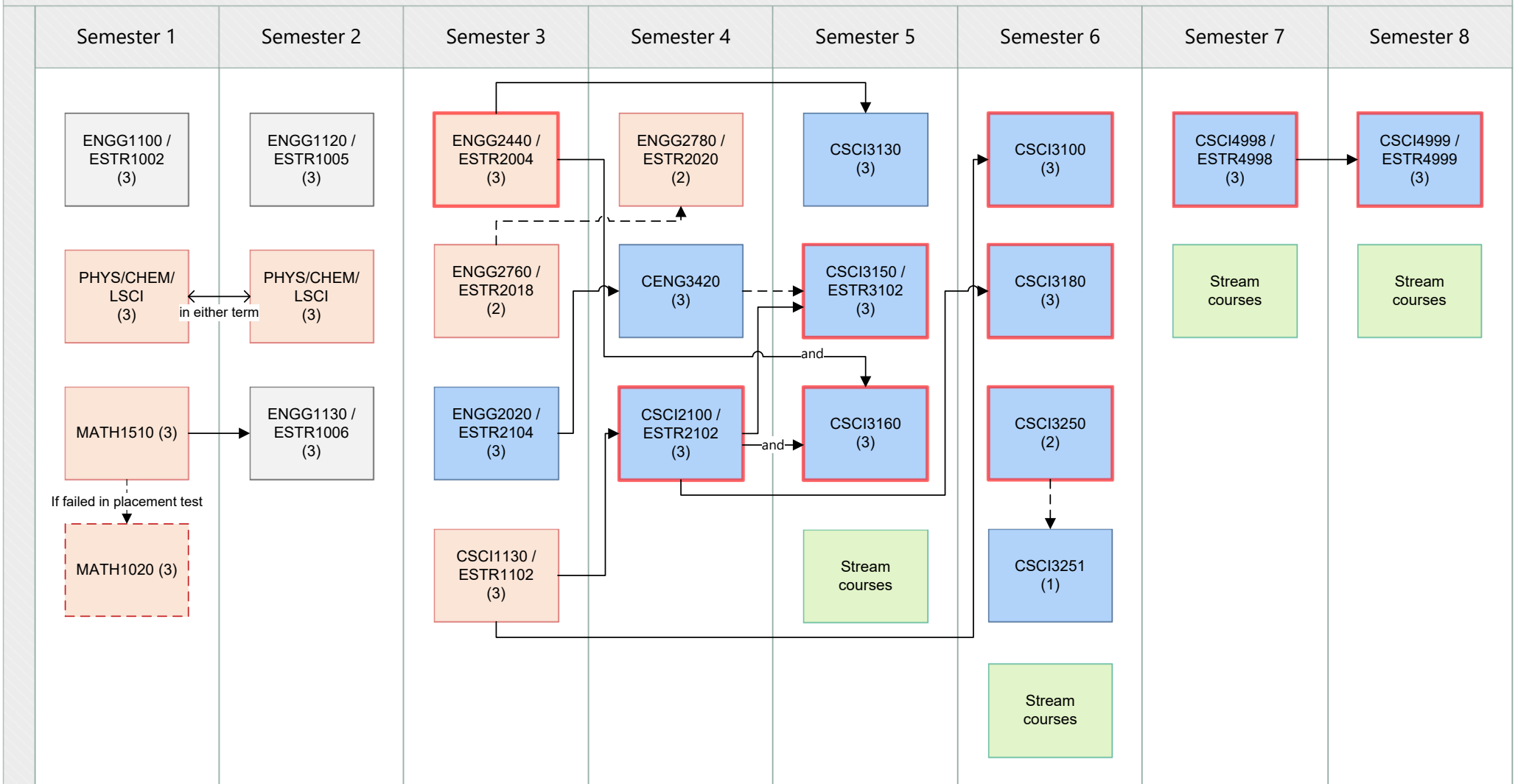


Department of Computer Science and Engineering

Curriculum Flowchart for CSCI programme (for 2020 entry and thereafter)



