

BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (CHITG)							
AY2023 - 2024 Intake onwards with Professional Internship							
Programme	Year of Study	Number of Academic Units (AU)					
		Major Requirement		Interdisciplinary		Broadening and Deepening Electives (BDE)	Total
		Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)		
Chemistry and Biological Chemistry	1	17/18*		6		12	35/36*
	2	21		11	3	8	43
	3	18			2	14	34
	4		12		10	6	28
	Total	56/57*	12	17	15	40	140/141*
BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (ITG)							
Category						AU	Total AU
Interdisciplinary Collaborative Core (ICC)	Common Core (University-level)						
	CC0001 Inquiry and Communication in the Interdisciplinary World					2	17
	CC0002 Navigating the Digital World					2	
	CC0003 Ethics & Civics in a Multi-Cultural World					2	
	CC0005 Healthy Living & Wellbeing					3	
	CC0006 Sustainability: Society, Economy & Environment					3	
	CC0007 Science & Technology for Humanity					3	
	ML0004 Career and Entrepreneurial Development for the Future World					2	
	Foundational Core (College-level)						
	HW0218 Communication Across the Sciences					2	15
PS0002 Introduction to Data Science and Artificial Intelligence					3		
CM4081 Professional Internship					10		
Major Requirement	CHEM Core						
	CM1001 Foundations of Chemistry I					4	56/57*
	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	
	CM2031 Organic and Bioorganic Chemistry					3	
	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	

2nd Major in Business - International Trading (ITG)	Business - International Trading Compulsory Courses			
	1) AB1201 Financial Management		3	31
	2) AB1501 Marketing		3	
	3) AD1102 Financial Accounting		3	
	4) AD2102 Management Accounting		3	
	5) BE1402 Business Operations & Process		3	
	6) BF2226 Trade Incoterms & Ship Chartering		3	
	7) BF2227 Commodity Markets		3	
	8) BF2302 International Tax & Trading Law		2	
	9) BF3212 Trade, Structured & Supply Chain Finance		2	
	10) BF3213 Enterprise Risk Management in Commodity Markets		2	
	11) BF3214 Commodities Trading		2	
12) BF3226 Strategic Management in Commodity Market		2		
BDE	Any 3 BDE		9	9
Total			140/141*	

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

& CM3011, CM3021. CM3031, CM3041 are offered in both semesters.

BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (CHITG)							
Suggested Study Plan for AY2023-2024 intake							
<i>with Professional Internship</i>							
Year 1 Semester 1				Year 1 Semester 2			
Course		Type	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
CC0002	Navigating the Digital World	CC	2	PH1011/	Physics <u>or</u>	C	3
AB1501	Marketing	BDE	3	PH1012*	Physics A (<i>For students without 'A' Level Physics</i>)	C	4
BE1402	Business Operations & Process	BDE	3	CC0001	Inquiry and Communication in an interdisciplinary World	CC	2
HW0001	<i>Introduction to Academic Communication</i> [#]			CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
				AD1102	Financial Accounting	BDE	3
				AB1201	Financial Management	BDE	3
			16				19/20*
			<i># for students who have not cleared QET</i>				
Year 2 Semester 1				Year 2 Semester 2			
Course		Type	AU	Course		Type	AU
CM2011	Analytical and Bioanalytical Chemistry	C	3	CM2031	Organic and Bioorganic Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	C	3	CM2041	Physical and Biophysical Chemistry 1	C	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	C	3	CM2062	Chemistry & Biological Chemistry Laboratory 2	C	3
PS0001	Introduction to Computational Thinking	C	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
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	AD2102	Management Accounting	BDE	3
CC0005	Healthy Living & Wellbeing	CC	3	BF2227	Commodity Markets	BDE	3
BF3214	Commodities Trading	BDE	2				
			22				21
Year 3 Semester 1				Year 3 Semester 2			
Course		Type	AU	Course		Type	AU
CM3xxx ^{&}	CHEM-Core	C	3	CM3xxx ^{&}	CHEM-Core	C	3
CM3xxx ^{&}	CHEM-Core	C	3	CM3xxx ^{&}	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3	CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
BF2302	International Tax and Trading Law	BDE	2	BF2226	Trade Incoterms & Ship Chartering	BDE	3
	BDE 1	BDE	3		BDE 3	BDE	3
	BDE 2	BDE	3	HW0218	Communication Across the Sciences	FC	2
			17				17
Year 4 Semester 1				Year 4 Semester 2			
Course		Type	AU	Course		Type	AU
	CHEM MPE1	MPE	3	CM4081	Professional Internship	FC	10
	CHEM MPE2	MPE	3				
	CHEM MPE3	MPE	3				
	CHEM MPE4	MPE	3				
BF3212	Trade, Structured & Supply Chain Finance	BDE	2				
BF3213	Enterprise Risk Management in Commodity Markets	BDE	2				
BF3226	Strategic Management in Commodity Market	BDE	2				
			18				10
				Total (AU)			140/141*

