

Graduation requirements for Double Degree Programme

BEng (CEG), BSocSci (Hons) for AY2016 intake - CEG requirements only

Minimum MCs for BEng (CEG) and BSocSci (Hons): 206

	Degree Requirements		MCs	MCs
A.	University Level Requirements (ULR)			20
	One General Education Module (GEM) from each of the five pillars:			
	Human Cultures – GEH1xxx	CA	4	
	Asking Questions – GEQ1000	CA	4	
	Quantitative Reasoning – GER1000	CA	4	
	Singapore Studies – GES1xxx	CA	4	
Thinking and Expression – GET1xxx	CA	4		
B.	FASS - BSocSci (Hons) Programme Requirements			60
	For BSocSci (Hons) requirements, please refer to http://www.nus.edu.sg/prog/engecon/	C2		
C.	FoE & SoC - BEng (CEG) Programme Requirements			82
	Major Requirements:			
	CEG Core Modules:			
	CG1001 Introduction to Computer Engineering	C1	2	
	CG1108 Electrical Engineering	C1	4	
	CG2023 Signals & Systems	C1	4	
	CG2271 Real-time Operating Systems	C1	4	
	CG3207 Computer Architecture	C1	4	
	CS1010 Programming Methodology	C1	4	
	CS1020 Data Structures and Algorithms I	C1	4	
	CS1231 Discrete Structures	C1	4	
	CS2101 Effective Communication for Computing Professionals	C1	4	
	Requirement is waived for students who passed FAS1102 or UWC2101%. Student(s) who dropped out of the respective programme will still be required to fulfil this requirement.			
	CS2103/T Software Engineering	C1	4	
	EE2020 Digital Fundamentals	C1	5	
	EE2021 Devices & Circuits	C1	4	
	EE2024 Programming for Computer Interfaces	C1	5	
	EE3204 Computer Communication Networks I	C1	4	
	PC1432 Physics IIE	C1	4	
	CEG Core Projects:			
	CG3002 Embedded Systems Design Project	C1	6	
	EE3031 Innovation & Enterprise I	C1/ CA	4	
	[# Note: EE3031 is a Major requirement. If EE3031 is counted towards CA, the Common Module of 'one B.Eng (CEG) - CEG technical elective from Table 1' will be counted towards C1, and vice versa.]			
CEG Technical Electives:				
(a) Depth (D) requirements	C1	8		
- at least 2 technical Depth electives from any concentration				
(b) Unrestricted	C1	4		
- at least 1 technical Breadth/Depth elective from any concentration				
D.	Common Modules			44
	Faculty Requirements:	20 MCs		
	FAS1101 Writing Academically: Arts and Social Sciences	CA	4	
	MA1505 Mathematics I	CA	4	
	MA1506 Mathematics II	CA	4	
	PH2208 Applied Ethics or PH2218 Business Ethics or PH2223 Introduction to the Philosophy of Technology (replaces EG2401 Engineering Professionalism)	CA	4	
	ST2334 Probability and Statistics	CA	4	
	Note: CEG students are required to read ST2334. If a DDP (CEG, Econs) student has already read EC2303, he/she must still read ST2334.			

	CEG / FASS Core Projects:	16 MCs			
	(i) XF4401 Integrated Project (over 3 sem) OR (ii) Separate FYPs [CG4001 BEng Dissertation (12 MCs, C1) + 1 CEG Breadth/Depth Technical Elective (4 MCs, C1)] AND [EC4401 Honours Thesis (15 MCs, C2) or 3 EC4xxxx in place of Econs thesis (no Highest Distinction Hons for BSocSci, 15 MCs, C2)]		CA	16	
	Common Modules from CEG / FASS:	8 MCs			
	One BEng (CEG) Technical Elective - from Table 1 [# Note: If the Common Module of 'one B.Eng (CEG) - CEG technical elective from Table 1' is counted towards CA, EE3031 will be counted towards C1, and vice versa.]		CA/ C1	4	
	One BA (Econs) - from Table 1		CA	4	
E.	Unrestricted Elective Requirements (UEM)	Exempted	-	-	EXE
	AY16 intake: TOTAL – BEng (CEG), BSocSci (Hons)				206

CA / C1 / C2 CLASSIFICATION:

The modules that DDP students take are counted towards the CAP in the following manner

1 st Degree	Classified as C1 in the database
2 nd Degree	Classified as C2 in the database
Both 1 st and 2 nd degrees	Classified as CA in the database

Additional modules taken will be counted towards C1, except for modules offered by the faculty of the student's second degree, which will be classified as C2.

Table 1: BEng (CEG) & BA modules that may be considered as common modules

BEng modules that can be counted towards BA - Economics major requirements*	BA - Economics modules that can be counted towards BEng requirements*
EE3031 Innovation & Enterprise I [Note: EE3031 is a Major requirement for CEG. If EE3031 is counted towards CA, the Common Module of 'one BEng (CEG) - CEG technical elective from Table 1' will be counted towards C1, and vice versa.] EE4305 Introduction to Fuzzy/Neural Systems EE4511 Sustainable Energy Systems CS3243 Foundations of Artificial Intelligence CS3244 Machine Learning CS4244 Knowledge Based Systems	EC3312 Game Theory & Applications to Economics EC3322 Industrial Organisation I EC3384 Resource and Energy Economics I EC4303 Econometrics IV EC4311 Mathematical Economics II EC4322 Industrial Organization II EC4372 Technology & Innovation EC4384 Resource and Energy Economics II EC5104 Mathematical Economics EC5314 Time Series Analysis EC5324 Cost-Benefit Analysis

* This list may be updated by the FoE and FASS acting in concert. Changes will be proposed by the Coordinating Committee, and will require approval by each Faculty's curriculum committee

Other relevant information:

CEG Technical Electives - <http://www.ceg.nus.edu.sg/students/ceg3TE/>

Faculty of Engineering - <http://www.eng.nus.edu.sg/undergraduatestudies/special-programmes/double-degrees/>

Registrar's Office - <http://www.nus.edu.sg/registrar/education-at-nus/undergraduate-education/special-undergraduate-programmes/double-degree-programmes.html>