Innovation & Design Programme
Faculty of Engineering

Bachelor of Engineering (Electrical Engineering) with Second Major in Innovation & Design

Cohort 2016/2017

Modular Requirements	Modular Credits (MCs)
University Level Requirements	
General education modules:	
• Quantitative Reasoning (GER1000)	4
• Thinking & Expression (GET)	4
• Human Cultures (GEH)	4
• Singapore Studies (GES)	4
• Asking Questions (GEQ1000)	4
Sub-total for University Level Requirements	**20**
Programme Requirements	
Faculty requirements:	
• ES1531 Critical Thinking & Writing [1] (or equivalent) *(Double-counted for Second Major in Innovation & Design)*	4
• ES2331 Communicating Engineering [1]	4
• EG2401 Engineering Professionalism	3
• ES1xxxx English [2]	-
Year 1 and core modules:	
• EG1111 Engineering Principles & Practice I	6
• EG1112 Engineering Principles & Practice II	6
• MA1505 Mathematics I	4
• MA1506 Mathematics II	4
• CS1010E Programming Methodology	4
• EE2011 Engineering Electromagnetics	4
• EE2012 Analytical Methods in Electrical & Computer Engineering	4
• EE2020 Digital Fundamentals	5
• EE2021 Devices & Circuits	4
• EE2023 Signals & Systems	4
• EE2024 Programming for Computer Interfaces	5
• EE2025 Power Electronics	4
• EE2031 Circuits & Systems Design Lab	3
• EE2032 Signals & Communications Lab	3
• PC2232 Physics for Electrical Engineers	4
EE outer core electives	8
EE technical electives [3, 5]	24
EE design and project modules:	
• EG4301 DCP Dissertation (over 2 consecutive semesters) *(Double-counted for Second Major in Innovation & Design and replaces EE4001 BEng Dissertation)*	12
EG3612 Vacation Internship Programme (VIP) [3, 4]	6
Sub-total for Programme Requirements	**125**
Unrestricted Elective Modules (UEM)	
• Group A module for Second Major	4
• Group B module for Second Major	4
• Group C modules for Second Major – Innovation & Enterprise electives	12
• EG3301R DCP Project [5] (over 2 consecutive semesters) *(replaces EE3031 Innovation & Enterprise I)*	12
Sub-total for Unrestricted Elective Modules	**32**
Total	**177**

(updated 12 June 2018)

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Notes:

1   Students in USP, UTRP, and RVRC may read an equivalent module (e.g. ES1501X Academic Expository Writing) in lieu of EG1531 and/or ES2331.

2   Students who have not passed or been exempted from the Qualifying English Test at the point of admission will have to read ES1000 and/or ES1103. ES1103 carries 4 MCs which may be counted as UEM.

3   Students in this Second Major are allowed to complete EG3612 (6 MCs) plus additional technical electives (6 MCs) in lieu of EG3612 (12 MCs).

   Students may also opt to do EG3611 (12 MCs) in lieu of EG3612 (6 MCs) and 6 MCs of technical electives.

4   EG3612 is optional for poly-intake students and those in the following special programmes: double degree programmes (DDP), concurrent degree programmes (CDP), Chemical Sciences Programme (CSP), and Global Engineering Programme (GEP).

5   Students in this Second Major are allowed to complete additional technical electives (4 MCs) in lieu of EE3031 (4 MCs).

(updated 12 June 2018)