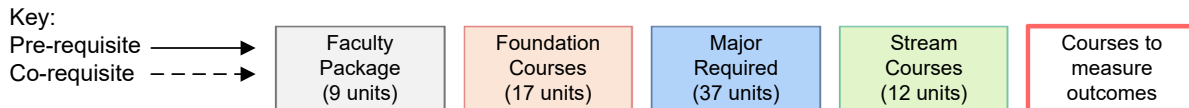
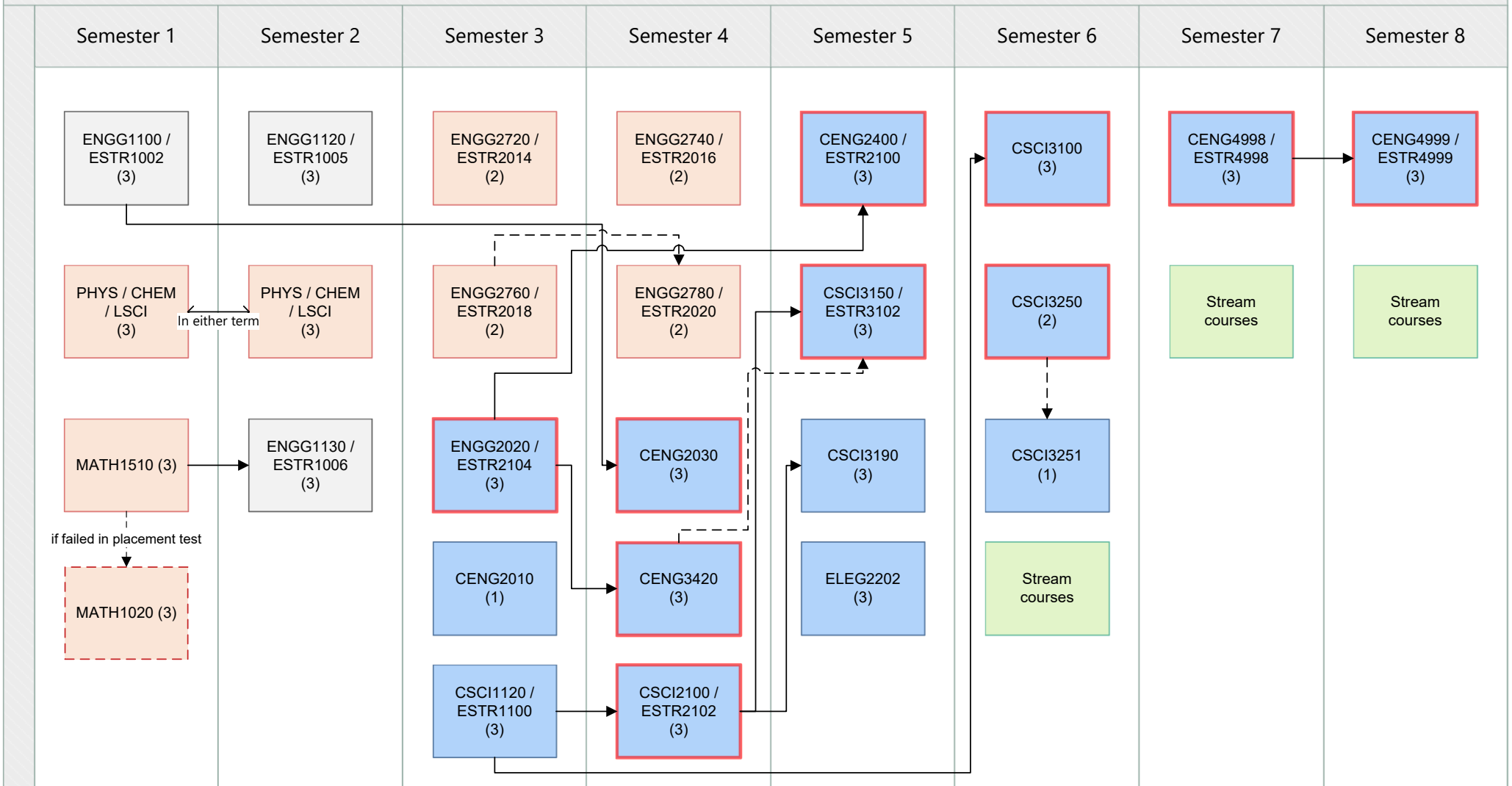


