

**AY2025-2026**  
**CURRICULUM FOR COMPUTER SCIENCE AND ECONOMICS**  
**DOUBLE DEGREE PROGRAMME**

PI option : 20-WEEK Professional Internship

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	Core		MPE		ICC			BDE	Total AU
	CSC	ECON	CSC	ECON	C-Core	Professional Series	Care, Serve & Learn		
1	16	9	0	0	8	3	0	0	36
2	18	6	0	3	6	0	3	0	36
3	12	9	12	6	0	2	0	0	42
4	0	0	9	6	0	10	0	0	25
5	9	0	6	18	0	1	0	3	36
<b>Total</b>	<b>55</b>	<b>24</b>	<b>27</b>	<b>33</b>	<b>14</b>	<b>16</b>	<b>3</b>	<b>3</b>	<b>175</b>

**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
SC1005	Digital Logic	Core	3	Nil
HE1001	Microeconomics I	Core-Econ	3	Nil
HE1002	Macroeconomics I	Core-Econ	3	Nil
CC0003	Ethics & Civics in a Multicultural World	C-Core	2	Nil
CC0015	Health & Wellbeing	C-Core	2	Nil
			16	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)
SC1007	Data Structures & Algorithms	Core	3	SC1003
SC1008	C and C++ Programming	Core	3	SC1003
MH1812	Discrete Mathematics	Core	3	Nil
HE2001	Microeconomics II	Core-Econ	3	HE1001
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
			20	

Year 1 Total AU

**36**

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)
SC2000	Probability & Statistics for Computing	Core	3	Nil
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007
HE3001	Microeconomics III	Core-Econ	3	HE2001
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
CSL	CSL (service learning course)- Part 1	CSL	-	(Continue in Semester 2)
			15	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812
SC2005	Operating Systems	Core	3	SC1006 & SC1007
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)
HE2002	Macroeconomics II	Core-Econ	3	HE1002
MH1820	Introduction to Statistical Theory and Methods	MPE-C	3	Nil
CC0007	Science & Technology for Humanity	C-Core	3	Nil
CSL	CSL (service learning course)- Part 2	CSL	3	(Continue from Semester 1)
			21	

Year 2 Total AU

**36**

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC2203	Automata, Computability and Complexity	Core	3	SC2001 (co-requisite)
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)
SC2008	Computer Network	Core	3	SC2000 & SC1004
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
HE2003	Econometrics I	Core-Econ	3	MH1820
HE3002	Macroeconomics III	Core-Econ	3	HE2002
			<b>21</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC2079	Multidisciplinary Design Project	Core	4	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
HE3003	Econometrics II	Core-Econ	3	HE2003
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HW0288	Engineering Communication	Professional Series	2	CC0001 & Year 3 standing
			<b>21</b>	

**Year 3 Total AU**

**42**

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
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
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
			<b>15</b>	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC3920	Professional Internship (Graded)	Professional Series	10	Year 3 Standing
			<b>10</b>	

**Year 4 Total AU**

**25**

YEAR 5 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 1)	Core	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
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
ML0015	Profession Preparation	Professional Series	1	Nil
			<b>17</b>	

YEAR 5 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 2)	Core	4	Year 4 Standing
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
			<b>19</b>	

**Year 5 Total AU**

**36**

**AY2025-2026 AND LATER COHORTS**  
**CURRICULUM FOR COMPUTER SCIENCE AND ECONOMICS**  
**DOUBLE DEGREE PROGRAMME**

**PA option : 10-WEEK Professional Attachment**

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	Core		MPE		ICC			BDE	Total AU
	CSC	ECON	CSC	ECON	C-Core	Professional Series	Care, Serve & Learn		
1	16	9	0	0	8	3	0	0	36
2	18	6	0	3	6	0	3	0	36
3	13	9	12	0	0	7	0	0	41
4	0	0	15	12	0	1	0	3	31
5	8	0	0	18	0	0	0	5	31
<b>Total</b>	<b>55</b>	<b>24</b>	<b>27</b>	<b>33</b>	<b>14</b>	<b>11</b>	<b>3</b>	<b>8</b>	<b>175</b>

