BSc in Chemistry and Biological Chemistry with 2nd Major in Sustainability (CHSN)

AY2023 - 2024 Intake onwards

with Professional Internship

			Number of Academic Units (AU)									
Programme	Year of Study	Major Requirement		Interdisciplinary Collaborative Core		Broadening and Deepening	Total					
	,	Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)	Electives (BDE)						
Chemistry and	1	17/18*		11		9	37/38*					
Biological	2	21		6	3	6	36					
Chemistry with	3	18			2	18	38					
2nd Major in	4		12		10	6	28					
Sustainability	Total	56/57*	12	17	15	39	139/140*					

BSc in Chemistry and Biological Chemistry with 2nd Major in Sustainability (CHSN)

Category		AU	Total AU
	Common Core (University-level)		
		2	
	CC0001 Inquiry and Communication in the Interdisciplinary		
	CC0002 Navigating the Digital World	2	
	CC0003 Ethics & Civics in a Multi-Cultural World	2	
	CC0005 Healthy Living & Wellbeing	3	17
Interdisciplinary	CC0006 Sustainability: Society, Economy & Environment	3	
	CC0007 Science & Technology for Humanity	3	
(ICC)	ML0004 Career and Entrepreneurial Development for the Fu	uture 2	
	World		
	Foundational Core (College-level)		
	HW0218 Communication Across the Sciences	2	
	PS0002 Introduction to Data Science and Artificial Intelligence		15
	CM4081 Professional Internship	10	
	- CHITOOT FTOTCSSTORIGE INTERNISHIP	1 10	
	CHEM Core		
	CM1001 Foundations of Chemistry I	4	
	CM1002 Foundations of Chemistry II	4	
	MH1802 Calculus for the Sciences	4	
	CM1804 Mathematics for Chemistry	2	
	PH1011 Physics or PH1012* Physics A	3/4*	
	CM2021 Inorganic and Bioinorganic Chemistry	3	
	CM2011 Analytical Chemistry	3	
	CM2061 Chemistry & Biological Chemistry Laboratory 1	3	
	PS0001 Introduction to Computational Thinking	3	56/57*
Major	CM2031 Organic and Bioorganic Chemistry	3	56/57*
Requirement	CM2041 Physical and Biophysical Chemistry 1	3	
	CM2062 Chemistry & Biological Chemistry Laboratory 2	3	
	CM3011 ^{&} Chemical Spectroscopy and Applications	3	
	CM3041 ^{&} Physical and Biophysical Chemistry 2	3	
	CM3062 Chemistry & Biological Chemistry Laboratory 4	3	
	CM3031 ^{&} Organic Reaction Mechanisms and Synthesis	3	
	CM3021 ^{&} Organometallic Chemistry	3	
	CM3061 Chemistry & Biological Chemistry Laboratory 3	3	
	CHEM Major Prescribed Electives (MPE)		
	4 x MPEs	12	12

otal			139/140
DE	Any 3 BDE	9	9
	Students are responsible to plan for their 2nd major courses		
	sustainability#Content_C002_Col00)		
	programmes/second-major-in-		
	https://www.ntu.edu.sg/ase/admissions/undergraduate-	12 - 13	
	Choose 3- 4 courses from the list of electives (min. 12 AUs)		
	Sustainability Electives		
	Interdisciplinary Project	3	
	(3AU)		
	HA1003 Introduction to Public Administration and Public Policy		
	(3AU)		
	HA1001 Introduction to International Relations and Foreign Policy		
	5) Policy HU1002 Introduction to Urban Planning (3AU)		
	E) Poliny		
	BM2517 Marketing Sustainability for the Next Generation (3AU)		
<u>Sustainability</u>	EG1001 Engineers in Society (2AU)		30
2nd Major in	EM5104 Air Quality Management (3AU)		20
	EM5103 Water Resources Management (3AU)		
	4) Practice		
	(55)	14 - 15	
	HE5091 Principles of Economics (3AU)	44 45	
	3) Profit AB0603 Social Entrepreneurship (3AU)		
	ES5007 Climate and Climate Change (3AU)		
	ES5005 Environmental Earth System Science (3AU)		
	2) Planet ES5001 Natural Hazards and Society (3AU)		
	HV5001 Introduction to Environmental Humanities (3AU)		
	ES5006 Environmental Sustainability (3AU)		
	1) PEOPLE EM5109 Environmental Issue & Sustainability (3AU)		
	Choose 1 Course from EACH of the 5 Knowledge Area		
	Sustainability Compulsory Courses		

^{*}Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

 $^{^{\&}amp;}$ CM3011, CM3021. CM3031, CM3041 are offered in both semesters.

