INDUSTRIAL & SYSTEMS ENGINEERING - Double Honours

Double Honours Degree Requirements	MCs	Remarks	Classification
(A) University Level Requirements			
General education modules:			
GER1000 Quantitative Reasoning	4		CA
GEQ1000 Asking Questions	4	Only 1 set needs to be completed for both BEng and BBA	CA
GET	4	degrees. May be replaced by selected USP, RVRC or UTCP modules.	CA CA
GEH GES	4	modules.	CA
Sub-total for University Level Requirements	20		CA
(B) Engineering Programme Requirements	20		
Faculty requirements:			
EG2401A Engineering Professionalism	2		C1
Foundation requirements:			
IE1111R Industrial & Systems Engrg Principles & Practice I	4		C1
E2111 Industrial & Systems Engrg Principles & Practice II	4		C1
MA1505 Mathematics I	4		C1
MA1508E Linear Algebra for Engineers	4		C1
CS1010E Programming Methodology	4		C1
E2211 Introduction to Machine Learning	4		C1
G1311 Design and Make	4		C1
E2141 Systems Thinking and Dynamics	4		C1
MLE1010 Materials Engineering Principles & Practices	4		C1
ST2334 Probability and Statistics	4		C1
PC1431 Physics IE	4		C1
or PC1432 Physics IIE	4		CI
SE core modules:			
E2100 Probability Models with Applications	4		C1
E2110 Operations Research I	4	Replace with additional ISE technical elective if IE2110 is	C1
		counted as Common Module	
E3101 Statistics for Engineering Applications	4		C1
E3110R Simulation	4		C1
SE project and internship modules:			
E3100R Systems Design Project	8		C1
E4100R B.Eng. Dissertation	8		C1
or IE4102 Independent Study Module + ISE technical elective			
G3611A Industrial Attachment	_	Exempted for DDP students	_
or EG3612 Vacation Internship Programme		- p	
SE pathway requirements and electives:			
E4211 Modelling and Analytics	4		C1
or Level 5000 module			
E4240 Project Management	4	Replace with additional ISE technical elective if IE4240 is	C1
or Level 5000 module	2	counted as Common Module	
Free electives	88		C1
Sub-total for Engineering Programme Requirements (C) Business Programme Requirements	88		
Business programme Requirements			
BPM1701 Calculus and Statistics	0	These modules must be completed within the first semester	
3PM1702 Microsoft Excel Skills for Business	0	after matriculation or first semester of commencing the DDP	-
BPM1705 Understanding How Business Works	0	for mid-stream DDP students.	-
STR1000 Career Creation Starter Workshops	0	ior mile screen por scaecies.	-
STR2000 Career Creation Starter Clinics	0		-
		May be fulfilled through student exchange, overseas	
Global Immersion and Study	-	internship, case competition, or study trip.	-
BBA core modules:		internship, case competition, or study trip.	
ACC1701 Accounting for Decision Makers	4		C2
3SP1702 Legal Environment of Business	4		C2
SSP1703 Managerial Economics	4		C2
3SP2701 Global Economy	2		C2
SSP3701 Strategic Management	4		C2
DAO1704 Desicion Analytics Using Spreadsheets	4		C2
DAO2702 Programming for Business Analytics	4		C2
			C2
DAO2703 Operations and Technology Management	4		
	4		C2
FIN2704 Finance			C2 C2
FIN2704 Finance MKT1705 Principles of Marketing	4		
FIN2704 Finance MKT1705 Principles of Marketing MNO1706 Organisational Behaviour	4		C2
-IN2704 Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MN02705 Leadership and Decision Making under Uncertainty	4 4 4		C2 C2
FIN2704 Finance MKT1705 Principles of Marketing MN01706 Organisational Behaviour MN02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules:	4 4 4		C2 C2 C2
FIN2704 Finance MKT1705 Principles of Marketing MN01706 Organisational Behaviour MN02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules:	4 4 4	It is not compulsory for DDP students to do a specialisation,	C2 C2
IN2704 Finance MKT1705 Principles of Marketing MNO1706 Organisational Behaviour MNO2705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1	4 4 4 4 4	but those who wish take up a specialisation will need to	C2 C2 C2
IN2704 Finance MKT1705 Principles of Marketing MNO1706 Organisational Behaviour MNO2705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1	4 4 4		C2 C2 C2
### Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MK02705 Leadership and Decision Making under Uncertainty BA electives / specialisation modules: BA elective 1 BBA elective 2	4 4 4 4 4	but those who wish take up a specialisation will need to	C2 C2 C2
