AY2022-23 AND LATER COHORTS CURRICULUM FOR COMPUTER SCIENCE

With a Second Major in Business **Mainstream Track**

PI option : 20-WEEK Professional Internship

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SUMMARY OF ACADEMIC UNIT REQUIREMENT								
				10	CC			
Year of Study	Core	MPE	Business	Common - Core	Foundational - Core	BDE	Total AU	
1	19	0	6	9	3	0	37	
2	24	0	6	8	0	0	38	
3	7	6	6	0	12	0	31	
4	8	18	12	0	0	0	38	
Total	58	24	30	17	15	0	144	

Recommended Course Schedule

YEAR 1 SEMESTER 1							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC1003	Introduction to Computational Thinking & Programming	Core	3	Nil			
SC1013	Physics For Computing	Core	2	Nil			
MH1810	Mathematics I	Core	3	Nil			
MH1812	Discrete Mathematics	Core	3	Nil			
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil			
CC0005	Healthy Living & Wellbeing	C-Core	3	Nil			
HW0001	Introduction to Academic Communication	-	-	For student who failed QET			
AB1201	Financial Management	Business	3	Nil			
			19				

YEAR 1 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC1005	Digital Logic	Core	3	Nil		
SC1007	Data Structures & Algorithms	Core	3	SC1003		
SC1015	Introduction to Data Science & Artificial Intelligence	F-Core	3	SC1003		
EG1001	Engineers in Society	Core	2	Nil		
CC0001	Inquiry & Communication in an Interdisciplinary World	C-Core	2	Nil		
CC0002	Navigating the Digital World	C-Core	2	Nil		
AB1501	Marketing	Business	3	Nil		
			18			
Year 1 Total AU 37						

			57				
YEAR 2 SEMESTER 1							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC1004	Linear Algebra for Computing	Core	3	SC1003 (co-requisite) & MH1810			
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)			
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812			
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007			
CC0007	Science & Technology for Humanity	C-Core	3	Nil			
AD1102	Financial Accounting	Business	3	Nil			

YEAR 2 SEMESTER 2								
Course Code	Course Title	Туре	AU	Pre-requisite				
SC2000	Probability & Statistics for Computing	Core	3	MH1810				
SC2005	Operating Systems	Core	3	SC1006 & SC1007				
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)				
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)				
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil				
ML0004	Career & Innovative Enterprise for the Future World	C-Core	2	Nil				
AB1601	Organisational Behaviour and Design	Business	3	Nil				
			20					
	Year 2 Total AU 38							

18

YEAR 3 SEMESTER 1							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC2008	Computer Network	Core	3	SC2000 & SC1004			
SC2079	Multidisciplinary Design Project	Core	4	Year 3 Standing			
SC3000	Artificial Intelligence	MPE-1	3	SC1007 & SC1015 & SC2000			
SC3010	Computer Security	MPE-1	3	SC2005			
HW0288	Engineering Communication	F-Core	2	CC0001 & Year 3 standing			
AD2102	Management Accounting	Business	3	AD1102			
AB1301	Business Law	Business	3	Nil			
			21				

	YEAR 3 SEMESTER 2							
Course Code	Course Title	Туре	AU	Pre-requisite				
SC3079	Professional Internship	F-Core	10	Year 3 Standing				
			10					
Year 3 Total AU 31								

YEAR 4 SEMESTER 1							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC4079	Final Year Project (Part 1)	Core	4	Year 4 Standing			
SC3xxx	Major Prescribe Elective (Choose within SC3xxx)	MPE-1	3	Year 3 Standing			
SC3xxx	Major Prescribe Elective (Choose within SC3xxx)	MPE-1	3	Year 3 Standing			
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing			
BF2219	Investments	Business	3	AB1201			
BE2602	Management Principles, Skills & Competencies	Business	3	AB1601			
			19				

YEAR 4 SEMESTER 2							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC4079	Final Year Project (Part 2)	Core	4	Year 4 Standing			
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing			
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing			
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing			
BM2509	Consumer Insights	Business	3	AB1501			
BE1402	Business Operations & Process	Business	3	Nil			
			19				
	Year 4 T	<u>38</u>					

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MPE Structure of Computer Science (U21 and after)									
Course Code	Course Code Type AU Remarks								
SC3000	MPE-1	3	MPE (Compulsory)						
SC3010 MPE-1 3 MPE (Compulsory)									
SC3xxx MPE-1 3 MPE (Choose within SC3xxx)									
SC3xxx	MPE-1	3	MPE (Choose within SC3xxx)						
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)						
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)						
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)						
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)						
Total 24									
Please refer t	he CSC MPE Cou	irses and Special	lization on SCSE website.						

AY2022-23 AND LATER COHORTS CURRICULUM FOR COMPUTER SCIENCE

With a Second Major in Business

Mainstream Track

PA option : 10-	WEEK Professi	2						
SUMMARY OF ACADEMIC UNIT REQUIREMENT								
				ICC				
Year of Study	Core	MPE	Business	Common - Core	Foundational - Core	BDE	Total AU	
					Core			
1	19	0	6	9	3	0	37	
2	24	0	6	8	0	0	38	
3	7	15	9	0	7	3	40	
4	8	9	9	0	0	2	29	
Total	58	24	30	17	10	5	144	