BSc in Cher	mistry and Biological Chemistry with 2nd	Major in	Sustainabili	ty (CHSN)			
	Study Plan for AY2023-2024 intake			,,,,,			
	ssional Internship						
	5.6.1.d						
Year 1 Sem	ester 1			Year 1 Sem	nester 2		
Course		Туре	AU	Course		Type	AU
CM1001	Foundations of Chemistry I	C	4	CM1002	Foundations of Chemistry II	C	4
MH1802	Calculus for the Sciences	C	4	CM1804	Mathematics for Chemistry	C	2
	Inquiry and Communication in the				·		
CC0001	Interdisciplinary World	CC	2	PH1011/	Physics <u>or</u>	С	3
			•	5114040*	Physics A (For students without 'A'		
CC0002	Navigating the Digital World	CC	2	PH1012*	Level Physics)	С	4
CC0005	Healthy Living & Well-being	CC	3	CC0003	Ethics & Civics in a Multi-Cultural		2
				CC0003	World	CC	2
	BDE 1	BDE	3	ML0004	Career and Entrepreneurial	CC	2
HW0001	Introduction to Academic Communicat	ion #			SN Compulsory 1	BDE	3
	meroduction to reductine communicati	011			BDE 2	BDE	3
			18				19/20*
# for studen	nts who have not cleared QET						•
jo. stauc.	is the have her dicarea Q2.						
Year 2 Sem	ester 1			Year 2 Sem	nester 2		
Course		Туре	AU	Course		Type	AU
	Analytical and Bioanalytical						
CM2011	Chemistry	С	3	CM2031	Organic and Bioorganic Chemistry	С	3
CN 42024	In a companie and Dining area in Chambinton	6	2	CN42044	Dharian and Diaghanian Chamistan 1	•	2
CM2021	Inorganic and Bioinorganic Chemistry	С	3	CM2041	Physical and Biophysical Chemistry 1	С	3
CM2061	Chemistry & Biological Chemistry	С	3	CM2062	Chemistry & Biological Chemistry	С	3
CIVIZU61	Laboratory 1	C	3	CIVIZU6Z	Laboratory 2	C	3
PS0001	Introduction to Computational	С	3	PS0002	Introduction to Data Science and	FC	3
	Thinking				Artificial Intelligence		
CC0006	Sustainability: Society, Economy &	CC	3	CC0007	Science & Technology for Humanity	CC	3
	Environment						
•	SN Compulsory 2	BDE	3		SN Compulsory 3	BDE	3
			18				18
Year 3 Sem	ester 1	_		Year 3 Sem	nester 2	_	
Course		Туре	AU	Course		Туре	AU
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
CM3062	Chemistry & Biological Chemistry	С	3	CM3061	Chemistry & Biological Chemistry	C	3
	Laboratory 4				Laboratory 3		
	SN Elective 1	BDE	3		SN Compulsory 4	BDE	3
	SN Elective 2	BDE	3		SN Compulsory 5	BDE	3
	BDE 3	BDE	3		SN Elective 3	BDE	3
				HW0218	Communication Across the Sciences	FC	2
			18				20
Year 4 Sem	ester 1	_		Year 4 Sem	nester 2	_	
Course	2.6.1.1.1.	Туре	AU	Course	0.1514.14054	Туре	AU
CM4081	Professional Internship	FC	10		CHEM MPE1	MPE	3
					CHEM MPE2	MPE	3
					CHEM MPE3	MPE	3
					CHEM MPE4 SN Elective 4	MPE BDE	3 3
						BDE	3
					Interdisplinary Project	DUE	э
			10	-			10
			10		Total (AU)		18 139/140*

This study plan is meant as a guide.

*Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

& CM3xxx refers to CM3011, CM3021, CM3031, CM3041 - These courses are offered in both semesters

BSc in Chemistry and Biological Chemistry with 2nd Major in Sustainability (CHSN)

AY2023 - 2024 Intake onwards

FYP with Professional Attachment

		Number of Academic Units (AU)									
Programme	Year of Study	Major Requirement		Interdisciplinary Collaborative Core		Broadening	Tatal				
		Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)	and Deepening Electives (BDE)	Total				
Chemistry and	1	17/18*		11		5	33/34*				
Biological	2	21		6	3	6	36				
Chemistry with	3	18			7	14	39				
2nd Major in	4		22			9	31				
Sustainability	Total	56/57*	22	17	10	34	139/140*				

2nd Major in	4		22			9	31			
Sustainability	Total	56/57*	10	34	139/140*					
BSc in Chemistry	and Biologi	cal Chemistry	with 2nd Majo	or in Sustainab	ility (CHSN)					
Category	ı					AU	Total AU			
	Common C	ore (Universit								
			2							
		uiry and Comr		the Interdiscip	linary World					
		vigating the Di	-			2				
		nics & Civics in		al World		2	47			
		althy Living & '	_	0.5.		3	17			
Interdisciplinary		stainability: So	•	-	ent	3				
Collaborative Core					Ale a Francisco	3				
(ICC)		reer and Entre	preneuriai De	velopment for	the Future	2				
	World									
	Foundation	nal Core (Colle	ge-level)							
		ommunication	-	ences		2				
		roduction to D			alligence	3	10			
		ofessional Atta		a Artificial filt	ingenee	5	10			
	CIVI 1002 1 1	010331011017100	aciiii ciic				l			
	CHEM Core	<u> </u>								
	CM1001	Foundations of	of Chemistry I			4				
	CM1002	Foundations of	of Chemistry II			4				
	MH1802	Calculus for th	ne Sciences			4				
	CM1804	Mathematics	for Chemistry			2				
	PH1011	Physics or PH	L012* Physics	Α		3/4*				
	CM2021	Inorganic and	Bioinorganic (Chemistry		3				
	CM2011	Analytical Che	emistry			3				
	CM2061	Chemistry & E	Biological Cher	nistry Laborato	ory 1	3				
	PS0001	Introduction t	o Computatio	nal Thinking		3	56/57*			
Major	CM2031	Organic and B	ioorganic Che	mistry		3	30/37			
Requirement	CM2041	Physical and E	Biophysical Che	emistry 1		3				
Requirement	CM2062	Chemistry & E	Biological Cher	nistry Laborato	ory 2	3				
	CM3011 ^{&}	Chemical Spec	ctroscopy and	Applications		3				
	CM3041 ^{&}	Physical and E	Biophysical Che	emistry 2		3				
	CM3062	Chemistry & E	Biological Cher	nistry Laborato	ory 4	3				
	CM3031 ^{&}	Organic React	ion Mechanisr	ms and Synthe	sis	3				
	CM3021 ^{&}	Organometall	ic Chemistry			3				
	CM3061	Chemistry & E	Biological Cher	nistry Laborato	ory 3	3				
		or Prescribed I		E)						
	CM4080	Honours Proje	ect 1			10	22			
	4 x MPEs					12				