Department of Computer Science and Engineering

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



Computer Engineering Programme

Graduation requirements: Applicable to students admitted in 2021-22

		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	17	17	3
	Required courses	31	31	28
	Research courses	6	6	6
	Stream / elective courses	12	12	12
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 Engineering (4-year)

Recommended course pattern for JUPAS students admitted in 2021-22 (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	UGFH1000*/ UGFN1000*	University Foundation General Education 大學基礎通識	3
	Physics, Chemistry or Life Science course 物理、化學或生命科學科目	3	ENGG1120/ ESTR1005	Linear Algebra for Engineers 線性代數及其工程應用	3
MATH1510	Calculus for Engineers 微積分的工程應用	3	ENGG1130/ ESTR1006	Multivariable Calculus for Engineers 多元微積分及其工程應用	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	0-3			
		13-19			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
UGFH1000*/ UGFN1000*	University Foundation General Education 大學基礎通識	3	ENGG2740/ ESTR2016	Differential Equations for Engineers 微分方程及其工程應用	2
ENGG2720/ ESTR2014	Complex Variables for Engineers 複變量及其工程應用	2	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	CENG2030	Fundamentals of Embedded Systems 基礎嵌入式系統	3
ENGG2020/ ESTR2104	Digital Logic and Systems 數位邏輯及數字系統	3	CENG3420	Computer Organization and Design 計算機組成與設計	3
CSCI1120/ ESTR1100	Introduction to Computing Using C++ 計算導論(C++語言)	3	CSCI2100/ ESTR2102	Data Structures 數據結構	3
CENG2010	Digital Logic Design Laboratory 數字邏輯設計實驗	1		University General Education (UGEA/B/C/D)* 大學通識	0-3
		17			16-18

³ 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
CENG2400/ ESTR2100	Embedded System Design 嵌入式系統設計	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
CSCI3190	Introduction to Discrete Mathematics and Algorithms 離散數學及算法導論	3	CSCI3250	Computers and Society 計算機與社會	2
ELEG2202	Fundamentals of Electric Circuits 基礎電路	3	CSCI3251	Engineering Practicum 工程實務	1
	University General Education (UGEA/B/C/D)* 大學通識	2-4	CENGxxxx	Stream courses 專修科目	3
	Free Elective Course(s)*	remaining		University General Education (UGEA/B/C/D)* 大學通識	2-4
				Free Elective Course(s)*	remaining
		14-18			13-18
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
CENG4998	Final Year Project I 畢業專題研究〔一〕	3	CENG4999	Final Year Project II 畢業專題研究〔二〕	3
CENGxxxx	Stream courses 專修科目	6	CENGxxxx	Stream courses 專修科目	3
	College General Education 書院通識	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 terms (max. 6 units)

Computer Engineering (4-year with advance standing)