Recommended Course Schedule

YEAR 1 SEMESTER 1							
Course Code	Course Title	Туре	AU	Pre-requisite			
SC1003	Introduction to Computational Thinking & Programming	Core	3	Nil			
SC1013	Physics For Computing	Core	2	Nil			
MH1810	Mathematics I	Core	3	Nil			
MH1812	Discrete Mathematics	Core	3	Nil			
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil			
CC0005	Healthy Living & Wellbeing	C-Core	3	Nil			
HW0001	Introduction to Academic Communication	-	-	For student who failed QET			
AB1201	Financial Management	Business	3	Nil			
			19				

YEAR 1 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC1005	Digital Logic	Core	3	Nil		
SC1007	Data Structures & Algorithms	Core	3	SC1003		
SC1015	Introduction to Data Science & Artificial Intelligence	F-Core	3	SC1003		
EG1001	Engineers in Society	Core	2	Nil		
CC0001	Inquiry & Communication in an Interdisciplinary World	C-Core	2	Nil		
CC0002	Navigating the Digital World	C-Core	2	Nil		
AB1501	Marketing	Business	3	Nil		
			18			

<u>Year 1 Total AU</u>		otal AU	<u>37</u>				
	YEAR 2 SEMESTER 1						
Course Code	Course Title	Туре	AU	Pre-requisite			
SC1004	Linear Algebra for Computing	Core	3	SC1003 (co-requisite) & MH1810			
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)			
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812			
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007			
CC0007	Science & Technology for Humanity	C-Core	3	Nil			
AD1102	Financial Accounting	Business	3	Nil			
			18				

YEAR 2 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC2000	Probability & Statistics for Computing	Core	3	MH1810		
SC2005	Operating Systems	Core	3	SC1006 & SC1007		
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)		
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)		
	Sustainability: Society, Economy & Environment	C-Core	3	Nil		
ML0004	Career & Innovative Enterprise for the Future World	C-Core	2	Nil		
AB1601	Organisational Behaviour and Design	Business	3	Nil		
			20			
	Year 2 T	<u>38</u>				

YEAR 3 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-requisite	
SC2008	Computer Network	Core	3	SC2000 & SC1004	
SC3000	Artificial Intelligence	MPE-1	3	SC1007 & SC1015 & SC2000	
SC3010	Computer Security	MPE-1	3	SC2005	
HW0288	Engineering Communication	F-Core	2	CC0001 & Year 3 standing	
AD2102	Management Accounting	Business	3	AD1102	
AB1301	Business Law	Business	3	Nil	
			17		

YEAR 3 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-requisite	
SC2079	Multidisciplinary Design Project	Core	4	Year 3 Standing	
SC3xxx	Major Prescribe Elective (Choose within SC3xxx)	MPE-1	3	Year 3 Standing	
SC3xxx	Major Prescribe Elective (Choose within SC3xxx)	MPE-1	3	Year 3 Standing	
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing	
BF2219	Investments	Business	3	AB1201	
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule	
			18		
	YEAR 3 SPECIAL SEMES	TER			
Course Code	Course Title	Туре	AU	Pre-requisite	
SC3026	Professional Attachment	F-Core	5	Year 3 Standing	
			5		
Year 3 Total AU 40					

YEAR 4 SEMESTER 1						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC4079	Final Year Project (Part 1)	Core	4	Year 4 Standing		
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing		
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing		
BE2602	Management Principles, Skills & Competencies	Business	3	AB1601		
			13			

YEAR 4 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-requisite		
SC4079	Final Year Project (Part 2)	Core	4	Year 4 Standing		
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-2	3	Year 3 Standing		
BM2509	Consumer Insights	Business	3	AB1501		
BE1402	Business Operations & Process	Business	3	Nil		
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule		
			16			
	Year 4 T	<u>otal AU</u>	<u>29</u>			

MPE Structure of Computer Science (U21 and after)								
Course Code	Туре	AU	Remarks					
SC3000	MPE-1	3	MPE (Compulsory)					
SC3010	MPE-1	3	MPE (Compulsory)					
SC3xxx	MPE-1	3	MPE (Choose within SC3xxx)					
SC3xxx	MPE-1	3	MPE (Choose within SC3xxx)					
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)					
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)					
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)					
SC4xxx	MPE-2	3	MPE (Choose within SC4xxx)					
	Total 24							
Please refer the CSC MPE Courses and Specialization on SCSE website.								

Business Course Lising					
Course Code	Course Title	Туре	AU	Pre-requisite	
AB1201	Financial Management	Business	3	Nil	
AB1501	Marketing	Business	3	Nil	
AD1102	Financial Accounting	Business	3	Nil	
AB1601	Organisational Behaviour and Design	Business	3	Nil	
AD2102	Management Accounting	Business	3	AD1102	
AB1301	Business Law	Business	3	Nil	
BF2219	Investments	Business	3	AB1201	
BE2602	Management Principles, Skills & Competencies	Business	3	AB1601	
BM2509	Consumer Insights	Business	3	AB1501	
BE1402	Business Operations & Process	Business	3	Nil	
	Business Course Lising	(ITP)			
Course Code	Course Title	Туре	AU	Pre-requisite	
BF2226	Trade Incoterms & Ship Chartering	ITP	3	Nil	
BF2227	Commodity Markets	ITP	3	Nil	
BF3214	Commodities Trading	ITP	2	Nil	
BF2302	International Tax & Trading Law	ITP	2	Nil	
BF3226	Strategic Management in Commodity Markets	ITP	2	Nil	
BF3212	Trade, Structured & Supply Chain Finance	ITP	2	BF2226	
BF3213	Enterprise Risk Management in Commodity Markets	ITP	2	Nil	