

**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		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	9	44
	3	18			2	15	35
	4		12		10	4	26
	Total	56	12	17	15	40	140

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

Category		AU	Total AU
Interdisciplinary Collaborative Core (ICC)	<b>Common Core (University-level)</b>		
	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	CHEM Core			
	CM1001	Foundations of Chemistry I	4	23
	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	

Major Requirement	CM2061	Chemistry & Biological Chemistry Laboratory 1	3	33
	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	
	<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) BF2216	Trade Incoterms & Ship Chartering	4	
	7) BF2218	Commodity Markets	4	
	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	

BDE	Any 3 BDE	9	9
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**Total**

**140**

**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
CM3011	Chemical Spectroscopy and Applications	C	3
CM3041	Physical and Biophysical Chemistry 2	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
BF3213	Enterprise Risk Management in Commodity Markets	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
BF2218	Commodity Markets	BDE	4

**22****Year 3 Semester 2**

Course		Type	AU
CM3021	Organometallic Chemistry	C	3
CM3031	Organic Reaction Mechanisms and Synthesis	C	3
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
BF2216	Trade Incoterms & Ship Chartering	BDE	4
	BDE 3	BDE	3
HW0218	Communication Across the Sciences	FC	2

**18****Year 4 Semester 2**

Course		Type	AU
CM4081	Professional Internship	FC	10

**10****Total (AU)****140**

**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		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	9	44
	3	18			7	8	33
	4		22			6	28
	Total	56	22	17	10	35	140

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

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	10
	PS0002 Introduction to Data Science and Artificial Intelligence	3	
	CM4082 Professional Attachment	5	

Major Requirement		CHEM Core	AU	Total
Major Requirement	CM1001	Foundations of Chemistry I	4	23
	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	

Major Requirement	CM2061	Chemistry & Biological Chemistry Laboratory 1	3	33
	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	
	<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) BF2216	Trade Incoterms & Ship Chartering	4	
	7) BF2218	Commodity Markets	4	
	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	

BDE	Any 2 BDE	4	4
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**Total**

**140**

**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>		
		<b>16</b>

\*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
		<b>22</b>

**Year 3 Semester 1**

Course	Type	AU
CM3011 Chemical Spectroscopy and Applications	C	3
CM3041 Physical and Biophysical Chemistry 2	C	3
CM3062 Chemistry & Biological Chemistry Laboratory 4	C	3
BF2302 International Tax and Trading Law	BDE	2
		<b>11</b>

**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
BF3213 Enterprise Risk Management in Commodity Markets	BDE	2
		<b>16</b>

**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
		<b>19</b>

**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
BF2218 Commodity Markets	BDE	4
		<b>22</b>

**Year 3 Semester 2**

Course	Type	AU
CM3021 Organometallic Chemistry	C	3
CM3031 Organic Reaction Mechanisms and Synthesis	C	3
CM3061 Chemistry & Biological Chemistry Laboratory 3	C	3
BF2216 Trade Incoterms & Ship Chartering	BDE	4
BDE 1	BDE	2
HW0218 Communication Across the Sciences	FC	2
		<b>22</b>

**Year 3 Special Sem**

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

Course	Type	AU
CM4080 Honours Project 1	MPE	10
BDE 2	BDE	2
		<b>12</b>

**Total (AU)****140**