

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

AY2022 - 2023 Intake onwards

with Professional Internship

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		6		12	35
	2	21		11	3	8	43
	3	18			2	14	34
	4		12		10	6	28
	Total	56	12	17	15	40	140

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

Category	AU	Total AU	
<b>Common Core (University-level)</b>			
Interdisciplinary Collaborative Core (ICC)	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	
<b>Foundational Core (College-level)</b>			
Major Requirement	HW0218 Communication Across the Sciences	2	15
	PS0002 Introduction to Data Science and Artificial Intelligence	3	
	CM4081 Professional Internship	10	

<b>CHEM Core</b>			AU	Total AU
Major Requirement	CM1001	Foundations of Chemistry I	4	56
	CM1002	Foundations of Chemistry II	4	
	MH1802	Calculus for the Sciences	4	
	MH1804	Mathematics for Chemistry	2	
	PH1801	Foundations of Physics I	3	
	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 <sup>&amp;</sup>	Chemical Spectroscopy and Applications	3	
	CM3041 <sup>&amp;</sup>	Physical and Biophysical Chemistry 2	3	
	CM3062	Chemistry & Biological Chemistry Laboratory 4	3	
	CM3031 <sup>&amp;</sup>	Organic Reaction Mechanisms and Synthesis	3	
	CM3021 <sup>&amp;</sup>	Organometallic Chemistry	3	
	CM3061	Chemistry & Biological Chemistry Laboratory 3	3	
<b>CHEM Major Prescribed Electives (MPE)</b>				
4 x MPEs			12	12

2nd Major in Business - International Trading (ITG)	<b>Business - International Trading Compulsory Courses</b>		
	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 3 BDE	9	9
<b>Total</b>			<b>140</b>

&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 AY2022-2023 intake***with Professional Internship***Year 1 Semester 1**

Course		Type	AU
CM1001	Foundations of Chemistry I	C	4
MH1802	Calculus for the Sciences	C	4
CC0002	Navigating the Digital World	CC	2
AB1501	Marketing	BDE	3
BE1402	Business Operations & Process	BDE	3
HW0001	Introduction to Academic Communication*		

**16***\*for students who have not cleared QET***Year 2 Semester 1**

Course		Type	AU
CM2011	Analytical and Bioanalytical Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	C	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	C	3
PS0001	Introduction to Computational Thinking	C	3
CC0006	Sustainability: Society, Economy & Environment	CC	3
ML0004	Career and Entrepreneurial Development for the Future World	CC	2
CC0005	Healthy Living & Wellbeing	CC	3
BF3214	Commodities Trading	BDE	2

**22****Year 3 Semester 1**

Course		Type	AU
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3
BF2302	International Tax and Trading Law	BDE	2
	BDE 1	BDE	3
	BDE 2	BDE	3

**17****Year 4 Semester 1**

Course		Type	AU
	CHEM MPE1	MPE	3
	CHEM MPE2	MPE	3
	CHEM MPE3	MPE	3
	CHEM MPE4	MPE	3
BF3212	Trade, Structured & Supply Chain Finance	BDE	2
BF3226	Strategic Management in Commodity Market	BDE	2

**16****Year 1 Semester 2**

Course		Type	AU
CM1002	Foundations of Chemistry II	C	4
MH1804	Mathematics for Chemistry	C	2
PH1801	Foundations of Physics I	C	3
CC0001	Inquiry and Communication in an interdisciplinary World	CC	2
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
AD1102	Financial Accounting	BDE	3
AB1201	Financial Management	BDE	3

**19****Year 2 Semester 2**

Course		Type	AU
CM2031	Organic and Bioorganic Chemistry	C	3
CM2041	Physical and Biophysical Chemistry 1	C	3
CM2062	Chemistry & Biological Chemistry Laboratory 2	C	3
PS0002	Introduction to Data Science and Artificial Intelligence	FC	3
CC0007	Science & Technology for Humanity	CC	3
AD2102	Management Accounting	BDE	3
BF2227	Commodity Markets	BDE	3

**21****Year 3 Semester 2**

Course		Type	AU
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
BF2226	Trade Incoterms & Ship Chartering	BDE	3
	BDE 3	BDE	3
HW0218	Communication Across the Sciences	FC	2