**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
SC1005	Digital Logic	Core	3	Nil
HE1001	Microeconomics I	Core-Econ	3	Nil
HE1002	Macroeconomics I	Core-Econ	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>16</b>	

**YEAR 1 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)
SC1007	Data Structures & Algorithms	Core	3	SC1003
SC1008	C and C++ Programming	Core	3	SC1003
MH1812	Discrete Mathematics	Core	3	Nil
HE2001	Microeconomics II	Core-Econ	3	HE1001
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>20</b>	

**Year 1 Total AU**

**36**

**YEAR 2 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-requisite
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)
SC2000	Probability & Statistics for Computing	Core	3	Nil
SC2002	Object Oriented Design & Programming	Core	3	SC1003 OR SC1007
HE3001	Microeconomics III	Core-Econ	3	HE2001
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
CSL	CSL(service learning course)- Part 1	CSL	-	(Continue in Semester 2)
			<b>15</b>	

**YEAR 2 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite
SC2001	Algorithm Design & Analysis	Core	3	SC1007 & MH1812
SC2005	Operating Systems	Core	3	SC1006 & SC1007
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)
HE2002	Macroeconomics II	Core-Econ	3	HE1002
MH1820	Introduction to Statistical Theory and Methods	MPE-C	3	Nil
CC0007	Science & Technology for Humanity	C-Core	3	Nil
CSL	CSL (service learning course)- Part 2	CSL	3	(Continue from Semester 1)
			<b>18</b>	

**Year 2 Total AU**

**33**

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)
SC2008	Computer Network	Core	3	SC2000 & SC1004
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
HE2003	Econometrics I	Core-Econ	3	MH1820
HE3002	Macroeconomics III	Core-Econ	3	HE2002
			<b>18</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC2203	Automata, Computability and Complexity	Core	3	SC2001 (co-requisite)
SC2079	Multidisciplinary Design Project	Core	4	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
HE3003	Econometrics II	Core-Econ	3	HE2003
HW0288	Engineering Communication	Professional Series	2	CC0001 & Year 3 standing
			<b>18</b>	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-requisite
SC3026	Professional Attachment	Professional Series	5	Year 3 Standing
			<b>5</b>	

Year 3 Total AU

**41**

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
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
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
ML0015	Profession Preparation	Professional Series	1	Nil
			<b>16</b>	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
			<b>15</b>	

Year 4 Total AU

**31**

YEAR 5 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 1)	Core	4	Year 4 Standing
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-
			<b>14</b>	

YEAR 5 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 2)	Core	4	Year 4 Standing
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-
	Broadening and Deepening Elective	BDE	3	Refer to Class Schedule
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule
			<b>17</b>	

Year 5 Total AU

**31**

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>	

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

MPE Structure of Economics (U21 and after)			
Course Code	Type	AU	Remarks
MH1820	MPE-C	3	Compulsory MPE
Level 3xxx (6 courses)	MEP-Econ 3	18	Choose with in HE3xxx
Level 4xxx (3 courses)	MEP-Econ 4	12	Choose with in HE4xxx
	<b>Total</b>	<b>33</b>	

ECONOMICS Course Lising				
Course Code	Course Title	Type	AU	Pre-requisite
HE1001	Microeconomics I	Core-Econ	3	Nil
HE1002	Macroeconomics I	Core-Econ	3	Nil
HE2001	Microeconomics II	Core-Econ	3	HE1001
HE2002	Macroeconomics II	Core-Econ	3	HE1002
HE2003	Econometrics I	Core-Econ	3	MH1820
HE3001	Microeconomics III	Core-Econ	3	HE2001
HE3002	Macroeconomics III	Core-Econ	3	HE2002
HE3003	Econometrics II	Core-Econ	3	HE2003
MH1820	Introduction to Statistical Theory and Methods	MPE-C	3	Nil
HE3xxx	Econs Prescribe Elective (Choose with in HE3xxx)	MEP-Econ 3	3	-
HE4xxx	Econs Prescribe Elective (Choose with in HE4xxx)	MEP-Econ 4	4	-