

**AY2022 AND LATER COHORTS CURRICULUM FOR
COMPUTER SCIENCE & 2ND MAJOR IN SUSTAINABILITY (PI)**

Option 1 : 20-week Professional Internship (PI)

SUMMARY OF ACADEMIC UNIT REQUIREMENT					
Year of Study	Major		Interdisciplinary Collaborative Core		Total AU
	Core	PE	Common Core	Foundational Core (F-Core)	
1	19	0	9	3	37
2	24	0	8	0	38
3	7	6	0	12	29
4	8	18	0	0	38
Total	58	24	17	15	142

Suggested Course Schedule

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC1003	Introduction to Computational Thinking & Programming	C	3	Nil
SC1013	Physics for Computing	C	2	Nil
MH1810	Mathematics I	C	3	Nil
MH1812	Discrete Mathematics	C	3	Nil
CC0003	Ethics & Civics in a Multi-Cultural World	C-Core	2	Nil
CC0005	Healthy Living & Mental Wellbeing	C-Core	3	Nil
HW0001	Introduction to Academic Communication	-	0	For student who failed QET
	Sustainability - Core	BDE	3	Refer to syllabus
			19	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC1005	Digital Logic	C	3	Nil
SC1007	Data Structures & Algorithms	C	3	SC1003
SC1015	Introduction to Data Science and Artificial Intelligence	F-Core	3	SC1003
EG1001	Engineers in Society / Sustainability - Core	C	2	Double-counted as SN Practice Core
CC0001	Inquiry and Communication in an Interdisciplinary World	C-Core	2	Nil
CC0002	Navigating the Digital World	C-Core	2	Nil
	Sustainability - Core	BDE	3	Refer to syllabus
			18	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC1004	Linear Algebra for Computing	C	3	MH1810, SC1003
SC1006	Computer Organisation & Architecture	C	3	SC1005
SC2001	Algorithm Design and Analysis	C	3	SC1007, MH1812
SC2002	Object Oriented Design and Programming	C	3	SC1003
CC0007	Science & Technology for Humanity	C-Core	3	Nil
	Sustainability - Core	BDE	3	Refer to syllabus
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YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC2000	Probability and Statistics for Computing	C	3	MH1810
SC2005	Operating Systems	C	3	SC1006, SC1007
SC2006	Software Engineering	C	3	SC2002
SC2207	Introduction to Database	C	3	SC2001
CC0006	Sustainability: Human Society Economic & Environment	C-Core	3	Nil
ML0004	Career & Entrepreneurial Development for the Future World	C-Core	2	Nil
	Sustainability - Core	BDE	3	Refer to syllabus
			20	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC2008	Computer Networks	C	3	SC1004, SC2000
SC2079	Multidisciplinary Design Project	C	4	Year 3 standing
SC3000	Third Year Prescribed Electives - Artificial Intelligence	MPE-1	3	SC1007, SC1015, SC2000
SC3010	Third Year Prescribed Electives - Computer Security	MPE-1	3	SC2005
HW0288	Effective Communication 2	F-Core	2	CC0001
	Sustainability - Elective	BDE	4	Refer to syllabus
			19	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC3079	Professional Internship	F-Core	10	Year 3 Standing
			10	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC4079	Final Year Project	C	4	Year 4 standing
SC30xx	Third Year Major Prescribed Elective	MPE-1	3	Year 3 standing
SC30xx	Third Year Major Prescribed Elective	MPE-1	3	Year 3 standing
SC4xxx	Final Year Major Prescribed Elective	MPE-2	3	Year 3 standing
	Sustainability - Elective	BDE	3	Refer to syllabus
	Sustainability - Elective	BDE	3	Refer to syllabus
			19	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC4079	Final Year Project	C	4	*Continue from previous
SC4xxx	Final Year Major Prescribed Elective	MPE-2	3	Year 3 standing
SC4xxx	Final Year Major Prescribed Elective	MPE-2	3	Year 3 standing
SC4xxx	Final Year Major Prescribed Elective	MPE-2	3	Year 3 standing
	Sustainability - Elective	BDE	3	Refer to syllabus
	Sustainability - Interdisciplinary Project	BDE	3	Refer to syllabus
			19	

Total AU for Graduation : **142**

AY2022 AND LATER COHORTS CURRICULUM FOR COMPUTER SCIENCE & 2ND MAJOR IN SUSTAINABILITY (PA)

