

## Graduation requirements for Double Degree Programme

B.Eng. (CEG), B.A. (Econs) for AY2015 intake - CEG requirements only  
Minimum MCs for B.Eng. (CEG) and B.A. (Econs): 190

	Degree Requirements		MCs	MCs
<b>A.</b>	<b>University Level Requirements (ULR)</b>			<b>20</b>
	One General Education Module (GEM) from each of the five pillars:			
	Human Cultures – GEH1xxx	CA	4	
	Asking Questions – GEQ1xxx	CA	4	
	Quantitative Reasoning – GER1000	CA	4	
	Singapore Studies – GES1xxx	CA	4	
	Thinking and Expression – GET1021 Critical Thinking & Writing [GET1021 is a compulsory T&E pillar for Engrg students. Only students who passed UWC1201% or ES1501% may read another GEM under T&E pillar, in lieu of GET1021.]	CA	4	
<b>B.</b>	<b>FASS - B.A. (Econs) Programme Requirements</b>			<b>48</b>
	For B.A. (Econs) requirements, please refer to <a href="http://www.nus.edu.sg/prog/engecon/">http://www.nus.edu.sg/prog/engecon/</a>	C2		
<b>C.</b>	<b>FoE &amp; SoC - B.Eng. (CEG) Programme Requirements</b>			<b>98</b>
	<b>Major Requirements:</b>			
	<b>CEG Core Modules:</b>			
	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 (or IEM2201%)	C1	4	
	Requirement is waived for students who passed UWC2101% or ES1501%. 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	
	ST2334 Probability and Statistics	C1	4	
	<b>CEG Core Projects:</b>			
	CG3002 Embedded Systems Design Project	C1	6	
	EE3031 Innovation & Enterprise I [# Note: EE3001/EE3031 is a Major requirement. If EE3001/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.]	C1/ CA	4	
	CG4001 B.Eng. Dissertation	C1	12	
	<b>CEG Technical Electives</b>			
	(a) Depth (D) requirements - at least 2 technical Depth electives from any concentration	C1	8	
	(b) Unrestricted - at least 1 technical Breadth/Depth elective from any concentration	C1	4	
<b>D.</b>	<b>Common Modules</b>			<b>24</b>
	<b>Faculty Requirements:</b> 16 MCs			
	MA1505 Mathematics I	CA	4	
	MA1506 Mathematics II	CA	4	
	PH2208 Applied Ethics or PH2218 Business Ethics (replaces EG2401 Engineering Professionalism)	CA	4	
	SC2202 Sociology of Work or SC1101E Making Sense of Society (replaces HR2002 Human Capital in Organizations)	CA	4	

	<b>Common Modules from CEG / FASS:</b>	8 MCs		
	One B.Eng. (CEG) Technical Elective - from Table 1 <small>[# Note: If the Common Module of 'one B.Eng (CEG) - CEG technical elective from Table 1' is counted towards CA, EE3001/EE3031 will be counted towards C1, and vice versa.]</small>		CA/ C1	4
	One B.A. (Econs) - from Table 1		CA	4
<b>E.</b>	<b>Unrestricted Elective Requirements (UEM)</b>	Exempted	-	-
	<b>AY15 intake: TOTAL – B.Eng. (CEG), B.A. (Econs)</b>			<b>190</b>

### CA / C1 / C2 CLASSIFICATION:

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

1 <sup>st</sup> Degree	Classified as <b>C1</b> in the database
2 <sup>nd</sup> Degree	Classified as <b>C2</b> in the database
Both 1 <sup>st</sup> and 2 <sup>nd</sup> degrees	Classified as <b>CA</b> 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: B.Eng. (CEG) & B.A. modules that may be considered as common modules**

<b>BEng modules that can be counted towards BA - Economics major requirements***</b>	<b>BA - Economics modules that can be counted towards BEng requirements***</b>
EE3031 Innovation & Enterprise I <small>[Note: EE3001/EE3031 is a Major requirement for CEG. If EE3001/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.]</small>	EC3312 Game Theory & Applications to Economics
EE4305 Introduction to Fuzzy/Neural Systems	EC3322 Industrial Organisation I
EE4511 Sustainable Energy Systems	EC3384 Resource and Energy Economics I
CS3243 Foundations of Artificial Intelligence	EC4303 Econometrics IV
CS3244 Machine Learning	EC4311 Mathematical Economics II
CS4244 Knowledge Based Systems	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

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Other relevant information:

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

Faculty of Engineering - [http://www.eng.nus.edu.sg/ugrad/SP\\_ddp.html](http://www.eng.nus.edu.sg/ugrad/SP_ddp.html)

Registrar's Office - <http://www.nus.edu.sg/registrar/edu/UG/spugp-double-degree.html>