**17****Year 4 Semester 2**

Course		Type	AU
CM4081	Professional Internship	FC	10

**10****Total (AU)****138***This study plan is meant as a guide.*<sup>&</sup> 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)**  
 AY2022 - 2023 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		6		12	35
	2	21		11	3	8	43
	3	18			7	9	34
	4		22			6	28
	Total	56	22	17	10	35	140

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

Category	AU	Total AU	
<b>Common Core (University-level)</b>			
Interdisciplinary Collaborative Core (ICC)	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	
<b>Foundational Core (College-level)</b>			
HW0218 Communication Across the Sciences	2	10	
PS0002 Introduction to Data Science and Artificial Intelligence	3		
CM4082 Professional Attachment	5		

Major Requirement	<b>CHEM Core</b>				
	CM1001	Foundations of Chemistry I	4	56	
	CM1002	Foundations of Chemistry II	4		
	MH1802	Calculus for the Sciences	4		
	MH1804	Mathematics for Chemistry	2		
	PH1801	Foundations of Physics I	3		
	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 <sup>&amp;</sup>	Chemical Spectroscopy and Applications	3		
	CM3041 <sup>&amp;</sup>	Physical and Biophysical Chemistry 2	3		
	CM3062	Chemistry & Biological Chemistry Laboratory 4	3		
	CM3031 <sup>&amp;</sup>	Organic Reaction Mechanisms and Synthesis	3		
	CM3021 <sup>&amp;</sup>	Organometallic Chemistry	3		
	CM3061	Chemistry & Biological Chemistry Laboratory 3	3		
	<b>CHEM Major Prescribed Electives (MPE)</b>				
	CM4080	Honours Project 1	10		22
4 x MPEs		12			

2nd Major in Business - International Trading (ITG)	<b>Business - International Trading Compulsory Courses</b>		
	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
<b>Total</b>			140

&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 AY2022-2023 intake***FYP with Professional Attachment Option***Year 1 Semester 1**

Course		Type	AU
CM1001	Foundations of Chemistry I	C	4
MH1802	Calculus for the Sciences	C	4
CC0002	Navigating the Digital World	CC	2
AB1501	Marketing	BDE	3
BE1402	Business Operations & Process	BDE	3
HW0001	<i>Introduction to Academic Communication*</i>		

**16***\*for students who have not cleared QET***Year 2 Semester 1**

Course		Type	AU
CM2011	Analytical and Bioanalytical Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	C	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	C	3
PS0001	Introduction to Computational Thinking	C	3
CC0006	Sustainability: Society, Economy & Environment	CC	3
ML0004	Career and Entrepreneurial Development for the Future World	CC	2
CC0005	Healthy Living & Wellbeing	CC	3
BF3214	Commodities Trading	BDE	2

**22****Year 3 Semester 1**

Course		Type	AU
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3
BF2302	International Tax and Trading Law	BDE	2
	BDE 1	BDE	2
	BDE 2	BDE	2

**15****Year 4 Semester 1**

Course		Type	AU
	CHEM MPE1	MPE	3
	CHEM MPE2	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****Year 1 Semester 2**

Course		Type	AU
CM1002	Foundations of Chemistry II	C	4
MH1804	Mathematics for Chemistry	C	2
PH1801	Foundations of Physics I	C	3
CC0001	Inquiry and Communication in an interdisciplinary World	CC	2
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
AD1102	Financial Accounting	BDE	3
AB1201	Financial Management	BDE	3

**19****Year 2 Semester 2**

Course		Type	AU
CM2031	Organic and Bioorganic Chemistry	C	3
CM2041	Physical and Biophysical Chemistry 1	C	3
CM2062	Chemistry & Biological Chemistry Laboratory 2	C	3
PS0002	Introduction to Data Science and Artificial Intelligence	FC	3
CC0007	Science & Technology for Humanity	CC	3
AD2102	Management Accounting	BDE	3
BF2227	Commodity Markets	BDE	3

**21****Year 3 Semester 2**

Course		Type	AU
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
BF2226	Trade Incoterms & Ship Chartering	BDE	3
HW0218	Communication Across the Sciences	FC	2

**Year 3 Special Sem**

CM4082	Professional Attachment	FC	5
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**19****Year 4 Semester 2**

Course		Type	AU
CM4080	Honours Project 1	MPE	10
	CHEM MPE4	MPE	3

**13****Total (AU)****140***This study plan is meant as a guide.*<sup>&</sup> 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)**  
 AY2022 - 2023 Intake onwards  
 with Professional Internship and FYP