Graduation requirements: Applicable to students admitted in 2021-22

Computer Science Programme

		4-year curriculum	4-year curriculum with advance standing	2-year curriculum
Normative study years		4	3	2
Components		Units		
Language	Chinese	6	0-6 ¹	0
	English	9	Associate degree: 2 Higher Diploma: 5 Others: 2-5 ²	Associate degree: 2 Higher Diploma: 5
General Education	University Foundation GE	6	3-6	3
	University General Education	9 [UGEA, UGEB, UGEC, UGED]	UGEA: 3	UGEA: 3
	College GE	6	6	2-3
Physical Education		2	1	1
Major	Faculty package	9	9	3
	Foundation courses	16	16	7
	Required courses	27	27	21
	Research courses	6	6	6
	Stream / elective courses	17	17	15
Free Electives		Remaining Units	Remaining Units	Remaining Units
Total		At least 123	At least 99-105	At least 69

¹ Student waived Chinese Language entry requirement is required to take 3-6 units Chinese courses instructed by the CHLL Department.

² Student could waive ELTU2014 if he/she meets the requirements of particular qualification.

Computer Science Programme (4-Year)

Recommended course pattern for JUPAS students (for reference only)

Term 1 - First Year of Attendance 第一修業學年第一學期		Units 學分	Term 2 - First Year of Attendance 第一修業學年第二學期		Units 學分
CHLT1100	University Chinese I 大學中文(一)	3	ELTU1001	Foundation English for University Studies 大學基礎英語	4
PHED	Physical Education 體育	1	PHED	Physical Education 體育	1
ENGG1110/ ESTR1000	Problem Solving By Programming 應用程式設計	3	ENGG1120/ ESTR1005	Linear Algebra for Engineers 線性代數及其工程應用	3
	Physics, Chemistry or Life Science course 物理、化學或生命科學科目	3	ENGG1130/ ESTR1006	Multivariable Calculus for Engineers 多元微積分及其工程應用	3
MATH1510	Calculus for Engineers 微積分的工程應用	3	UGFH1000/ UGFN1000	University Foundation General Education 大學基礎通識	3
MATH1020 ³	General Mathematics 普通數學	0-3		College General Education 書院通識	0-2
	College General Education 書院通識	2-3			
		15-19			14-16
Term 1 - Second Year of Attendance 第二修業學年第一學期		Units 學分	Term 2 - Second Year of Attendance 第二修業學年第二學期		Units 學分
CHLT1200	University Chinese II 大學中文(二)	3	ELTU2014	English for Engineering Students I	3
CSCI1130/ ESTR1102	Introduction to Computing Using Java 計算導論(Java 語言)	3	CENG3420	Computer Organization and Design 計算機組成與設計	3
ENGG2020/ ESTR2104	Digital Logic and Systems 數位邏輯及數字系統	3	CSCI2100/ ESTR2102	Data Structures 數據結構	3
ENGG2440/ ESTR2004	Discrete Mathematics for Engineers 離散數學的工程應用	3	ENGG2780/ ESTR2020	Statistics for Engineers 統計及其工程應用	2
ENGG2760/ ESTR2018	Probability for Engineers 概率及其工程應用	2		University General Education (UGEA/B/C/D) ⁴ 大學通識	2-3
UGFH1000/ UGFN1000	University Foundation General Education 大學基礎通識	3		Free Elective Course(s)	remaining
		17			13-18

³ Student is required to take a placement test. If pass, MATH1020 will be waived.