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 Business - International Trading (CHITG)
 AY2023 - 2024 Intake onwards
FYP with Professional Attachment

Programme	Year of Study	Number of Academic Units (AU)					Total
		Major Requirement		Interdisciplinary		Broadening and Deepening Electives (BDE)	
		Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)		
Chemistry and Biological Chemistry	1	17/18*		6		12	35/36*
	2	21		11	3	8	43
	3	18			7	9	34
	4		22			6	28
	Total	56/57*	22	17	10	35	140/141*

BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (ITG)

Category	AU	Total AU	
Interdisciplinary Collaborative Core (ICC)	Common Core (University-level)		
	CC0001 Inquiry and Communication in the Interdisciplinary World	2	17
	CC0002 Navigating the Digital World	2	
	CC0003 Ethics & Civics in a Multi-Cultural World	2	
	CC0005 Healthy Living & Wellbeing	3	
	CC0006 Sustainability: Society, Economy & Environment	3	
	CC0007 Science & Technology for Humanity	3	
	ML0004 Career and Entrepreneurial Development for the Future World	2	
	Foundational Core (College-level)		
	HW0218 Communication Across the Sciences	2	10
PS0002 Introduction to Data Science and Artificial Intelligence	3		
CM4082 Professional Attachment	5		

Major Requirement	CHEM Core		56/57*
	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	
	CM2031 Organic and Bioorganic Chemistry	3	
	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)		22
CM4080 Honours Project 1	10		
4 x MPEs	12		

2nd Major in Business - International Trading (ITG)	Business - International Trading Compulsory Courses		
	1) AB1201 Financial Management	3	31
	2) AB1501 Marketing	3	
	3) AD1102 Financial Accounting	3	
	4) AD2102 Management Accounting	3	
	5) BE1402 Business Operations & Process	3	
	6) BF2226 Trade Incoterms & Ship Chartering	3	
	7) BF2227 Commodity Markets	3	
	8) BF2302 International Tax & Trading Law	2	
	9) BF3212 Trade, Structured & Supply Chain Finance	2	
	10) BF3213 Enterprise Risk Management in Commodity Markets	2	
	11) BF3214 Commodities Trading	2	
12) BF3226 Strategic Management in Commodity Market	2		
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BDE	Any 2 BDE	4	4
Total			140/141*

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

& CM3011, CM3021. CM3031, CM3041 are offered in both semesters.

BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (CHITG)							
Suggested Study Plan for AY2023-2024 intake							
<i>FYP with Professional Attachment Option</i>							
Year 1 Semester 1				Year 1 Semester 2			
Course		Type	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
CC0002	Navigating the Digital World	CC	2	PH1011/	Physics <u>or</u>	C	3
AB1501	Marketing	BDE	3	PH1012*	Physics A (<i>For students without 'A' Level Physics</i>)	C	4
BE1402	Business Operations & Process	BDE	3	CC0001	Inquiry and Communication in an interdisciplinary World	CC	2
HW0001	<i>Introduction to Academic Communication</i> [#]			CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
			16				19/20*
[#] for students who have not cleared QET							
Year 2 Semester 1				Year 2 Semester 2			
Course		Type	AU	Course		Type	AU
CM2011	Analytical and Bioanalytical Chemistry	C	3	CM2031	Organic and Bioorganic Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	C	3	CM2041	Physical and Biophysical Chemistry 1	C	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	C	3	CM2062	Chemistry & Biological Chemistry Laboratory 2	C	3
PS0001	Introduction to Computational Thinking	C	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
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	AD2102	Management Accounting	BDE	3
CC0005	Healthy Living & Wellbeing	CC	3	BF2227	Commodity Markets	BDE	3
BF3214	Commodities Trading	BDE	2				21
			22				19
Year 3 Semester 1				Year 3 Semester 2			
Course		Type	AU	Course		Type	AU
CM3xxx ^{&}	CHEM-Core	C	3	CM3xxx ^{&}	CHEM-Core	C	3
CM3xxx ^{&}	CHEM-Core	C	3	CM3xxx ^{&}	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3	CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
BF2302	International Tax and Trading Law	BDE	2	BF2226	Trade Incoterms & Ship Chartering	BDE	3
	BDE 1	BDE	2	HW0218	Communication Across the Sciences	FC	2
	BDE 2	BDE	2	Year 3 Special Sem			
			15	CM4082	Professional Attachment	FC	5
			15				19
Year 4 Semester 1				Year 4 Semester 2			
Course		Type	AU	Course		Type	AU
	CHEM MPE1	MPE	3	CM4080	Honours Project 1	MPE	10
	CHEM MPE2	MPE	3		CHEM MPE4	MPE	3
	CHEM MPE3	MPE	3				
BF3212	Trade, Structured & Supply Chain Finance	BDE	2				
BF3213	Enterprise Risk Management in Commodity Markets	BDE	2				
BF3226	Strategic Management in Commodity Market	BDE	2				
			15				13
						Total (AU)	140/141*