otal			139/140
DE	Any 2 BDE	4	4
	Students are responsible to plan for their 2nd major courses		
	programmes/second-major-in-sustainability#Content_C002_Col00)		
	https://www.ntu.edu.sg/ase/admissions/undergraduate-		
	Choose 3- 4 courses from the list of electives (min. 12 AUs)	12 - 13	
	Sustainability Electives		
	Interdisciplinary Project	3	
		_	
	(3AU)		
	(3AU) HA1003 Introduction to Public Administration and Public Policy		
	HA1001 Introduction to International Relations and Foreign Policy		
	HU1002 Introduction to Urban Planning (3AU)		
	5) Policy		
	BM2517 Marketing Sustainability for the Next Generation (3AU)		
	EG1001 Engineers in Society (2AU)		
Sustainability	EM5104 Air Quality Management (3AU)		30
2nd Major in	EM5103 Water Resources Management (3AU)		
	4) Practice		
		14 - 15	
	HE5091 Principles of Economics (3AU)	1/1 15	
	AB0603 Social Entrepreneurship (3AU)		
	3) Profit		
	ES5007 Climate and Climate Change (3AU)		
	ES5005 Environmental Earth System Science (3AU)		
	ES5001 Natural Hazards and Society (3AU)		
	2) Planet		
	HV5001 Introduction to Environmental Humanities (3AU)		
	EM5109 Environmental Issue & Sustainability (3AU) ES5006 Environmental Sustainability (3AU)		
	1) PEOPLE EME 100 Environmental Issue 8 Sustainability (2.411)		
	Choose 1 Course from EACH of the 5 Knowledge Area		
	Sustainability Compulsory Courses		

^{*}Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

[&]amp; CM3011, CM3021. CM3031, CM3041 are offered in both semesters.

	mistry and Biological Chemistry with 2nd	Major in	Sustainabili	ty (CHSN)			
	Study Plan for AY2023-2024 intake						
FYP with Pr	rofessional Attachment Option						
Year 1 Sem	ester 1			Year 1 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM1001	Foundations of Chemistry I	С	4	CM1002	Foundations of Chemistry II	С	4
MH1802	Calculus for the Sciences Inquiry and Communication in the	С	4	CM1804	Mathematics for Chemistry	С	2
CC0001	Interdisciplinary World	CC	2	PH1011/	Physics <u>or</u>	С	3
CC0002	Navigating the Digital World	CC	2	PH1012*	Physics A (For students without 'A' Level Physics)	С	4
CC0005	Healthy Living & Well-being	CC	3	CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
	BDE 1	BDE	2	ML0004	Career and Entrepreneurial Development for the Future World	СС	2
HW0001	Introduction to Academic Communicati	on #			SN Compulsory 1	BDE	3
			17				16/17*
# for studen	nts who have not cleared QET		,				-0,
Year 2 Sem	ester 1			Year 2 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM2011	Analytical and Bioanalytical Chemistry	С	3	CM2031	Organic and Bioorganic Chemistry	С	3
CM2021	Inorganic and Bioinorganic Chemistry	С	3	CM2041	Physical and Biophysical Chemistry 1	С	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	С	3	CM2062	Chemistry & Biological Chemistry Laboratory 2	С	3
PS0001	Introduction to Computational Thinking	С	3	PS0002	Introduction to Data Science and Artificial Intelligence	FC	3
CC0006	Sustainability: Society, Economy & Environment	CC	3	CC0007	Science & Technology for Humanity	CC	3
	SN Compulsory 2	BDE	3		SN Compulsory 3	BDE	3
			18				18
Year 3 Sem	ester 1			Year 3 Sem	nester 2		
Course		Туре	AU	Course		Type	AU
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
CM3xxx ^{&}	CHEM-Core Chemistry & Biological Chemistry	С	3	CM3xxx ^{&}	CHEM-Core Chemistry & Biological Chemistry	С	3
CM3062	Laboratory 4	С	3	CM3061	Laboratory 3	С	3
	SN Elective 1	BDE	3		SN Compulsory 4	BDE	3
	SN Elective 2	BDE	3		SN Compulsory 5	BDE	3
	BDE 2	BDE	2		SN Elective 3	BDE	3
				HW0218	Communication Across the Sciences	FC	2
				Year 3 Spe CM4082	<u>cial Sem</u> Professional Attachment	FC	5
			47				
			17				25
Year 4 Sem	ester 1	_		Year 4 Sem	nester 2	_	
Course	0.151.1.1.054	Туре	AU	Course		Type	AU
	CHEM MPE1	MPE	3	CM4080	Honours Project 1	MPE	10
	CHEM MPE2	MPE	3		Interdisplinary Project	BDE	3
	CHEM MPE3	MPE	3				
	CHEM MPE4	MPE	3				
	SN Elective 4	BDE	3				
			15				13
					Total (AU)		139/140
					i Jilai (AU)		133/140

