

AY2025-2026
CURRICULUM FOR COMPUTER SCIENCE

With a Second Major in Business
International Trading Programme (ITP) track

PI option : 20-WEEK Professional Internship

SUMMARY OF ACADEMIC UNIT REQUIREMENT

Year of Study	Major		ICC			2M - BUS (ITP) / BDE	Total AU
	Core	MPE	Common - Core	Professional Series	Care, Serve, Learn		
Y1	19	0	8	3	0	6	36
Y2	21	0	6	0	3	11	41
Y3	7	6	0	12	0	6	31
Y4	0	29/30	0	1	0	8	38/39
Total	47	35/36	14	16	3	31	146/147

Recommended Course Schedule

YEAR 1 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1003	Introduction to Computational Thinking & Programming	P-Series	3	Nil
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-req)
MH1812	Discrete Mathematics	Core	3	Nil
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil
CC0015	Health & Wellbeing	C-Core	2	Nil
AB1201	Financial Management	2M-BUS (BDE)	3	Nil
HW0001	Introduction to Academic Communication	-	-	For student failed QET
HW0002	Calculus	-	-	For student not done Calculus
TOTAL			17	

YEAR 1 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1005	Digital Logic	Core	3	Nil
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-req)
SC1007	Data Structures & Algorithms	Core	3	SC1003
SC1008	C and C++ Programming	Core	3	SC1003
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
AB1501	Marketing	2M-BUS (BDE)	3	Nil
TOTAL			19	
		Year 1 Total AU	36	

YEAR 2 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2000	Probability & Statistics for Computing	Core	3	Nil
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007
SC2005	Operating Systems	Core	3	SC1006 & SC1007
CC0007	Science & Technology for Humanity	C-Core	3	Nil
CSL	CSL (service learning course) - Part 1	CSL	3	(Continue in Semester 2)
AD1102	Financial Accounting	2M-BUS (BDE)	3	Nil
BF2227	Commodities Market	2M-BUS-ITP (BDE)	3	Nil
TOTAL			24	

YEAR 2 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2006	Software Engineering	Core	3	SC2002 (co-req)
SC2008	Computer Network	Core	3	SC2000 & SC1004
SC2207	Introduction to Databases	Core	3	SC2001 (co-req)
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
CSL	CSL (service learning course) - Part 2	CSL	-	(Continue from Semester 1)
BE1402	Business Operations & Process	2M-BUS (BDE)	3	Nil
BF3214	Commodities Trading	2M-BUS-ITP (BDE)	2	Nil
TOTAL			17	
		Year 2 Total AU	41	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2203	Automata, Computability and Complexity	Core	3	SC2001 (co-req)
SC3099	Capstone	Core	4	Year 3 Standing
HW0288	Engineering Communication	P-Series	2	CC0001 & Year 3 standing
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
AD2102	Management Accounting	2M-BUS (BDE)	3	Nil
BF2226	Trade Incoterms & Ship Chartering	2M-BUS-ITP (BDE)	3	Nil
TOTAL			21	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC3920	Professional Internship (Graded)	P-Series	10	Year 3 Standing
TOTAL			10	
Year 3 Total AU			31	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC4079	Final Year Project (Part 1)	MPE	4	Year 4 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
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
ML0015	Profession Preparation	P-Series	1	Nil
BF2302	International Tax & Trading Law	2M-BUS-ITP (BDE)	2	Nil
BF3226	Strategic Management in Commodity Markets	2M-BUS-ITP (BDE)	2	Nil
TOTAL			21	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC4079	Final Year Project (Part 2)	MPE	4	Year 4 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-7	3	Refer to MPE listing
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
BF3212	Trade, Structured & Supply Chain Finance	2M-BUS-ITP (BDE)	2	BF2226
BF3213	Enterprise Risk Management in Commodity Markets	2M-BUS-ITP (BDE)	2	Nil
TOTAL			17	
Year 4 Total AU			38	

Grand Total (Year 1 to 4)			146	
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Important Note:

- Students are required to complete **9 Major Prescribed Electives (MPE) courses** (SC3xxx or SC4xxx), including **at least 4 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 (U21 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)
	Total	27	
Please refer the CSC MPE Courses and Specialisation on CCDS website.			