Recommended course pattern for Non-JUPAS students admitted in 2021-22 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
ENGG1110/ ESTR1000	Problem Solving By Programming 應用程式設計	3	ELTU2014	English for Engineering Students I (for HD holders only)	3
MATH1510	Calculus for Engineers 微積分的工程應用	3	ENGG1120/ ESTR1005	Linear Algebra for Engineers 線性代數及其工程應用	3
MATH1020 ⁴	General Mathematics 普通數學	0-3	ENGG1130/ ESTR1006	Multivariable Calculus for Engineers 多元微積分及其工程應用	3
	Physics, Chemistry or Life Science course 物理、化學或生命科學科目	3	UGFH1000/ UGFN1000	University Foundation General Education 大學基礎通識	3
CSCI1120/ ESTR1100	Introduction to Computing Using C++ 計算導論(C++語言)	3	CSCI2100/ ESTR2102	Data Structures 數據結構	3
ENGG2020/ ESTR2104	Digital Logic and Systems 數位邏輯及數字系統	0-3	UGFH1000*/ UGFN1000*	University Foundation General Education 大學基礎通識	0-3
	College General Education 書院通識	0-2		College General Education 書院通識	0-2
PHED	Physical Education 體育	0-1	PHED	Physical Education 體育	0-1
		15-19			15-18
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
ENGG2720/ ESTR2014	Complex Variables for Engineers 複變量及其工程應用	2	ELTU3014	English for Engineering Students II	2
ENGG2760/ ESTR2018	Probability for Engineers 概率及其工程應用	2	ENGG2740/ ESTR2016	Differential Equations for Engineers 微分方程及其工程應用	2
CENG2010	Digital Logic Design Laboratory 數字邏輯設計實驗	1	ENGG2780/ ESTR2020	Statistics for Engineers 統計及其工程應用	2
CENG2400/ ESTR2100	Embedded System Design 嵌入式系統設計	3	CENG2030	Fundamentals of Embedded Systems 基礎嵌入式系統	3
ENGG2020/ ESTR2104	Digital Logic and Systems 數位邏輯及數字系統	0-3	CENG3420	Computer Organization and Design 計算機組成與設計	3
ELEG2202	Fundamentals of Electric Circuits 基礎電路	3	CSCI3250	Computers and Society 計算機與社會	2
CSCI3190	Introduction to Discrete Mathematics and Algorithms 離散數學及算法導論	3	CSCI3251	Engineering Practicum 工程實務	1
UGFH1000*/ UGFN1000*	University Foundation General Education 大學基礎通識	0-3	UGEA*	University General Education (UGEA) 大學通識	3
		14-17			17

⁴ 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
CSCI3150/ ESTR3102	Introduction to Operating Systems 操作系統導論	3	CSCI3100	Software Engineering 軟件工程	3
CENG4998	Final Year Project I 畢業專題研究〔一〕	3	CENG4999	Final Year Project II 畢業專題研究〔二〕	3
CENGxxxx	Stream courses 專修科目	6	CENGxxxx	Stream courses 專修科目	6
	College General Education 書院通識	2-3		Free Elective Course(s)*	remaining
	Free Elective Course(s)*	remaining			
		14-18			12-18
Minimum units for graduation: 99-105 (Associate Degree: 99; Higher Diploma: 102; IB/GCE AL: 105)					

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

Computer Engineering (2-year)

Recommended course pattern for Non-JUPAS students admitted in 2021-22 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
CENG2010	Digital Logic Design Laboratory 數字邏輯設計實驗	1	ENGG1120/ ESTR1005	Linear Algebra for Engineers 線性代數及其工程應用	3
CENG2400/ ESTR2100	Embedded System Design 嵌入式系統設計	3	CENG2030	Fundamentals of Embedded Systems 基礎嵌入式系統	3
ENGG2020/ ESTR2104	Digital Logic and Systems 數位邏輯及數字系統	3	CENG3420	Computer Organization and Design 計算機組成與設計	3
CSCI3190	Introduction to Discrete Mathematics and Algorithms 離散數學及算法導論	3	CSCI2100	Data Structures 數據結構	3
MATH1510	Calculus for Engineers 微積分的工程應用	3	ELTU2014	English for Engineering Students I (for HD holders only)	0-3
UGFH1000*/ UGFN1000*	University Foundation General Education 大學基礎通識	3	UGEA*	University General Education (UGEA) 大學通識	3
PHED	Physical Education 體育	1		Free Elective Course(s)*	remaining
		17			15-18
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	CSCI3100	Software Engineering 軟件工程	3
CENG4998/ ESTR4998	Final Year Project I 畢業專題研究〔一〕	3	CSCI3250	Computers and Society 計算機與社會	2
CENGxxxx	Stream course 專修科目	6-9	CSCI3251	Engineering Practicum 工程實務	1
	College General Education 書院通識	2-3	CENG4999/ ESTR4999	Final Year Project II 畢業專題研究〔二〕	3
	Free Elective Course(s)*	remaining	CENGxxxx	Stream courses 專修科目	3-6
			ELTU3014	English for Engineering Students II	2
		15-18			15-18
Minimum units for graduation: 69					

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