Option 2 : 10-week Professional Internship (PA)

SUMMARY OF ACADEMIC UNIT REQUIREMENT						
Year of Study	Major		Interdisciplinary Collaborative Core		BDE	Total AU
	Core	PE	Common Core (C-Core)	Foundational Core (F-Core)		
1	19	0	9	3	6	37
2	24	0	8	0	3	35
3	7	15	0	7	12	38
4	8	9	0	0	12	32
Total	58	24	17	10	33	142

Suggested Course Schedule

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite /
SC1003	Introduction to Computational Thinking & Programming	C	3	Nil
SC1013	Physics for Computing	C	2	Nil
MH1810	Mathematics I	C	3	Nil
MH1812	Discrete Mathematics	C	3	Nil
CC0003	Ethics & Civics in a Multi-Cultural World	C-Core	2	Nil
CC0005	Healthy Living & Mental Wellbeing	C-Core	3	Nil
HW0001	Introduction to Academic Communication	-	0	For student who failed QET
	Sustainability - Core	BDE	3	Refer to syllabus
			19	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite /
SC1005	Digital Logic	C	3	Nil
SC1007	Data Structures & Algorithms	C	3	SC1003
SC1015	Introduction to Data Science and Artificial Intelligence	F-Core	3	SC1003
EG1001	Engineers in Society / Sustainability - Core	C	2	Double-counted as SN Practice
CC0001	Inquiry and Communication in an Interdisciplinary World	C-Core	2	Nil
CC0002	Navigating the Digital World	C-Core	2	Nil
	Sustainability - Core	BDE	3	Refer to syllabus
			18	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite /
SC1004	Linear Algebra for Computing	C	3	MH1810, SC1003
SC1006	Computer Organisation & Architecture	C	3	SC1005
SC2001	Algorithm Design and Analysis	C	3	SC1007, MH1812
SC2002	Object Oriented Design and Programming	C	3	SC1003
CC0007	Science & Technology for Humanity	C-Core	3	Nil
	Sustainability - Core	BDE	3	Refer to syllabus
			18	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite /
SC2000	Probability and Statistics for Computing	C	3	MH1810
SC2005	Operating Systems	C	3	SC1006, SC1007
SC2006	Software Engineering	C	3	SC2002
SC2207	Introduction to Database	C	3	SC2001
CC0006	Sustainability: Human Society Economic & Environment	C-Core	3	Nil
ML0004	Career & Entrepreneurial Development for the Future World	C-Core	2	Nil
			17	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC2008	Computer Networks	C	3	SC1004, SC2000
SC3000	Third Year Prescribed Electives - Artificial Intelligence	MPE-1	3	SC1007, SC1015, SC2000
SC3010	Third Year Prescribed Electives - Computer Security	MPE-1	3	SC2005
HW0288	Effective Communication 2	F-Core	2	CC0001
	Sustainability - Core	BDE	3	Refer to syllabus
	Sustainability - Elective	BDE	3	Refer to syllabus
			17	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC2079	Multidisciplinary Design Project	C	4	Year 3 standing
SC30xx	Third Year Major Prescribed Elective	MPE-1	3	Year 3 standing
SC30xx	Third Year Major Prescribed Elective	MPE-1	3	Year 3 standing
SC4xxx	Final Year Major Prescribed Elective	MPE-2	3	Year 3 standing
	Sustainability - Elective	BDE	3	Refer to syllabus
			16	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC3078	Professional Attachment	F-Core	5	Year 3 Standing
			5	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC4079	Final Year Project	C	4	Year 4 standing
SC4xxx	Final Year Major Major Prescribed Elective	MPE-2	3	Year 3 standing
SC4xxx	Final Year Major Major Prescribed Elective	MPE-2	3	Year 3 standing
	Broadening and Deepening Elective	BDE	2	Nil
	Sustainability - Elective	BDE	4	Refer to syllabus
			16	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite / Remarks
SC4079	Final Year Project	C	4	*Continue from previous
SC4xxx	Final Year Major Prescribed Elective	MPE-2	3	Year 3 standing
	Broadening and Deepening Elective	BDE	3	Nil
	Sustainability - Elective	BDE	3	Refer to syllabus
	Sustainability - Interdisciplinary Project	BDE	3	Refer to syllabus
			16	

Total AU for Graduation : 142