

## CIVIL ENGINEERING - Single Honours

Single Honours Degree Requirements	MCs	Remarks	Classification
<b>(A) University Level Requirements</b>			
General education modules:			
GER1000 Quantitative Reasoning	4	Only 1 set needs to be completed for both BEng and BBA degrees. May be replaced by selected USP, RVRC or UTCP modules.	CA
GEQ1000 Asking Questions	4		CA
GET	4		CA
GEH	4		CA
GES	4		CA
<b>Sub-total for University Level Requirements</b>	<b>20</b>		
<b>(B) Engineering Programme Requirements</b>			
<b>Faculty requirements:</b>			
EG2401A Engineering Professionalism	2		C1
ES2351 Critical Thinking and Writing	4	Can be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP students).	CA
<b>Foundation requirements:</b>			
CE1101A Civil Engineering Principles and Practice	4		C1
CE2102 Principles & Practice in Infrastructure and Environment	4		C1
MA1505 Mathematics I	4		C1
CS1010E Programming Methodology	4		C1
EE2211 Introduction to Machine Learning	4		C1
EG1311 Design and Make	4		C1
IE2141 Systems Thinking and Dynamics	4		C1
MLE1010 Materials Engineering Principles & Practices	4		C1
<b>CVE core modules:</b>			
CE2112 Soil Mechanics	4		C1
CE2134 Hydraulics	4		C1
CE2155 Structural Mechanics and Materials	4		C1
CE2183 Construction Project Management	4		C1
CE2407 Engineering and Uncertainty Analyses	4		C1
ESE3001 Water Quality Engineering	4		C1
CE3115 Geotechnical Engineering	4		C1
CE3116 Foundation Engineering	4		C1
CE3121 Transportation Engineering	4		C1
CE3132 Water Resources Engineering	4		C1
CE3155 Structural Analysis	4		C1
CE3165 Structural Concrete Design	4		C1
CE3166 Structural Steel Design and System	4		C1
<b>CVE project and internship modules:</b>			
CE4103 Design Project	4		C1
CE4104 B.Eng. Dissertation	8		C1
EG3611A Industrial Attachment	-	Exempted for DDP students	-
<b>CVE electives:</b>			
<b>Free electives</b>	<b>2</b>		<b>C1</b>
<b>Sub-total for Engineering Programme Requirements</b>	<b>104</b>		
<b>(C) FASS Faculty Requirements</b>			
Level 1000 exposure module - Asian Studies	4	Choose one from the following: CH1101E, CL1101E, JS1101E, MS1102E, SE1101E, SN1101E	C2
Level 1000 exposure module - Social Sciences	4	EC1101E Introduction to Economic Analysis	C2
Level 1000 exposure module - Humanities	4	Choose one from the following: EL1101E, EN1101E, TS1101E, HY1101E, GET1029	C2
FAS1102 Public Writing and Communication or FAS1103 Effective Workplace Communication + CFG1002 Career Catalyst	4		C2
<b>Sub-total for FASS Faculty Requirements</b>	<b>16</b>		
<b>(D) Economics Major Requirements</b>			
<b>Essential modules:</b>			
EC2101 Microeconomic Analysis I	4		C2
EC2102 Macroeconomic Analysis I	4		C2
EC2104 Quantitative Methods for Economic Analysis	4		C2
EC3101 Microeconomic Analysis II	4		C2
EC3102 Macroeconomic Analysis II	4		C2
EC3303 Econometrics I	4		C2
<b>Elective modules:</b>			
EC elective 1 (Level 2000/3000)	4		C2
EC elective 2 (Level 3000)	4		C2
EC elective 2 (Level 3000)	4		C2
<b>Sub-total for Economics Major Requirements</b>	<b>36</b>		
<b>(E) Common Modules</b>			
BEng module	4	Select from list of Common Modules	CA
EC module	4		CA
<b>Sub-total for Common Modules</b>	<b>8</b>		
<b>TOTAL (minimum)</b>	<b>184</b>		