BSc in Chemistry and Biological Chemistry with 2nd Major in Data Analytics (CHDA)
AY2025 - 2026 Intake onwards
FYP with Professional Internship

Programme	Year of Study	Number of Academic Units (AU)						
		Major Requirement		Interdisciplinary Collaborative Core			Broadening and Deepening Electives (BDE)	Total
		Core (C)	Major PE (MPE)	Common Core (CC)	Professional Series (PS)	Care, Serve and Learn (CSL)		
Chemistry and Biological Chemistry	1	18/19* [2]		8			5	31/32* [2]
	2	22 [3]		6	3	3	7	41 [3]
	3	18	3 [3]		3		18	42 [3]
	4		19 [3]		10			29 [3]
	Total	58/59* [5]	22 [6]	14	16	3	30	143/144* [11]

BSc in Chemistry and Biological Chemistry with 2nd Major in Data Analytics (CHDA)

Category		AU	Total AU
Interdisciplinary Collaborative Core (ICC)	**Common Core (University-level)**		14
	CC0001 Inquiry & Communication in an Interdisciplinary World	2	
	CC0003 Ethics & Civics in a Multi-Cultural World	2	
	ML0004 Career Design & Workplace Readiness in the V.U.C.A World	2	
	CC0015 Health & Wellbeing	2	
	CC0006 Sustainability: Society, Economy & Environment	3	
	CC0007 Science & Technology for Humanity	3	
	Professional Series (College-level)		16
	HW0218 Communication Across the Sciences	2	
	PS0002 Introduction to Data Science and Artificial Intelligence	3	
	MLXXXX Profession Preparation	1	
	CM4081 Professional Internship	10	
	XXXXXX **Care, Serve, Learn (University-level)**	3	3
Major Requirement	**CHEM Core**		58/59*
	CM1001 Foundations of Chemistry I	4	
	CM1002 Foundations of Chemistry II	4	
	CB1102 Introduction to Chemistry, Chemical and Biomedical Engineering	1	
	MH1082 Calculus for the Sciences	4	
	CM1804^ Mathematics for Chemistry	2	
	PH1011 Physics or PH1012* Physics A	3/4*	
	CM2011 Analytical and Bioanalytical Chemistry	3	
	CM2021 Inorganic and Bioinorganic Chemistry	3	
	CM2061 Chemistry & Biological Chemistry Laboratory 1	3	
	CM2031 Organic and Bioorganic Chemistry	3	
	CM2041 Physical and Biophysical Chemistry 1	3	
	CM2062 Chemistry & Biological Chemistry Laboratory 2	3	
	CB2002 Introduction to Chemical and Biological Safety	1	
	PS0001^ Introduction to Computational Thinking	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	22
	4 x MPEs	12	

2nd Major in Data Analytics (BDEs)	**Data Analytics Compulsory Courses** 1) Probability and Statistics: MH2500 Probability and Introduction to Statistics 2) Linear Algebra: CM1804 Mathematics for Chemistry 3) Data Analysis/Computing: PS0001 Introduction to Computational Thinking 4) Algorithms: MH1403 Algorithms & Computing 5) Database: BC2402 Designing & Developing Databases (4AU) / EE4791 Database Systems (3AU) / SC2207 Introduction to Database (3AU) 6) Data Mining: MH4510 Statistical Learning & Data Mining (4AU) / IE4483 Artificial Intelligence & Data Mining (3AU) / SC4020 Data Analytics and Mining (3AU) 7) Data Visualisation/Management: BC2406 Analytics I: Visual and Predictive Techniques (4AU) / SC4023 Big Data Management (3AU) / SC4024 Data Visualization (3AU)	4 NA NA 3 3 - 4 3 - 4 3 - 4	16 - 19
2nd Major in Data Analytics (BDEs)	**Data Analytics Electives (Read any 3)** BC2407 Analytics II: Advanced Predictive Techniques (4AU) BS3008 Computer Aided Drug Discovery (3AU) BS4017 High-Throughput Bioinformatics (3AU) CM4043+ Molecular Modelling: Principles and Applications (3AU) CM4044+ Artificial Intelligence in Chemistry (3AU) ES2001 Computational Earth Systems Science (4AU) MH3400 Algorithms for the Real World (4AU) MH3500 Statistics (4AU) MH3510 Regression Analysis (4AU) MH3511 Data Analysis with Computer (3AU) MH3701 Basic Optimization (4AU) MH4500 Time Series Analysis (4AU) MH4513 Survival Analysis (4AU) MH4302 Theory of Computing (4AU) MH4320 Computational Economics (4AU) MH4511 Sampling and Survey (4AU) MH4512 Clinical Trials (4AU) MH4702 Probabilistic Methods in OR (4AU)	9 - 12	9 - 12
	Students are responsible to plan for their 2nd major courses		
BDE	Any 2 BDE		5
Total			**143 - 149**

