

**Bachelor of Engineering (Civil 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) <i>(Double-counted for Second Major in Innovation & Design)</i>	4
• ES2331 Communicating Engineering ¹	4
• EG2401 Engineering Professionalism	3
• ES1xxx English ²	-
Year 1 and core modules:	
• MA1505 Mathematics I	4
• MA1506 Mathematics II	4
• PC1431 Physics IE	4
• CE1109 Statics & Mechanics of Materials	4
• CE2112 Soil Mechanics	4
• CE2134 Hydraulics	4
• CE2155 Structural Mechanics & Materials	4
• CE2183 Construction Project Management	4
• CE2184 Infrastructure and the Environment	4
• CE2407 Engineering & Uncertainty Analyses	4
• CE2409 Computer Applications in Civil Engineering	4
• ESE3001 Water Quality Engineering	4
• CE3115 Geotechnical Engineering	4
• CE3116 Foundation Engineering	4
• CE3121 Transportation Engineering	4
• CE3132 Water Resources Engineering	4
• CE3155 Structural Analysis	4
• CE3165 Structural Concrete Design	4
• CE3166 Structural Steel Design & System	4
CVE technical electives ³	
Level 3 technical elective modules	4
Higher level technical level modules	10
CVE design and project modules:	
• CE4103 Design Project	4
• EG4301 DCP Dissertation <u>or</u> EG4301A Ideas to Start-up (over 2 consecutive semesters) <i>(Double-counted for Second Major in Innovation & Design and replaces CE4104 B.Eng. Dissertation)</i>	12
EG3612 Vacation Internship Programme (VIP) ^{3,4}	6
Sub-total for Programme Requirements	123

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 (over 2 consecutive semesters)	12
Sub-total for Unrestricted Elective Modules	32
Total	175

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 EG3611 (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 (VIP) 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).