### STATE OF THE PROPERTY OF T	4 4 4 4 4 4 4 4	but those who wish take up a specialisation will need to	C2 C2 C2 C2
### STATE OF THE PROPERTY OF T	4 4 4 4 4	but those who wish take up a specialisation will need to	C2 C2 C2
IN2704 Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MN02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1 BBA elective 2 Honours requirements: BHD4001 Dissertation DECENTIFY OF THE PROPERTY OF THE PRO	4 4 4 4 4 4 4 4	but those who wish take up a specialisation will need to	C2 C2 C2 C2
EIN2704 Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MN01706 Capanisational Behaviour MN02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1 BBA elective 2 Honours requirements: BBH04001 Dissertation BB 1 Level 4000 BBA modules SEP4003 Field Service Project	4 4 4 4 12 8 8	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules.	C2 C2 C2 C2 C2
EN2704 Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MK02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1 BBA elective 2 Honours requirements: BHD4001 Dissertation 27 3 Level 4000 BBA modules SP4003 Field Service Project Sub-total for Business Programme Requirements	4 4 4 4 4 12	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules.	C2 C2 C2 C2 C2
### STAND ST	4 4 4 4 12 8 8	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area.	C2 C2 C2 C2 C2
### STAND ST	4 4 4 4 4 4 12 8 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA).	C2 C
### STAND ST	4 4 4 4 12 8 8	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students),	C2 C2 C2 C2 C2
EN2704 Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MK02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1 BBA elective 2 Honours requirements: BHD4001 Dissertation 27 3 Level 4000 BBA modules ESP4003 Field Service Project Sub-total for Business Programme Requirements D) Common Modules	4 4 4 4 4 4 12 8 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP	C2 C
### STATE OF THE PROPRIES OF MARKETING MINOTOS Principles of Marketing MINOTOS Principles of Marketing MINOTOS Principles of Marketing MINOTOS Leadership and Decision Making under Uncertainty MINOTOS Leadership and Decision Making under Uncertainty MINOTOS Leadership and Decision Making under Uncertainty MINOTOS BAB A elective 1 #### STATE OF THE PROPRIES OF THE	4 4 4 4 4 4 12 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students),	C2 C
### STATES Frinciples of Marketing ### MNO1706 Organisational Behaviour ### MNO1706 Leadership and Decision Making under Uncertainty ### As electives / specialisation modules: ### BBA elective 1 ### BBA elective 2 ### Honours requirements: ### BID4001 Dissertation ### 3 Level 4000 BBA modules ### STATES FOR THE MESS Programme Requirements ### DI Common Modules ### STATES FOR THE MESS PROGRAMME REQUIREMENTS ### BID Common Modules #### STATES FOR THE MESS PROGRAMME REQUIREMENTS ### STATES F	4 4 4 4 4 4 12 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP students).	C2 C2 C2 C2 C2 C2 C2 CA CA CA
### FIN2704 Finance MKT1705 Principles of Marketing MMO1706 Organisational Behaviour MMO2705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 2 Honours requirements: #### HD4001 Dissertation or 3 Level 4000 BBA modules ###################################	4 4 4 4 4 4 12 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP	C2 C2 C2 C2 C2 C4 CA CA CA CA
EIN2704 Finance MKT1705 Principles of Marketing MK01706 Organisational Behaviour MK02705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 2 Honours requirements: BHD4001 Dissertation 27 3 Level 4000 BBA modules ESP4003 Field Service Project Sub-total for Business Programme Requirements (D) Common Modules ES2531 Critical Thinking and Writing BBER module 1 BERG module 2 BBA module 1	4 4 4 4 4 4 12 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP students).	C2 C2 C2 C2 C2 C2 CA CA CA CA CA CA CA
DAO2703 Operations and Technology Management Filin2704 Finance MKT1705 Principles of Marketing MNO1706 Organisational Behaviour MNO2705 Leadership and Decision Making under Uncertainty BBA electives / specialisation modules: BBA elective 1 BBA elective 2 Honours requirements: BHD4001 Dissertation or 3 Level 4000 BBA modules FSP4003 Field Service Project Sub-total for Business Programme Requirements (D) Common Modules ES2531 Critical Thinking and Writing BENG module 1 BENG m	4 4 4 4 4 4 12 8 74	but those who wish take up a specialisation will need to complete 24 MCs of specialisation modules. Must not be related to dissertation research area. Replaces ES2002 Business Communication for Leaders (BBA). Can also be replaced by UWC2101% (for USP students), ES1601 (for RVRC students), or UTW2001% (for UTCP students).	C2 C2 C2 C2 C2 C2 CA CA CA CA CA