^Counted towards 2nd major in Data Analytic Compulsory Course

+ Counted towards CHEM MPE

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

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

B.Sci. (Chemistry and Biological Chemistry) with 2nd major in Data Analytics (CHDA)
Suggested Study Plan for AY2025-2026 intake
FYP with Professional Internship

Year 1 Semester 1

Course		Type	AU
CM1001	Foundations of Chemistry I	C	4
MH1802	Calculus for the Sciences	C	4
CB1102	Introduction to Chemistry, Chemical and Biomedical Engineering	C	1
CC0001	Inquiry & Communication in an Interdisciplinary World	CC	2
CC0015	Health & Wellbeing	CC	2
	BDE 1	BDE	3
HW0001	*Introduction to Academic Communication* [#]		
			16

Year 1 Semester 2

Course		Type	AU
CM1002	Foundations of Chemistry II	C	4
CM1804^	Mathematics for Chemistry	C	2
PH1011/	Physics or	C	3
PH1012*	Physics A *(For students without 'A' Level Physics)*	C	4
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2
	BDE 2	BDE	2
			15/16*

[#] *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
MH2500	Probability and Introduction to Statistics (CHDA-Core 3)	BDE	4
XXXXXX	Care, Serve, Learn	CSL	3
			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
CB2002	Introduction to Chemical and Biological Safety	C	1
PS0002	Introduction to Data Science and Artificial Intelligence	PS	3
CC0007	Science & Technology for Humanity	CC	3
MH1403	Algorithms & Computing (CHDA-Core 4)	BDE	3
			19

Year 3 Semester 1

Course		Type	AU
CM3xxx[&]	CHEM-Core	C	3
CM3xxx[&]	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3
	CHDA-Core 5	BDE	4
	CHDA-Core 6	BDE	4
CM4044[+]	Artificial Intelligence in Chemistry (MPE 1)	MPE	3
MLxxxx	Profession Preparation	PS	1
			21

Year 3 Semester 2

Course		Type	AU
CM3xxx[&]	CHEM-Core	C	3
CM3xxx[&]	CHEM-Core	C	3
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
HW0218	Communication Across the Sciences	PS	2
	CHDA-Core 7	BDE	3
	CHDA-Elective 1	BDE	4
	BDE 3	BDE	3
			21

Year 4 Semester 1

Course		Type	AU
CM4081	Professional Internship	PS	10
			10

Year 4 Semester 2

Course		Type	AU
CM4080	Honours Project 1	MPE	10
CM4043[+]	Molecular Modelling: Principles and Applications (MPE 2)	MPE	3
	CHEM MPE 3	MPE	3
	CHEM MPE 4	MPE	3
			19
	Total (AU)		**143/144***

This study plan is meant as a guide.
^Counted towards 2nd major in Data Analytic requirements
[+] *Counted towards CHEM MPE*
**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 Data Analytics (CHDA)
AY2025 - 2026 Intake onwards
FYP with Professional Attachment

Programme	Year of Study	Number of Academic Units (AU)						
		Major Requirement		Interdisciplinary Collaborative Core			Broadening and Deepening Electives (BDE)	Total
		Core (C)	Major PE (MPE)	Common Core (CC)	Professional Series (PS)	Care, Serve and Learn (CSL)		
Chemistry and Biological Chemistry	1	18/19* [2]		8			6	32/33* [2]
	2	22 [3]		6	3	3	7	41 [3]
	3	18	3 [3]		8		15	44 {3}
	4		19 [3]				6	25 [3]
	Total	58/59* [5]	22 [6]	14	11	3	34	142/143* [11]

BSc in Chemistry and Biological Chemistry with 2nd Major in Data Analytics (CHDA)

