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| AY2025-2026 AND LATER COHORTS Curriculum for Bachelor of Computing (Computer Science) |
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| SUMMARY OF ACADEMIC UNIT REQUIREMENT | | | | | | | |
|--------------------------------------|-----------|-----------|---------------|---------------------|---------------------|-----------|------------|
| Year of Study | Core | MPE | ICC | | | BDE | Total AU |
| | | | Common - Core | Professional Series | Care, Serve & Learn | | |
| 1 | 25 | 0 | 8 | 3 | 0 | 0 | 36 |
| 2 | 18 | 6 | 6 | 0 | 3 | 3 | 36 |
| 3 | 4 | 6 | 0 | 12 | 0 | 6 | 28 |
| 4 | 0 | 23 | 0 | 1 | 0 | 11 | 35 |
| Total | 47 | 35 | 14 | 16 | 3 | 20 | 135 |

Recommended Course Schedule

| YEAR 1 SEMESTER 1 | | | | |
|-------------------|--|---------------------|-----------|-------------------------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC1003 | Introduction to Computational Thinking & Programming | Professional Series | 3 | Nil |
| SC1004 | Linear Algebra for Computing | Core | 4 | SC1003 (co-requisite) |
| 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 |
| | | | 17 | |

| YEAR 1 SEMESTER 2 | | | | |
|-------------------|--|--------|-----------|-----------------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC1006 | Computer Organisation & Architecture | Core | 3 | SC1005 (co-requisite) |
| 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 |
| | | | 19 | |

Year 1 Total AU

36

| YEAR 2 SEMESTER 1 | | | | |
|-------------------|--|--------|-----------|--------------------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC2001 | Algorithm Design & Analysis | Core | 3 | SC1007 & MH1812 |
| SC2005 | Operating Systems | Core | 3 | SC1006 & SC1007 |
| SC2203 | Automata, Computability and Complexity | Core | 3 | SC2001 (co-requisite) |
| SC2006 | Software Engineering | Core | 3 | SC2002 (co-requisite) |
| SC2008 | Computer Network | Core | 3 | SC2000 & SC1004 |
| CC0007 | Science & Technology for Humanity | C-Core | 3 | Nil |
| CSL | CSL (service learning course)- Part 1 | CSL | - | (Continue in Semester 2) |
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| | | | 18 | |

| YEAR 2 SEMESTER 2 | | | | |
|-------------------|--|--------|-----------|----------------------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC2207 | Introduction to Databases | Core | 3 | SC2001 (co-requisite) |
| CC0006 | Sustainability: Society, Economy & Environment | C-Core | 3 | Nil |
| SC3xxx/SC4xxx | Major Prescribe Elective (Choose within SC3xxx/SC4xxx) | MPE | 3 | Year 3 Standing |
| SC3xxx/SC4xxx | Major Prescribe Elective (Choose within SC3xxx/SC4xxx) | MPE | 3 | Year 3 Standing |
| | Broadening and Deepening Elective | BDE | 3 | Refer to Class Schedule |
| CSL | CSL (service learning course)- Part 2 | CSL | 3 | (Continue from Semester 1) |
| | | | | |
| | | | 18 | |

Year 2 Total AU

36

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

| YEAR 3 SEMESTER 2 | | | | |
|-------------------|----------------------------------|---------------------|-----------|-----------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC3920 | Professional Internship (Graded) | Professional Series | 10 | Year 3 Standing |
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| | | | 10 | |

Year 3 Total AU

28

| YEAR 4 SEMESTER 1 | | | | |
|-------------------|--|---------------------|-----------|-------------------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC4079 | Final Year Project (Part 1) | MPE | 4 | Year 4 Standing |
| SC3xxx/SC4xxx | Major Prescribe Elective (Choose within SC3xxx/SC4xxx) | MPE | 3 | Year 3 Standing |
| SC4xxx | Major Prescribe Elective (Choose within SC4xxx) | MPE | 3 | Year 3 Standing |
| SC4xxx | Major Prescribe Elective (Choose within SC4xxx) | MPE | 3 | Year 3 Standing |
| | Broadening and Deepening Elective | BDE | 3 | Refer to Class Schedule |
| | Broadening and Deepening Elective | BDE | 3 | Refer to Class Schedule |
| ML0015 | Profession Preparation | Professional Series | 1 | Nil |
| | | | 20 | |

| YEAR 4 SEMESTER 2 | | | | |
|-------------------|---|------|-----------|-------------------------|
| Course Code | Course Title | Type | AU | Pre-requisite |
| SC4079 | Final Year Project (Part 2) | MPE | 4 | Year 4 Standing |
| SC4xxx | Major Prescribe Elective (Choose within SC4xxx) | MPE | 3 | Year 3 Standing |
| SC4xxx | Major Prescribe Elective (Choose within SC4xxx) | MPE | 3 | Year 3 Standing |
| | Broadening and Deepening Elective | BDE | 3 | Refer to Class Schedule |
| | Broadening and Deepening Elective | BDE | 2 | Refer to Class Schedule |
| | | | 15 | |

Year 4 Total AU

35

Note:

1. Students are required to complete **9 Major Prescribed Electives** (SC3xxx or SC4xxx), including **at least 4 at the SC4xxx level**.
2. Students may choose to complete a **Final Year Project (FYP)** or take **3 additional MPEs** in its place.
3. 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 |
| SC3000 | MPE-1 | 3 | MPE(Compulsory) |
| SC3010 | MPE-2 | 3 | MPE(Compulsory) |
| 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) |
| | Total | 27 | |

Please refer to the CSC MPE Courses and Specialization on CCDS website.