⁴ GE course / Free elective could be taken in summer terms (max. 6 units)

Term 1 - Third Year of Attendance 第三修業學年第一學期		Units 學分	Term 2 - Third Year of Attendance 第三修業學年第二學期		Units 學分
CSCI3130	Formal Languages and Automata Theory 形式語言及自動機理論	3	ELTU3014	English for Engineering Students II	2
CSCI3150/ ESTR3102	Introduction to Operating Systems 操作系統導論	3	CSCI3100	Software Engineering 軟件工程	3
CSCI3160/ ESTR3104	Design and Analysis of Algorithms 算法設計及分析	3	CSCI3180/ ESTR3106	Principles of Programming Languages 程序設計語言原理	3
CSCIxxxx	Stream courses 專修科目	3	CSCI3250	Computers and Society 計算機與社會	2
	University General Education (UGEA/B/C/D)* 大學通識	2-3	CSCI3251	Engineering Practicum 工程實務	1
	Free Elective Course(s)	remaining	CSCIxxxx	Stream courses 專修科目	3
				University General Education (UGEA/B/C/D)* 大學通識	0-3
		14-18			14-18
Term 1 – Fourth Year of Attendance 第四修業學年第一學期		Units 學分	Term 2 - Fourth Year of Attendance 第四修業學年第二學期		Units 學分
CSCI4998/ ESTR4998	Final Year Project I 畢業專題研究〔一〕	3	CSCI4999/ ESTR4999	Final Year Project II 畢業專題研究〔二〕	3
CSCIxxxx	Stream courses 專修科目	5-9	CSCIxxxx	Stream courses 專修科目	2-6
	College General Education 書院通識	2-3		University General Education (UGEA/B/C/D)* 大學通識	2-3
	University General Education (UGEA/B/C/D)* 大學通識	2-3		Free Elective Course(s)	remaining
	Free Elective Course(s)	remaining			
		11-18			9-18
Minimum units for graduation: 123					

* GE course / Free elective could be taken in summer term (max. 6 units)

Computer Science Programme (3-Year)

Recommended course pattern for Non-JUPAS students with advance standing (for reference only)

Term 1 - First Year of Attendance 第一修業學年第一學期		Units 學分	Term 2 - First Year of Attendance 第一修業學年第二學期		Units 學分
CHLT1100	University Chinese I 大學中文(一)	0-3	ELTU2014	English for Engineering Students I	0-3
ENGG1110/ ESTR1000	Problem Solving By Programming 應用程式設計	3	ENGG1120/ ESTR1005	Linear Algebra for Engineers 線性代數及其工程應用	3
	Physics, Chemistry or Life Science course 物理、化學或生命科學科目	3	ENGG1130/ ESTR1006	Multivariable Calculus for Engineers 多元微積分及其工程應用	3
MATH1510	Calculus for Engineers 微積分的工程應用	3	CSCI2100/ ESTR2102	Data Structures 數據結構	3
MATH1020 ⁵	General Mathematics 普通數學	0-3	CENG3420	Computer Organization and Design 計算機組成與設計	3
	College General Education 書院通識	2-3	UGFH1000/ UGFN1000	University Foundation General Education 大學基礎通識	3
CSCI1130/ ESTR1102 OR ENGG2020/ ESTR2104	Introduction to Computing Using Java 計算導論(Java 語言) Digital Logic and Systems 數位邏輯及數字系統	3		College General Education 書院通識	0-2
			PHED	Physical Education 體育	1
		14-18			16-18
Term 1 - Second Year of Attendance 第二修業學年第一學期		Units 學分	Term 2 - Second Year of Attendance 第二修業學年第二學期		Units 學分
CHLT1200	University Chinese II 大學中文(二)	0-3	ELTU3014	English for Engineering Students II	2
ENGG2440/ ESTR2004	Discrete Mathematics for Engineers 離散數學的工程應用	3	ENGG2780/ ESTR2020	Statistics for Engineers 統計及其工程應用	2
ENGG2760/ ESTR2018	Probability for Engineers 概率及其工程應用	2	CSCI3100	Software Engineering 軟件工程	3
CSCI3130	Formal Languages and Automata Theory 形式語言及自動機理論	3	CSCI3180/ ESTR3106	Principles of Programming Languages 程序設計語言原理	3
CSCI3150/ ESTR3102	Introduction to Operating Systems 操作系統導論	3	CSCI3250	Computers and Society 計算機與社會	2
CSCIxxxx	Stream courses 專修科目	3	CSCI3251	Engineering Practicum 工程實務	1
UGFH1000/ UGFN1000	University Foundation General Education 大學基礎通識	0-3		University General Education (UGEA) 大學通識	3
	Free Elective Course(s)	remaining		Free Elective Course(s)	remaining
		14-18			16-18

