

**AY2025 2026 AND LATER COHORTS**  
**Curriculum for Bachelor of Computing (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		ITP	ICC			BDE	Total AU
	Core	MPE		Common - Core	Professional Series	Care, Serve & Learn		
1	19	0	6	8	3	0	0	36
2	21	0	11	6	0	3	0	41
3	7	6	6	0	12	0	0	31
4	0	29	8	0	1	0	0	38
<b>Total</b>	<b>47</b>	<b>35</b>	<b>31</b>	<b>14</b>	<b>16</b>	<b>3</b>	<b>0</b>	<b>146</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
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)
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
AB1201	Financial Management	ITP	3	Nil
			<b>17</b>	

**YEAR 1 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite
SC1005	Digital Logic	Core	3	Nil
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)
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	ITP	3	Nil
			<b>19</b>	

**Year 1 Total AU**

**36**

**YEAR 2 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-requisite
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
AD1102	Financial Accounting	ITP	3	Nil
BF2227	Commodity Markets	ITP	3	Nil
CSL	CSL (service learning course)- Part 1	CSL	-	(Continue in Semester 2)
			<b>21</b>	

**YEAR 2 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)
SC2008	Computer Network	Core	3	SC2000 & SC1004
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
BE1402	Business Operations & Process	ITP	3	Nil
BF3214	Commodities Trading	ITP	2	Nil
CSL	CSL (service learning course)- Part 2	CSL	3	(Continue from Semester 1)
			<b>20</b>	

**Year 2 Total AU**

**41**

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC2203	Automata, Computability and Complexity	Core	3	SC2001 (co-requisite)
SC3099	Capstone	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
AD2102	Management Accounting	ITP	3	AD1102
BF2226	Trade Incoterms & Ship Chartering	ITP	3	Nil
			<b>21</b>	

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

**Year 3 Total AU**

**31**

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
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
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
BF2302	International Tax & Trading Law	ITP	2	Nil
BF3226	Strategic Management in Commodity Markets	ITP	2	Nil
ML0015	Profession Preparation	Professional Series	1	Nil
			<b>21</b>	

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
SC4xxx	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
BF3212	Trade, Structured & Supply Chain Finance	ITP	2	BF2226
BF3213	Enterprise Risk Management in Commodity Markets	ITP	2	Nil
			<b>17</b>	

**Year 4 Total AU**

**38**

**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)
	<b>Total</b>	<b>27</b>	
Please refer to the CSC MPE Courses and Specialization on CCDS website.			

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**International Trading Programme (ITP) track**

PA option : 10-WEEK Professional Attachment

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	Major		ITP	ICC			BDE	Total AU
	Core	MPE		Common - Core	Professional Series	Care, Serve & Learn		
1	19	0	6	8	3	0	0	36
2	21	0	11	6	0	3	0	41
3	7	18	6	0	7	0	3	41
4	0	17	8	0	1	0	2	28
<b>Total</b>	<b>47</b>	<b>35</b>	<b>31</b>	<b>14</b>	<b>11</b>	<b>3</b>	<b>5</b>	<b>146</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
SC1004	Linear Algebra for Computing	Core	4	SC1003 (co-requisite)
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
AB1201	Financial Management	ITP	3	Nil
			<b>17</b>	

**YEAR 1 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite
SC1005	Digital Logic	Core	3	Nil
SC1006	Computer Organisation & Architecture	Core	3	SC1005 (co-requisite)
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
AB1501	Marketing	ITP	3	Nil
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	C-Core	2	Nil
			<b>19</b>	

Year 1 Total AU

**36**

**YEAR 2 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-requisite
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
AD1102	Financial Accounting	ITP	3	Nil
BF2227	Commodity Markets	ITP	3	Nil
CSL	CSL (service learning course)- Part 1	CSL	-	(Continue in Semester 2)
			<b>21</b>	

**YEAR 2 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-requisite
SC2006	Software Engineering	Core	3	SC2002 (co-requisite)
SC2008	Computer Network	Core	3	SC2000 & SC1004
SC2207	Introduction to Databases	Core	3	SC2001 (co-requisite)
CC0006	Sustainability: Society, Economy & Environment	C-Core	3	Nil
BE1402	Business Operations & Process	ITP	3	Nil
BF3214	Commodities Trading	ITP	2	Nil
CSL	CSL (service learning course)- Part 2	CSL	3	(Continue from Semester 1)
			<b>20</b>	

Year 2 Total AU

**41**

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC2203	Automata. Computability and Complexity	Core	3	SC2001 (co-requisite)
SC3099	Capstone	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
AD2102	Management Accounting	ITP	3	AD1102
BF2226	Trade Incoterms & Ship Chartering	ITP	3	Nil
			<b>21</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-requisite
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
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
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule
			<b>14</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 40

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-requisite
SC4079	Final Year Project (Part 1)	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
BF2302	International Tax & Trading Law	ITP	2	Nil
BF3226	Strategic Management in Commodity Markets	ITP	2	Nil
ML0015	Profession Preparation	Professional Series	1	Nil
			<b>15</b>	

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
BF3212	Trade, Structured & Supply Chain Finance	ITP	2	BF2226
BF3213	Enterprise Risk Management in Commodity Markets	ITP	2	Nil
	Broadening and Deepening Elective	BDE	2	Refer to Class Schedule
			<b>13</b>	

Year 4 Total AU 28

**Note:**

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SC3000	MPE-1	3	MPE (Complusory)
SC3010	MPE-2	3	MPE (Complusory)
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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 to the CSC MPE Courses and Specialization on CCDS website.			

Business Course Listing				
Course Code	Course Title	Type	AU	Pre-requisite
AB1201	Financial Management	Business	3	Nil
AB1501	Marketing	Business	3	Nil
AD1102	Financial Accounting	Business	3	Nil
AB1601	Organisational Behaviour and Design	Business	3	Nil
AD2102	Management Accounting	Business	3	AD1102
AB1301	Business Law	Business	3	Nil
BF2219	Investments	Business	3	AB1201
BE2602	Management Principles, Skills & Competencies	Business	3	AB1601
BM2509	Consumer Insights	Business	3	AB1501
BE1402	Business Operations & Process	Business	3	Nil
Business Course Listing (ITP)				
Course Code	Course Title	Type	AU	Pre-requisite
BF2226	Trade Incoterms & Ship Chartering	ITP	3	Nil
BF2227	Commodity Markets	ITP	3	Nil
BF3214	Commodities Trading	ITP	2	Nil
BF2302	International Tax & Trading Law	ITP	2	Nil
BF3226	Strategic Management in Commodity Markets	ITP	2	Nil
BF3212	Trade, Structured & Supply Chain Finance	ITP	2	BF2226
BF3213	Enterprise Risk Management in Commodity Markets	ITP	2	Nil
Please refer to the Second Major in Business website for Course Listing: <a href="https://www.ntu.edu.sg/engineering/admissions/ug/allprogrammes/highlights/business">https://www.ntu.edu.sg/engineering/admissions/ug/allprogrammes/highlights/business</a>				