Category		AU	Total AU
Interdisciplinary Collaborative Core (ICC)	**Common Core (University-level)**		14
	CC0001 Inquiry & Communication in an Interdisciplinary World	2	
	CC0003 Ethics & Civics in a Multi-Cultural World	2	
	ML0004 Career Design & Workplace Readiness in the V.U.C.A World	2	
	CC0015 Health & Wellbeing	2	
	CC0006 Sustainability: Society, Economy & Environment	3	
	CC0007 Science & Technology for Humanity	3	
	Professional Series (College-level)		11
	HW0218 Communication Across the Sciences	2	
	PS0002 Introduction to Data Science and Artificial Intelligence	3	
	CM4082 Professional Attachment	5	
	MLXXXX Profession Preparation	1	
	XXXXXX **Care, Serve, Learn (University-level)**	3	3
Major Requirement	**CHEM Core**		58/59*
	CM1001 Foundations of Chemistry I	4	
	CM1002 Foundations of Chemistry II	4	
	CB1102 Introduction to Chemistry, Chemical and Biomedical Engineering	1	
	MH1082 Calculus for the Sciences	4	
	CM1804^ Mathematics for Chemistry	2	
	PH1011 Physics or PH1012* Physics A	3/4*	
	CM2011 Analytical and Bioanalytical Chemistry	3	
	CM2021 Inorganic and Bioinorganic Chemistry	3	
	CM2061 Chemistry & Biological Chemistry Laboratory 1	3	
	CM2031 Organic and Bioorganic Chemistry	3	
	CM2041 Physical and Biophysical Chemistry 1	3	
	CM2062 Chemistry & Biological Chemistry Laboratory 2	3	
	CB2002 Introduction to Chemical and Biological Safety	1	
	PS0001^ Introduction to Computational Thinking	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 Data Analytics (BDEs)	**Data Analytics Compulsory Courses** 1) Probability and Statistics: MH2500 Probability and Introduction to Statistics 2) Linear Algebra: CM1804 Mathematics for Chemistry 3) Data Analysis/Computing: PS0001 Introduction to Computational Thinking 4) Algorithms: MH1403 Algorithms & Computing 5) Database: BC2402 Designing & Developing Databases (4AU) / EE4791 Database Systems (3AU) / SC2207 Introduction to Database (3AU) 6) Data Mining: MH4510 Statistical Learning & Data Mining (4AU) / IE4483 Artificial Intelligence & Data Mining (3AU) / SC4020 Data Analytics and Mining (3AU) 7) Data Visualisation/Management: BC2406 Analytics I: Visual and Predictive Techniques (4AU) / SC4023 Big Data Management (3AU) / SC4024 Data Visualization (3AU)	4 NA NA 3 3 - 4 3 - 4 3 - 4	16 - 19
2nd Major in Data Analytics (BDEs)	**Data Analytics Electives (Read any 3)** BC2407 Analytics II: Advanced Predictive Techniques (4AU) BS3008 Computer Aided Drug Discovery (3AU) BS4017 High-Throughput Bioinformatics (3AU) CM4043[+^] Molecular Modelling: Principles and Applications (3AU) CM4044[+^] Artificial Intelligence in Chemistry (3AU) ES2001 Computational Earth Systems Science (4AU) MH3400 Algorithms for the Real World (4AU) MH3500 Statistics (4AU) MH3510 Regression Analysis (4AU) MH3511 Data Analysis with Computer (3AU) MH3701 Basic Optimization (4AU) MH4500 Time Series Analysis (4AU) MH4513 Survival Analysis (4AU) MH4302 Theory of Computing (4AU) MH4320 Computational Economics (4AU) MH4511 Sampling and Survey (4AU) MH4512 Clinical Trials (4AU) MH4702 Probabilistic Methods in OR (4AU)	9 - 12	9 - 12
	Students are responsible to plan for their 2nd major courses		
BDE	Any 3 BDE	9	9
Total			**142 - 149**

^Counted towards 2nd major in Data Analytic Compulsory Course

[+] Counted towards CHEM MPE

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

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

B.Sci. (Chemistry and Biological Chemistry) with 2nd major in Data Analytics (CHDA)
Suggested Study Plan for AY2025-2026 intake
FYP with Professional Attachment