⁵ Student is required to take a placement test. If pass, MATH1020 will be waived.

Term 1 - Third Year of Attendance 第三修業學年第一學期		Units 學分	Term 2 - Third Year of Attendance 第三修業學年第二學期		Units 學分
CSCI3160/ ESTR3104	Design and Analysis of Algorithms 算法設計及分析	3	CSCI4999/ ESTR4999	Final Year Project II 畢業專題研究〔二〕	3
CSCI4998/ ESTR4998	Final Year Project I 畢業專題研究〔一〕	3	CSCIxxxx	Stream courses 專修科目	6-9
CSCIxxxx	Stream courses 專修科目	6-9		Free Elective Course(s)	remaining
	College General Education 書院通識	2-3			
	Free Elective Course(s)	remaining			
		14-18			9-18
Minimum units for graduation: 123					

* GE course / Free elective could be taken in summer term (max. 6 units)

Computer Science Programme (2-Year)

Recommended course pattern for Non-JUPAS students in senior year entry (for reference only)

Term 1 - First Year of Attendance 第一修業學年第一學期	Units 學分	Term 2 - First Year of Attendance 第一修業學年第二學期	Units 學分
ENGG2440/ ESTR2004 Discrete Mathematics for Engineers 離散數學的工程應用	3	ENGG1120/ ESTR1005 Linear Algebra for Engineers 線性代數及其工程應用	3
ENGG2760/ ESTR2018 Probability for Engineers 概率及其工程應用	2	ENGG2780/ ESTR2020 Statistics for Engineers 統計及其工程應用	2
CSCI3130 Formal Languages and Automata Theory 形式語言及自動機理論	3	CENG3420 Computer Organization and Design 計算機組成與設計	3
CSCI3160/ ESTR3104 Design and Analysis of Algorithms 算法設計及分析	3	CSCI3100 Software Engineering 軟件工程	3
CSCIxxxx Stream course 專修科目	3	CSCI3180/ ESTR3106 Principles of Programming Languages 程序設計語言原理	3
UGFH1000/ UGFN1000 University Foundation General Education 大學基礎通識	3	ELTU2014 English for Engineering Students I (for HD holders only)	0-3
Physical Education 體育	1	UGEA University General Education (UGEA) 大學通識	0-3
	18		14-18
Term 1 - Second Year of Attendance 第二修業學年第一學期	Units 學分	Term 2 - Second Year of Attendance 第二修業學年第二學期	Units 學分
CSCI3150/ ESTR3102 Introduction to Operating Systems 操作系統導論	3	ELTU3014 English for Engineering Students II	2
CSCI4998/ ESTR4998 Final Year Project I 畢業專題研究〔一〕	3	CSCI3250 Computers and Society 計算機與社會	2
CSCIxxxx Stream course 專修科目	6	CSCI3251 Engineering Practicum 工程實務	1
College General Education 書院通識	2-3	CSCI4999/ ESTR4999 Final Year Project II 畢業專題研究〔二〕	3
UGEA University General Education (UGEA) 大學通識	0-3	CSCIxxxx Stream courses 專修科目	6
Free Elective Course(s)	remaining	Free Elective Course(s)	remaining
	14-18		14-18
Minimum units for graduation: 69			

* GE course / Free elective could be taken in summer term (max. 6 units)