

**AY2025-2026**  
**CURRICULUM FOR COMPUTER ENGINEERING & BUSINESS (BA SPECIALISATION)**  
**DOUBLE DEGREE PROGRAMME**

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	Core		MPE		ICC		Care, Serve, Learn	Total AU
	CE	BUS	CE	BUS	Common Core	Professional Series		
Y1	20	9	0	0	6	8	0	43
Y2	12	15	0	0	8	5	3	43
Y3	25	6	3	3	0	0	0	37
Y4	8	6	12	6	0	1	0	33
<b>Total</b>	<b>65</b>	<b>36</b>	<b>15</b>	<b>9</b>	<b>14</b>	<b>14</b>	<b>3</b>	<b>156</b>

**Recommended Course Schedule**

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1013	Physics For Computing	Core-CE	2	Nil
SC1004	Linear Algebra for Computing	Core-CE	4	SC1003 (co-req)
EG1001	Engineers in Society	Core-CE	2	Nil
AB1301	Business Law	Core-BUS	3	Nil
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil
CC0015	Health & Wellbeing	C-Core	2	Nil
SC1003	Introduction to Computational Thinking & Programming	P-Series	3	Nil
HW0001	Introduction to Academic Communication	-	-	For student failed QET
HW0002	Calculus	-	-	For student not done Calculus
<b>TOTAL</b>			<b>18</b>	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1005	Digital Logic	Core-CE	3	Nil
SC1007	Data Structures & Algorithms	Core-CE	3	SC1003
SC1008	C and C++ Programming	Core-CE	3	SC1003
MH1812	Discrete Mathematics	Core-CE	3	Nil
AD1102	Financial Accounting	Core-BUS	3	Nil
AB1601	Organisational Behaviour and Design	Core-BUS	3	Nil
CC0001	Inquiry & Communication in an Interdisciplinary World	C-Core	2	Nil
<b>TOTAL</b>			<b>20</b>	

YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
AB1003	Professional Attachment (Graded)	P-Series	5	Nil
<b>TOTAL</b>			<b>5</b>	
<b>Year 1 Total AU</b>			<b>43</b>	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1006	Computer Organisation & Architecture	Core-CE	3	SC1005 (co-req)
SC2000	Probability & Statistics for Computing	Core-CE	3	Nil
BC2402	Designing & Developing Database (SC2207)	Core-BUS	4	Nil
BC2406	Analytics I: Visual and Predictive Analytics	Core-BUS	4	Nil
CC0007	Science & Technology for Humanity	C-Core	3	Nil
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	C-Core	2	Nil
AB0602	Communication Management Strategies (HW0288)	P-Series	4	CC0001
AB2008	Careers Future Forward	P-Series	1	Nil
<b>TOTAL</b>			<b>24</b>	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2001	Algorithm Design & Analysis	Core-CE	3	SC1007 & MH1812
SC2103	Digital Systems Design	Core-CE	3	SC1005
AB1201	Financial Management	Core-BUS	3	Nil
BC2407	Analytics II: Advanced Predictive Analytics	Core-BUS	4	AB1202, BC2406
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
CSL	CSL (service learning course)- Part 1	CSL	3	(Continue in Semester 1)
<b>TOTAL</b>			<b>19</b>	
			<b>Year 2 Total AU</b>	<b>43</b>