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

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 AY2023 - 2024 Intake onwards
 with Professional Internship and FYP

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		Major Requirement		Interdisciplinary		Broadening and Deepening Electives (BDE)	
		Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)		
Chemistry and Biological Chemistry	1	17/18*		6		12	35/36*
	2	21		11	3	8	43
	3	18	9		2	5	34
	4		13		10	6	29
	Total	56/57*	22	17	15	31	141/142*

BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (ITG)

Category	AU	Total AU	
Interdisciplinary Collaborative Core (ICC)	Common Core (University-level)		
	CC0001 Inquiry and Communication in the Interdisciplinary World	2	17
	CC0002 Navigating the Digital World	2	
	CC0003 Ethics & Civics in a Multi-Cultural World	2	
	CC0005 Healthy Living & Wellbeing	3	
	CC0006 Sustainability: Society, Economy & Environment	3	
	CC0007 Science & Technology for Humanity	3	
	ML0004 Career and Entrepreneurial Development for the Future World	2	
	Foundational Core (College-level)		
	HW0218 Communication Across the Sciences	2	15
PS0002 Introduction to Data Science and Artificial Intelligence	3		
CM4081 Professional Internship	10		

Major Requirement	CHEM Core		56/57*
	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	
	CM2031 Organic and Bioorganic Chemistry	3	
	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)		22
CM4080 Honours Project 1	10		
4 x MPEs		12	

2nd Major in Business - International Trading (ITG)	Business - International Trading Compulsory Courses		
	1) AB1201 Financial Management	3	31
	2) AB1501 Marketing	3	
	3) AD1102 Financial Accounting	3	
	4) AD2102 Management Accounting	3	
	5) BE1402 Business Operations & Process	3	
	6) BF2226 Trade Incoterms & Ship Chartering	3	
	7) BF2227 Commodity Markets	3	
	8) BF2302 International Tax & Trading Law	2	
	9) BF3212 Trade, Structured & Supply Chain Finance	2	
	10) BF3213 Enterprise Risk Management in Commodity Markets	2	
	11) BF3214 Commodities Trading	2	
12) BF3226 Strategic Management in Commodity Market	2		
Total			141/142*

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

& CM3011, CM3021. CM3031, CM3041 are offered in both semesters.

BSc in Chemistry and Biological Chemistry with 2nd Major in Business - International Trading (CHITG)							
Suggested Study Plan for AY2023-2024 intake							
<i>with Professional Internship and FYP</i>							
Year 1 Semester 1				Year 1 Semester 2			
Course		Type	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
CC0002	Navigating the Digital World	CC	2	PH1011/	Physics <u>or</u>	C	3
AB1501	Marketing	BDE	3	PH1012*	Physics A (<i>For students without 'A' Level Physics</i>)	C	4
BE1402	Business Operations & Process	BDE	3	CC0001	Inquiry and Communication in an interdisciplinary World	CC	2
HW0001	<i>Introduction to Academic Communication</i> [#]			CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
			16	AD1102	Financial Accounting	BDE	3
				AB1201	Financial Management	BDE	3
							19/20*
[#] for students who have not cleared QET							
Year 2 Semester 1				Year 2 Semester 2			
Course		Type	AU	Course		Type	AU
CM2011	Analytical and Bioanalytical Chemistry	C	3	CM2031	Organic and Bioorganic Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	C	3	CM2041	Physical and Biophysical Chemistry 1	C	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	C	3	CM2062	Chemistry & Biological Chemistry Laboratory 2	C	3
PS0001	Introduction to Computational Thinking	C	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
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	AD2102	Management Accounting	BDE	3
CC0005	Healthy Living & Wellbeing	CC	3	BF2227	Commodity Markets	BDE	3
BF3214	Commodities Trading	BDE	2				21
			22				
Year 3 Semester 1				Year 3 Semester 2			
Course		Type	AU	Course		Type	AU
CM3xxx ^{&}	CHEM-Core	C	3	CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
CM3xxx ^{&}	CHEM-Core	C	3	BF2226	Trade Incoterms & Ship Chartering	BDE	3
CM3xxx ^{&}	CHEM-Core	C	3	HW0218	Communication Across the Sciences	FC	2
CM3xxx ^{&}	CHEM-Core	C	3		CHEM MPE 1	MPE	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3		CHEM MPE 2	MPE	3
BF2302	International Tax and Trading Law	BDE	2		CHEM MPE 3	MPE	3
			17				17
Year 4 Semester 1				Year 4 Semester 2			
Course		Type	AU	Course		Type	AU
CM4080	Honours Project 1	MPE	10	CM4081	Professional Internship	FC	10
BF3212	Trade, Structured & Supply Chain Finance	BDE	2				
BF3213	Enterprise Risk Management in Commodity Markets	BDE	2				
	CHEM MPE 4	MPE	3				
BF3226	Strategic Management in Commodity Market	BDE	2				
			19				10
				Total (AU)			141/142*

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