

**COMPUTER ENGINEERING - Double Honours**

Double 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>			
Faculty requirements:			
EG2401A Engineering Professionalism	2		C1
CS2101 Effective Communication for Computing Professionals	4	Can be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP students).	CA
<b>CEG core modules:</b>			
CG1111 Engineering Principles and Practice I	6		C1
CG1112 Engineering Principles and Practice II	6		C1
CS1010 Programming Methodology	4		C1
CS1231 Discrete Structures	4		C1
MA1511 Engineering Calculus	2		C1
MA1512 Differential Equations for Engineering	2		C1
MA1508E Linear Algebra for Engineers	4		C1
CG2023 Signals and Systems	4		C1
CG2027 Transistor-level Digital Circuits	2		C1
CG2028 Computer Organization	2		C1
CG2271 Real-time Operating Systems	4		C1
CS2040C Data Structures and Algorithms	4		C1
CS2113T Software Engineering & Object-Oriented Programming	4		C1
EE2026 Digital Design	4		C1
ST2334 Probability and Statistics	-	Counted as essential Common Module	CA
CG3207 Computer Architecture or CS3230 Design and Analysis of Algorithms	4		C1
EE4204 Computer Networks	4		C1
<b>CEG project and internship modules:</b>			
CG4002 Computer Engineering Capstone Project	8		C1
CG4001 B.Eng. Dissertation or CP4106 Computing Project + 1 Level 4000 CS/EE elective or EE4002R Research Capstone + 1 Level 4000 CS/EE elective or 3 Level 4000 CS/EE electives	-	Replaced with XFE4401 Integrated Honours Project. Students who do not complete XFE4401 must fulfil at least 12 MCs this requirement.	C1
EG3611A Industrial Attachment or CP3880 Advanced Technology Attachment Programme	-	Exempted for DDP students	-
<b>CEG electives:</b>			
CEG technical elective	4		C1
CEG technical elective (depth)	4		C1
<b>CEG technical elective 3</b>	-	<b>Students who do not complete XFE4401 must fulfil at least 4 MCs for this requirement.</b>	<b>C1</b>
<b>Sub-total for Engineering Programme Requirements</b>	<b>82</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
FAS1101 Writing Academically: Arts and Social Sciences	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
EC3304 Econometrics II	4		C2
<b>Elective modules:</b>			
EC elective 1 (Level 3000)	4		C2
EC elective 2 (Level 4000)	5		C2
EC elective 3 (Level 4000)	5		C2
EC elective 4 (Level 4000)	5		C2
EC elective 5 (Level 4000)	5		C2
EC elective 6 (Level 4000)	5		C2
<b>Honours requirement:</b>			
EC4401 Honours Thesis or 3 Level 4000 EC electives	-	Replaced with XFE4401 Integrated Honours Project. Students who do not complete XFE4401 must fulfil this requirement.	C2
<b>Sub-total for Economics Major Requirements</b>	<b>57</b>		
<b>(E) Common Modules</b>			
BEng module	4	Select from list of Common Modules	CA
EC module	4		CA
Essential common module	4	ST2334 Probability and Statistics	CA
XFE4401 Integrated Honours Project	16	Replaces dissertation / honours thesis modules in both degree programmes	CA
<b>Sub-total for Common Modules</b>	<b>28</b>		
<b>TOTAL (minimum)</b>	<b>203</b>		