

**AY2025-2026**  
**CURRICULUM FOR COMPUTER SCIENCE**

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	Core	MPE	ICC			BDE	Total AU
			Common - Core	Professional Series	Care, Serve, Learn		
Y1	25	0	8	3	0	0	36
Y2	18	6	6	0	3	3	36
Y3	4	6	0	12	0	6	28
Y4	0	23/24	0	1	0	11	35/36
<b>Total</b>	<b>47</b>	<b>35/36</b>	<b>14</b>	<b>16</b>	<b>3</b>	<b>20</b>	<b>135/136</b>

**Recommended Course Schedule**

**YEAR 1 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC1003	Introduction to Computational Thinking & Programming	P-Series	3	Nil
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-req)
SC1005	Digital Logic	Core	3	Nil
MH1812	Discrete Mathematics	Core	3	Nil
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil
CC0015	Health & Wellbeing	C-Core	2	Nil
HW0001	Introduction to Academic Communication	-	-	For student failed QET
HW0002	Calculus	-	-	For student not done Calculus
<b>TOTAL</b>			<b>17</b>	

**YEAR 1 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-req)
SC1007	Data Structures & Algorithms	Core	3	SC1003
SC1008	C and C++ Programming	Core	3	SC1003
SC2000	Probability & Statistics for Computing	Core	3	Nil
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007
CC0001	Inquiry & Communication in an Interdisciplinary World	C-Core	2	Nil
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	C-Core	2	Nil
<b>TOTAL</b>			<b>19</b>	
			<b>Year 1 Total AU</b>	<b>36</b>

**YEAR 2 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812
SC2005	Operating Systems	Core	3	SC1006 & SC1007
SC2203	Automata, Computability and Complexity	Core	3	SC2001 (co-req)
SC2006	Software Engineering	Core	3	SC2002 (co-req)
SC2008	Computer Network	Core	3	SC2000 & SC1004
CC0007	Science & Technology for Humanity	C-Core	3	Nil
CSL	CSL (service learning course) - Part 1	CSL	3	(Continue in Y2S2)
<b>TOTAL</b>			<b>21</b>	

**YEAR 2 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC2207	Introduction to Databases	Core	3	SC2001 (co-req)
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-1	3	Refer to MPE listing
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-2	3	Refer to MPE listing
CSL	CSL (service learning course) - Part 2	CSL	-	(Continue from Y2S1)
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
<b>TOTAL</b>			<b>15</b>	
			<b>Year 2 Total AU</b>	<b>36</b>

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC3099	Capstone Project	Core	4	Year 3 Standing
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-3	3	Refer to MPE listing
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-4	3	Refer to MPE listing
HW0288	Engineering Communication	P-Series	2	CC0001 & Year 3 standing
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
<b>TOTAL</b>			<b>18</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC3920	Professional Internship (Graded)	P-Series	10	Year 3 Standing
<b>TOTAL</b>			<b>10</b>	
		<b>Year 3 Total AU</b>	<b>28</b>	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC4079	Final Year Project (Part 1)	MPE	4	Year 4 Standing
SC3xxx/SC4xxx	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE-5	3	Refer to MPE listing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-6	3	Refer to MPE listing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-7	3	Refer to MPE listing
ML0015	Profession Preparation	P-Series	1	Nil
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
<b>TOTAL</b>			<b>20</b>	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remark
SC4079	Final Year Project (Part 2)	MPE	4	Year 4 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-8	3	Refer to MPE listing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-9	3	Refer to MPE listing
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule
<b>TOTAL</b>			<b>15</b>	
		<b>Year 4 Total AU</b>	<b>35</b>	
<b>Grand Total (Year 1 to 4)</b>			<b>135</b>	

**Important Note:**

- Students are required to complete **9 Major Prescribed Electives (MPE) courses** (SC3xxx or SC4xxx), of which **at least 4 must be at the SC4xxx level**.
- Students may choose to complete a **Final Year Project (FYP)** or take **3 additional MPEs** in its place.
- In order to graduate with **Highest Distinction**, students **must complete a Final Year Project**.

MPE Structure of Computer Science (U24 and after)				
Course Code	Type	AU	Remarks	
SC3xxx/SC4xxx	MPE-1	3	Any MPE	
SC3xxx/SC4xxx	MPE-2	3	Any MPE	
SC3xxx/SC4xxx	MPE-3	3	Any MPE	
SC3xxx/SC4xxx	MPE-4	3	Any MPE	
SC3xxx/SC4xxx	MPE-5	3	Any MPE	
SC4xxx	MPE-6	3	MPE (Choose within SC4xxx)	
SC4xxx	MPE-7	3	MPE (Choose within SC4xxx)	
SC4xxx	MPE-8	3	MPE (Choose within SC4xxx)	
SC4xxx	MPE-9	3	MPE (Choose within SC4xxx)	
	<b>Total</b>	<b>27</b>		
<a href="#">Please refer the CSC MPE Courses and Specialisation on CCDS website.</a>				