Graduation requirements for Double Degree Programme

BEng (CEG), BA (Econs) for AY2020 intake
- CEG requirements only, and with Faculty of Engineering (FoE) as Home Faculty

Minimum MCs for BEng (CEG) and BA (Econs): 182

	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 - BA (Econs) Programme Requirements**			**52**
	i) FASS Requirements - Level 1000 exposure module (Asian Studies) - Level 1000 exposure module (Social Sciences) - Level 1000 exposure module (Humanities) - FAS1101	C2	16	
	ii) Economics Programme Requirements - Essential modules - Elective Major modules	C2	36	
C.	**FoE & SoC - BEng (CEG) Programme Requirements**			**102**
	Major Requirements:			
	CEG Core Modules:			
	CG1111 Engineering Principles and Practice I	C1	6	
	CG1112 Engineering Principles and Practice II	C1	6	
	CS1010 Programming Methodology	C1	4	
	CS1231 Discrete Structures	C1	4	
	MA1511 Engineering Calculus	C1	2	
	MA1512 Differential Equations for Engineering	C1	2	
	MA1508E Linear Algebra for Engineering	C1	4	
	CG2023 Signals & Systems	C1	4	
	CG2027 Transistor-level Digital Circuits	C1	2	
	CG2028 Computer Organization	C1	2	
	CG2271 Real-Time Operating Systems	C1	4	
	CS2040C Data Structures and Algorithms	C1	4	
	CS2101 Effective Communication for Computing Professionals (in lieu of ~~FAS1102 (4MCs)~~ FAS1103 (2 MCs) + CFG1002 (2 MCs))	CA	4	
	CS2113/T Software Engineering & Object-Oriented Programming	C1	4	
	EE2026 Digital Design	C1	4	
	EG2401A Engineering Professionalism	C1	2	
	ST2334 Probability & Statistics	C1	4	
	CG3207 Computer Architecture OR CS3230 Design and Analysis of Algorithms	C1	4	
	CG4002 Computer Engineering Capstone Project	C1	8	
	EE4204 Computer Networks	C1	4	
	CEG Technical Electives - at least 12 MCs technical Depth electives from any concentration - another 12 MCs technical Breadth/Depth electives from any concentration	C1	24	

D.	**Common Modules**			8
	One BEng (CEG) Technical Elective - from Table 1	CA	4	
	One BA (Econs) - from Table 1	CA	4	
E.	**Unrestricted Elective Requirements (UEM):** Exempted	-	-	EXE
	Total for BEng (CEG), BA (Econs)			182

CA / C1 / C2 CLASSIFICATION:

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

1st Degree	Classified as **C1** in the database
2nd Degree	Classified as **C2** in the database
Both 1st and 2nd 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 requirements*	BA - Economics modules that can be counted towards BEng requirements*
CS3243 Introduction to Artificial Intelligence CS3244 Machine Learning CS4244 Knowledge Representation and Reasoning CS4246 AI Planning and Decision Making EE3031 Innovation & Enterprise I EE3801 Data Engineering Principles* EE4211 Data Science for the Internet of Things (anti-req: EE4802) EE4305 Fuzzy/Neural Systems for Intelligent Robotics EE4511 Renewable Generation and Smart Grid EE4802 Learning from Data* (anti-req: EE4211)	EC3312 Game Theory & Applications to Economics EC3322 Industrial Organization I EC3384 Resource & Energy Economics I EC4303 Econometrics III EC4311 Mathematical Economic Analysis EC4322 Industrial Organization II EC4372 Technology & Innovation EC4384 Resource & Energy Economics II EC5104 Mathematical Economics EC5314 Time Series Analysis EC5324R 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

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Other relevant information:
CEG Technical Electives - https://ceg.nus.edu.sg/curriculum/electives-ay17/
Faculty of Engineering - https://www.eng.nus.edu.sg/undergraduate/double-degrees/double-degree-programme-in-engineering-economics/
Registrar's Office - http://www.nus.edu.sg/registrar/academic-information-policies/undergraduate-students/special-programmes/double-degree-programmes