

AY2021-22 CURRICULUM
B.Eng (Computer Engineering) & B.Business (BA Specialization)
DOUBLE DEGREE PROGRAMME

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	Major Core		MPE		Interdisciplinary Curriculum Core		Total AU
	CS	BUS	CS	BUS	Common Core (CC)	Foundational Core (FC)	
1	16	12	0	0	9	8	45
2	15	15	0	0	8	5	43
3	28	6	0	3	0	0	37
4	11	6	9	6	0	0	32
Total	70	39	9	9	14	13	157

Suggested Course Schedules

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
SC1003	Introduction to Computational Thinking & Programming	C	3	Nil
SC1013	Physics for Computing	C	2	Nil
MH1810	Mathematics I	C	3	Nil
EG1001	Engineers in Society	C	2	Nil
AB1202	Statistics & Analysis	C	3	Nil
AB1301	Business Law	C	3	Nil
CC0005	Healthy Living & Wellbeing	C-Core	3	Nil
CC0003	Ethics & Civics in a Multi-Cultural World	C-Core	2	Nil
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YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
SC1005	Digital Logic	C	3	Nil
MH1812	Discrete Mathematics	C	3	Nil
SC1015	Introduction to Data Science & AI	F-Core	3	SC1003
AD1102	Financial Accounting	C	3	Nil
AB1601	Organisational Behaviour and Design	C	3	Nil
CC0001	Inquiry and Communication in an Interdisciplinary World	C-Core	2	Nil
CC0002	Navigating the Digital World	C-Core	2	Nil
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YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite
AB1003	Professional Attachment	F-Core	5	ABXXXX
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YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
SC1004	Linear Algebra for Computing	C	3	MH1810
SC1006	Computer Organisation and Architecture	C	3	SC1005
SC1007	Data Structures & Algorithms	C	3	SC1003
AB0602	Communication Management Strategies	F-Core	4	CC0001
AB2008	Careers II	F-Core	1	TBD
BC2402	Designing & Developing Databases	C	4	Nil
BC2406	Analytics I: Visual and Predictive Analytics	C	4	Nil
CC0007	Science & Technology for Humanity	C-Core	3	Nil
			25	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
SC2001	Algorithm Design and Analysis	C	3	SC1007, MH1812
SC2103	Digital System Design	C	3	SC1005
AB1201	Financial Management	C	3	
BC2407	Analytics II: Advanced Predictive Analytics	C	4	AB1202, BC2406
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
ML0004	Career & Entrepreneurial Development for the Future World	C-Core	2	Nil
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YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
SC2000	Probability and Statistics for Computing	C	3	MH1810
SC2002	Object Oriented Design and Programming	C	3	SC1003
SC2005	Operating Systems	C	3	SC1006, SC1007
SC2104	Sensors, Interfacing & Digital Control	C	3	SC1006
SC2107	Microprocessor System Design and Development	C	3	SC1006
AB1501	Marketing	C	3	
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YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
SC2079	Multidisciplinary Design Project	C	4	Year 3 standing
SC2006	Software Engineering	C	3	SC2002
SC2008	Computer Networks	C	3	SC1004, SC2000
SC3103	Embedded Programming	C	3	SC2107
AD2102	Management Accounting	C	3	AD1102
Bxxxxx	BA/CE Integration 1	BC-PE1	3	
			19	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
SC4079	Final Year Project	C	4	Final year standing
SC3102	Signal, Systems and Transform	C	3	SC1004
AB3602	Strategic Management	C	3	AB1501, AB1601
SC4xxx	Major Prescribe Elective	MPE-a (CE)	3	Year 3 standing
Bxxxxx	BA/CE Integration 2	BC-PE1	3	
			16	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
SC4079	Final Year Project	C	4	Final year standing
HE5091	Principles of Economics	C	3	
SC4xxx	Major Prescribe Elective	MPE-b (CE)	3	Year 3 standing
SC4xxx	Major Prescribe Elective	MPE-c (CE)	3	Year 3 standing
Bxxxxx	BA/CE Integration 3	BC-PE1	3	
			16	