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2002	Object Oriented Design & Programming	Core-CE	3	SC1003 OR SC1007
SC2005	Operating Systems	Core-CE	3	SC1006 & SC1007
SC2006	Software Engineering	Core-CE	3	SC2002 (co-req)
SC2008	Computer Network	Core-CE	3	SC2000 & SC1004
SC2107	Microprocessor System Design and Development	Core-CE	3	SC1006
AB1501	Marketing	Core-BUS	3	Nil
CSL	CSL (service learning course)- Part 2	CSL	-	(Continue from Semester 2)
<b>TOTAL</b>			<b>18</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2079	Multidisciplinary Design Project	Core-CE	4	Year 3 Standing
SC2104	Sensors, Interfacing & Digital Control	Core-CE	3	SC1006
SC3102	Signals, Systems and Transforms	Core-CE	3	SC1004
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-1	3	Refer to MPE listing
AD2102	Management Accounting	Core-BUS	3	AD1102
BXxxxx	BA/CS Integration 1	BC-PE1	3	Refer to MPE listing
<b>TOTAL</b>			<b>19</b>	
			<b>Year 3 Total AU</b>	<b>37</b>

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC4079	Final Year Project (Part 1)	Core-CE	4	Year 4 Standing
AB3602	Strategic Management	Core	3	AB1501, AB1601
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-2	3	Refer to MPE listing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-3	3	Refer to MPE listing
BXxxxx	BA/CS Integration 2	BC-PE2	3	Refer to MPE listing
ML0015	Profession Preparation	P-Series	1	Nil
<b>TOTAL</b>			<b>17</b>	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC4079	Final Year Project (Part 2)	Core-CE	4	Year 4 Standing
HE5091	Principles of Economics	Core-BUS	3	Nil
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-4	3	Refer to MPE listing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-5	3	Refer to MPE listing
BXxxxx	BA/CS Integration 3	BC-PE3	3	Refer to MPE listing
<b>TOTAL</b>			<b>16</b>	
			<b>Year 4 Total AU</b>	<b>33</b>
<b>Grand Total (Year 1 to 4)</b>			<b>156</b>	

**Important Note:**

- Students are required to complete **5 Major Prescribed Electives (MPE)** courses, of which **at least 3 must be at the SC4xxx level**.
- One of BXxxxx-PE** courses with the **highest grade** will be **used to fulfil one SC4xxx MPE**.
- In order to graduate with Highest Distinction, students must achieve **minimum CGPA of 4.5** and at least a **'B+'** grade for the **Final Year Project**.

MPE Structure of Computer Engineering (U24 and after)			
Course Code	Type	AU	Remarks
SC3xxx / SC4xxx	MPE-1	3	Choose within SC3xxx/SC4xxx
SC3xxx / SC4xxx	MPE-2	3	Choose within SC3xxx/SC4xxx
SC4xxx	MPE-3	3	Choose within SC4xxx
SC4xxx	MPE-4	3	Choose within SC4xxx
SC4xxx	MPE-5	3	Choose within SC4xxx
SC4xxx	MPE-6	3	One of BXxxx-PE with the highest grade will be used to fulfil one SC4xxx MPE
	<b>Total</b>	<b>18</b>	
<a href="#">Please refer the CE MPE Courses and Elective Focus Areas on CCDS website.</a>			

Business Course Listing				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
AB1301	Business Law	Core	3	Nil
AD1102	Financial Accounting	Core	3	Nil
AB1601	Organisational Behaviour and Design	Core	3	Nil
AB1003	Professional Attachment (Graded)	PS	5	ABXXXX
AB0602	Communication Management Strategies (HW0288)	PS	4	CC0001
AB2008	Careers II	PS	1	Nil
BC2402	Designing & Developing Database (SC2207)	Core	4	Nil
BC2406	Analytics I: Visual and Predictive Analytics	Core	4	Nil
AB1201	Financial Management	Core	3	Nil
BC2407	Analytics II: Advanced Predictive Analytics	Core	4	AB1202, BC2406
AB1501	Marketing	Core	3	Nil
AD2102	Management Accounting	Core	3	AD1102
AB3602	Strategic Management	Core	3	AB1501, AB1601
HE5091	Principles of Economics	Core	3	Nil
BXxxx	BA/CS Integration 1	BC-PE1	3	-
BXxxx	BA/CS Integration 2	BC-PE2	3	-
BXxxx	BA/CS Integration 3	BC-PE3	3	-