This study plan is meant as a guide. *Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

 $^{^{\&}amp;}$ CM3xxx refers to CM3011, CM3021, CM3031, CM3041 - These courses are offered in both semesters

BSc in Chemistry and Biological Chemistry with 2nd Major in Sustainability (CHSN)

AY2023 - 2024 Intake onwards

with Professional Internship and FYP

		Number of Academic Units (AU)									
Programme	Year of Study	Major Requirement		Interdisciplinary Collaborative Core		Broadening and Deepening	Total				
	•	Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)	Electives (BDE)					
Chemistry and	1	17/18*		11		5	33/34*				
Biological	2	21		6	3	6	36				
Chemistry with	3	18			7	14	39				
2nd Major in	4		22			9	31				
Sustainability	Total	56/57*	22	17	10	34	139/140*				

RSc in Chemistry	and Biological Chemistry with 2nd Major in Sustainability (CHSN)		
Category	and biological chemistry with 2nd Major in Sustamability (Crisiv)	AU	Total AU
	Common Core (University-level)		
	CC0001 Inquiry and Communication in the Interdisciplinary World	2	
	CC0002 Navigating the Digital World	2	
	CC0003 Ethics & Civics in a Multi-Cultural World	2	
	CC0005 Healthy Living & Wellbeing	3	17
Lata de la Callaca	CC0006 Sustainability: Society, Economy & Environment	3	
Interdisciplinary	CC0007 Science & Technology for Humanity	3	
Collaborative Core (ICC)	ML0004 Career and Entrepreneurial Development for the Future		
(ICC)	World	2	
		•	
	Foundational Core (College-level)		
	HW0218 Communication Across the Sciences	2	
	PS0002 Introduction to Data Science and Artificial Intelligence	3	15
	CM4081 Professional Internship	10	
	CUSAA Coor	1	
	CHEM Core	4	
	CM1001 Foundations of Chemistry I CM1002 Foundations of Chemistry II	4	
	CM1002 Foundations of Chemistry II MH1802 Calculus for the Sciences	4	
		4 2	
	CM1804 Mathematics for Chemistry PH1011 Physics or PH1012* Physics A		
	· — ·	3/4*	
		3 3	
	CM2011 Analytical Chemistry CM2061 Chemistry & Biological Chemistry Laboratory 1	3	
	PS0001 Introduction to Computational Thinking	3	
Major	CM2031 Organic and Bioorganic Chemistry	3	56/57*
Requirement	CM2041 Physical and Biophysical Chemistry 1	3	
Requirement	CM2062 Chemistry & Biological Chemistry Laboratory 2	3	
	CM3011 ^{&} Chemical Spectroscopy and Applications	3	
	CM3041 ^{&} Physical and Biophysical Chemistry 2	3	
	CM3062 Chemistry & Biological Chemistry Laboratory 4	3	
	CM3031 ^{&} Organic Reaction Mechanisms and Synthesis	3	
	CM3021 ^{&} Organometallic Chemistry	3	
	CM3061 Chemistry & Biological Chemistry Laboratory 3	3	
	CHEM Major Prescribed Electives (MPE)	†	
	CM4080 Honours Project 1	10	
	4 x MPEs	12	22

	Sustainability Compulsory Courses		
	Choose 1 Course from EACH of the 5 Knowledge Area		
	1) PEOPLE		
	EM5109 Environmental Issue & Sustainability (3AU)		
	ES5006 Environmental Sustainability (3AU)		
	HV5001 Introduction to Environmental Humanities (3AU)		
	2) Planet		
	ES5001 Natural Hazards and Society (3AU)		
	ES5005 Environmental Earth System Science (3AU)		
	ES5007 Climate and Climate Change (3AU)		
	3) Profit		
	AB0603 Social Entrepreneurship (3AU)		
	HE5091 Principles of Economics (3AU)	14 - 15	
	4) Practice		
	EM5103 Water Resources Management (3AU)		
2nd Major in	EM5104 Air Quality Management (3AU)		
Sustainability	EG1001 Engineers in Society (2AU)		30
	BM2517 Marketing Sustainability for the Next Generation (3AU)		
	5) Policy		
	HU1002 Introduction to Urban Planning (3AU)		
	HA1001 Introduction to International Relations and Foreign Policy		
	(3AU)		
	HA1003 Introduction to Public Administration and Public Policy (3AU)		
	Interdisciplinary Project	3	
	Sustainability Electives		
	Choose 3- 4 courses from the list of electives (min. 12 AUs)	12 - 13	
	https://www.ntu.edu.sg/ase/admissions/undergraduate-		
	programmes/second-major-in-sustainability#Content_C002_Col00)		