AY2025-2026
CURRICULUM FOR COMPUTER SCIENCE

With a Second Major in Business
International Trading Programme (ITP) track

PA option : 10-WEEK Professional Attachment (Graded)

SUMMARY OF ACADEMIC UNIT REQUIREMENT

Year of Study	Major		ICC			2M - BUS (ITP) / BDE	Total AU
	Core	MPE	Common - Core	Professional Series	Care, Serve, Learn		
Y1	19	0	8	3	0	6	36
Y2	21	0	6	0	3	11	41
Y3	7	18	0	7	0	9	41
Y4	0	17/18	0	1	0	10	28/29
Total	47	35/36	14	11	3	36	146/147

Recommended Course Schedule

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1003	Introduction to Computational Thinking & Programming	P-Series	3	Nil
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-req)
MH1812	Discrete Mathematics	Core	3	Nil
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil
CC0015	Health & Wellbeing	C-Core	2	Nil
AB1201	Financial Management	2M-BUS (BDE)	3	Nil
HW0001	Introduction to Academic Communication	-	-	For student failed QET
HW0002	Calculus	-	-	For student not done Calculus
TOTAL			17	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC1005	Digital Logic	Core	3	Nil
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-req)
SC1007	Data Structures & Algorithms	Core	3	SC1003
SC1008	C and C++ Programming	Core	3	SC1003
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
AB1501	Marketing	2M-BUS (BDE)	3	Nil
TOTAL			19	
Year 1 Total AU			36	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2000	Probability & Statistics for Computing	Core	3	Nil
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007
SC2005	Operating Systems	Core	3	SC1006 & SC1007
CC0007	Science & Technology for Humanity	C-Core	3	Nil
CSL	CSL (service learning course) - Part 1	CSL	3	(Continue in Semester 2)
AD1102	Financial Accounting	2M-BUS (BDE)	3	Nil
BF2227	Commodities Market	2M-BUS-ITP (BDE)	3	Nil
TOTAL			24	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2006	Software Engineering	Core	3	SC2002 (co-req)
SC2008	Computer Network	Core	3	SC2000 & SC1004
SC2207	Introduction to Databases	Core	3	SC2001 (co-req)
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
BE1402	Business Operations & Process	2M-BUS (BDE)	3	Nil
BF3214	Commodities Trading	2M-BUS-ITP (BDE)	2	Nil
CSL	CSL (service learning course) - Part 2	CSL	-	(Continue from Semester 1)
TOTAL			17	
Year 2 Total AU			41	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC2203	Automata, Computability and Complexity	Core	3	SC2001 (co-req)
SC3099	Capstone	Core	4	Year 3 Standing
HW0288	Engineering Communication	P-Series	2	CC0001 & Year 3 standing
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
AD2102	Management Accounting	2M-BUS (BDE)	3	Nil
BF2226	Trade Incoterms & Ship Chartering	2M-BUS-ITP (BDE)	3	Nil
TOTAL			21	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
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
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
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
TOTAL			15	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC3910	Professional Attachment (Graded)	P-Series	5	Year 3 Standing
			5	
			41	
				Year 3 Total AU

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC4079	Final Year Project (Part 1)	MPE	4	Year 4 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-7	3	Refer to MPE listing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-8	3	Refer to MPE listing
ML0015	Profession Preparation	P-Series	1	Nil
BF2302	International Tax & Trading Law	2M-BUS-ITP (BDE)	2	Nil
BF3226	Strategic Management in Commodity Markets	2M-BUS-ITP (BDE)	2	Nil
TOTAL			15	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
SC4079	Final Year Project (Part 2)	MPE	4	Year 4 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE-9	3	Refer to MPE listing
BF3212	Trade, Structured & Supply Chain Finance	2M-BUS-ITP (BDE)	2	BF2226
BF3213	Enterprise Risk Management in Commodity Markets	2M-BUS-ITP (BDE)	2	Nil
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule
TOTAL			13	
			28	
				Year 4 Total AU
Grand Total (Year 1 to 4)			146	

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2. Students may choose to complete a **Final Year Project (FYP)** or take **3 additional MPEs** in its place.
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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)
	Total	27	

[Please refer the CSC MPE Courses and Specialisation on CCDS website.](#)

Business Course Listing				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
AB1201	Financial Management	2M-BUS (BDE)	3	Nil
AB1501	Marketing	2M-BUS (BDE)	3	Nil
AD1102	Financial Accounting	2M-BUS (BDE)	3	Nil
AD2102	Management Accounting	2M-BUS (BDE)	3	Nil
BE1402	Business Operations & Process	2M-BUS (BDE)	3	AD1102
TOTAL			15	

Business Course Listing (ITP)				
Course Code	Course Title	Type	AU	Pre-requisite/Remarks
BF2226	Trade Incoterms & Ship Chartering	2M-BUS-ITP (BDE)	3	Nil
BF2227	Commodity Markets	2M-BUS-ITP (BDE)	3	Nil
BF3214	Commodities Trading	2M-BUS-ITP (BDE)	2	Nil
BF2302	International Tax & Trading Law	2M-BUS-ITP (BDE)	2	Nil
BF3226	Strategic Management in Commodity Markets	2M-BUS-ITP (BDE)	2	Nil
BF3212	Trade, Structured & Supply Chain Finance	2M-BUS-ITP (BDE)	2	BF2226
BF3213	Enterprise Risk Management in Commodity Markets	2M-BUS-ITP (BDE)	2	Nil
TOTAL			16	