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		6		12	35
	2	21		11	3	8	43
	3	18	9		2	5	34
	4		13		10	6	29
	Total	56	22	17	15	31	141

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

Category	AU	Total AU	
<b>Common Core (University-level)</b>			
Interdisciplinary Collaborative Core (ICC)	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	
<b>Foundational Core (College-level)</b>			
HW0218 Communication Across the Sciences	2	15	
PS0002 Introduction to Data Science and Artificial Intelligence	3		
CM4081 Professional Internship	10		

Major Requirement	<b>CHEM Core</b>			
	CM1001	Foundations of Chemistry I	4	56
	CM1002	Foundations of Chemistry II	4	
	MH1802	Calculus for the Sciences	4	
	MH1804	Mathematics for Chemistry	2	
	PH1801	Foundations of Physics I	3	
	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 <sup>&amp;</sup>	Chemical Spectroscopy and Applications	3	
	CM3041 <sup>&amp;</sup>	Physical and Biophysical Chemistry 2	3	
	CM3062	Chemistry & Biological Chemistry Laboratory 4	3	
	CM3031 <sup>&amp;</sup>	Organic Reaction Mechanisms and Synthesis	3	
	CM3021 <sup>&amp;</sup>	Organometallic Chemistry	3	
	CM3061	Chemistry & Biological Chemistry Laboratory 3	3	
	<b>CHEM Major Prescribed Electives (MPE)</b>			
CM4080	Honours Project 1	10	22	
4 x MPEs		12		

2nd Major in Business - International Trading (ITG)	<b>Business - International Trading Compulsory Courses</b>		
	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		
<b>Total</b>			141

&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 AY2022-2023 intake***with Professional Internship and FYP***Year 1 Semester 1**

Course		Type	AU
CM1001	Foundations of Chemistry I	C	4
MH1802	Calculus for the Sciences	C	4
CC0002	Navigating the Digital World	CC	2
AB1501	Marketing	BDE	3
BE1402	Business Operations & Process	BDE	3
HW0001	Introduction to Academic Communication*		

**16***\*for students who have not cleared QET***Year 1 Semester 2**

Course		Type	AU
CM1002	Foundations of Chemistry II	C	4
MH1804	Mathematics for Chemistry	C	2
PH1801	Foundations of Physics I	C	3
CC0001	Inquiry and Communication in an interdisciplinary World	CC	2
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
AD1102	Financial Accounting	BDE	3
AB1201	Financial Management	BDE	3

**19****Year 2 Semester 1**

Course		Type	AU
CM2011	Analytical and Bioanalytical Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	C	3
CM2061	Chemistry & Biological Chemistry Laboratory 1	C	3
PS0001	Introduction to Computational Thinking	C	3
CC0006	Sustainability: Society, Economy & Environment	CC	3
ML0004	Career and Entrepreneurial Development for the Future World	CC	2
CC0005	Healthy Living & Wellbeing	CC	3
BF3214	Commodities Trading	BDE	2

**22****Year 2 Semester 2**

Course		Type	AU
CM2031	Organic and Bioorganic Chemistry	C	3
CM2041	Physical and Biophysical Chemistry 1	C	3
CM2062	Chemistry & Biological Chemistry Laboratory 2	C	3
PS0002	Introduction to Data Science and Artificial Intelligence	FC	3
CC0007	Science & Technology for Humanity	CC	3
AD2102	Management Accounting	BDE	3
BF2227	Commodity Markets	BDE	3

**21****Year 3 Semester 1**

Course		Type	AU
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3xxx <sup>&amp;</sup>	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3
BF2302	International Tax and Trading Law	BDE	2

**17****Year 3 Semester 2**

Course		Type	AU
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
BF2226	Trade Incoterms & Ship Chartering	BDE	3
HW0218	Communication Across the Sciences	FC	2
	CHEM MPE 1	MPE	3
	CHEM MPE 2	MPE	3
	CHEM MPE 3	MPE	3

**17****Year 4 Semester 1**

Course		Type	AU
CM4080	Honours Project 1	MPE	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****Year 4 Semester 2**

Course		Type	AU
CM4081	Professional Internship	FC	10

**10****Total (AU)****141***This study plan is meant as a guide.*<sup>&</sup> CM3xxx refers to CM3011, CM3021, CM3031, CM3041 - These courses are offered in both semesters