^{*}Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

 $^{^{\&}amp;}$ CM3011, CM3021. CM3031, CM3041 are offered in both semesters.

Suggested S				ty (CHSN)			
	tudy Plan for AY2023-2024 intake						
with Projess	ional Internship and FYP						
Year 1 Seme	ester 1			Year 1 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM1001	Foundations of Chemistry I	С	4	CM1002	Foundations of Chemistry II	C	4
MH1802	Calculus for the Sciences	С	4	CM1804	Mathematics for Chemistry	С	2
CC0001	Inquiry and Communication in the Interdisciplinary World	CC	2	PH1011/	Physics <u>or</u>	С	3
CC0002	Navigating the Digital World	CC	2	PH1012*	Physics A (For students without 'A' Level Physics)	С	4
CC0005	Healthy Living & Well-being	СС	3	CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
				ML0004	Career and Entrepreneurial Development for the Future World	CC	2
HW0001	Introduction to Academic Communicati	on #			SN Compulsory 1	BDE	3
							/47¥
# for student	ts who have not cleared QET		15				16/17*
Year 2 Seme	ester 1			Year 2 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM2011	Analytical and Bioanalytical Chemistry	С	3	CM2031	Organic and Bioorganic Chemistry	С	3
CM2021	Inorganic and Bioinorganic Chemistry	С	3	CM2041	Physical and Biophysical Chemistry 1	С	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	С	3	CM2062	Chemistry & Biological Chemistry Laboratory 2	С	3
PS0001	Introduction to Computational Thinking	С	3	PS0002	Introduction to Data Science and Artificial Intelligence	FC	3
CC0006	Sustainability: Society, Economy & Environment	СС	3	CC0007	Science & Technology for Humanity	CC	3
	SN Compulsory 2	BDE	3		SN Compulsory 3	BDE	3
					SN Elective 1	BDE	3
			18				21
Year 3 Seme	octer 1			Year 3 Sem	nester 2		
Course	3161 1	Туре	AU	Course	iester 2	Туре	AU
CM3xxx ^{&}	CHEM-Core	C	3	CM3xxx ^{&}	CHEM-Core	C	3
CM3xxx ^{&}	CHEM-Core	С	3	CM3061	Chemistry & Biological Chemistry	С	3
CM3xxx ^{&}	CHEM-Core	С	3		Laboratory 3 SN Compulsory 4	BDE	3
CM3062	Chemistry & Biological Chemistry	С	3		SN Compulsory 5	BDE	3
CIVIDUUL	SN Elective 2	BDE			SN Compulsory 5 SN Elective 4	BDE	3
			3	1010240			
	SN Elective 3	BDE	3	HW0218	Communication Across the Sciences	FC	2
					CHEM MPE1	MPE	3
					5	MPE	3
			18	-			23
···· 4 Come				V 1 Com			
Year 4 Seme	ester 1	Timo	A11	Year 4 Sem	nester 2	Timo	A11
CM4091	De-fassional Internation	Type FC	10	Course	Unnaura Prainct 1	Type	AU 10
CM4081	Professional Internship	FC	10	CM4080	Honours Project 1 CHEM MPE3	MPE	10
					CHEM MPE3 CHEM MPE4	MPE MPE	3 3
					Interdisplinary Project	BDE	3
			10				19
					Total (AU)		139/140*
					rotal (rio)		155, 146

This study plan is meant as a guide.

^{*}Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

 $^{^{\&}amp;}$ CM3xxx refers to CM3011, CM3021, CM3031, CM3041 - These courses are offered in both semesters