Year 1 Semester 1

Course		Type	AU
CM1001	Foundations of Chemistry I	C	4
MH1802	Calculus for the Sciences	C	4
CB1102	Introduction to Chemistry, Chemical and Biomedical Engineering	C	1
CC0001	Inquiry & Communication in an Interdisciplinary World	CC	2
CC0015	Health & Wellbeing	CC	2
	BDE 1	BDE	3
HW0001	*Introduction to Academic Communication* [#]		
			16

Year 1 Semester 2

Course		Type	AU
CM1002	Foundations of Chemistry II	C	4
CM1804^	Mathematics for Chemistry	C	2
PH1011/	Physics or	C	3
PH1012*	Physics A *(For students without 'A' Level Physics)*	C	4
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2
	BDE 2	BDE	3
			16/17*

[#] *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
MH2500	Probability and Introduction to Statistics (CHDA-Core 3)	BDE	4
XXXXXX	Care, Serve, Learn	CSL	3
			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
CB2002	Introduction to Chemical and Biological Safety	C	1
PS0002	Introduction to Data Science and Artificial Intelligence	PS	3
CC0007	Science & Technology for Humanity	CC	3
MH1403	Algorithms & Computing (CHDA-Core 4)	BDE	3
			19

Year 3 Semester 1

Course		Type	AU
CM3xxx[&]	CHEM-Core	C	3
CM3xxx[&]	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3
	CHDA-Core 5	BDE	4
	CHDA-Core 6	BDE	4
CM4044[+]	Artificial Intelligence in Chemistry	MPE	3
MLxxxx	Profession Preparation	PS	1
			21

Year 3 Semester 2

Course		Type	AU
CM3xxx[&]	CHEM-Core	C	3
CM3xxx[&]	CHEM-Core	C	3
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
HW0218	Communication Across the Sciences	PS	2
	CHDA-Core 7	BDE	3
	CHDA-Elective 1	BDE	4
Year 3 Special Sem			
CM4082	Professional Attachment	PS	5
			23

Year 4 Semester 1

Course		Type	AU
CM4080	Honours Project 1	MPE	10
	BDE 3	BDE	3
			13

Year 4 Semester 2

Course		Type	AU
CM4043[+]	Molecular Modelling: Principles and Applications	MPE	3
	CHEM MPE 3	MPE	3
	CHEM MPE 4	MPE	3
	BDE 4	BDE	3
			12
	Total (AU)		**142/143***

This study plan is meant as a guide.
^Counted towards 2nd major in Data Analytic Compulsory Course
[+] *Counted towards CHEM MPE*
**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 Data Analytics (CHDA)
AY2025 - 2026 Intake onwards
with Professional Internship

Programme	Year of Study	Number of Academic Units (AU)						
		Major Requirement		Interdisciplinary Collaborative Core			Broadening and Deepening Electives (BDE)	Total
		Core (C)	Major PE (MPE)	Common Core (CC)	Professional Series (PS)	Care, Serve and Learn (CSL)		
Chemistry and Biological Chemistry	1	18/19* [2]		8			6	32/33* [2]
	2	22 [3]		6	3	3	10	44 [3]
	3	18	3 [3]		3		18	42 [3]
	4		9 [3]		10		5	24 [3]
	Total	58/59* [5]	12 [6]	14	16	3	39	142/143* [11]

BSc in Chemistry and Biological Chemistry with 2nd Major in Data Analytics (CHDA)

Category			AU	Total AU
Interdisciplinary Collaborative Core (ICC)	**Common Core (University-level)**			
	CC0001	Inquiry & Communication in an Interdisciplinary World	2	14
	CC0003	Ethics & Civics in a Multi-Cultural World	2	
	ML0004	Career Design & Workplace Readiness in the V.U.C.A World	2	
	CC0015	Health & Wellbeing	2	
	CC0006	Sustainability: Society, Economy & Environment	3	
	CC0007	Science & Technology for Humanity	3	
	Professional Series (College-level)			
	HW0218	Communication Across the Sciences	2	16
	PS0002	Introduction to Data Science and Artificial Intelligence	3	
	CM4081	Professional Internship	10	
	MLXXXX	Profession Preparation	1	
	XXXXXX **Care, Serve, Learn (University-level)**		3	3
Major Requirement	**CHEM Core**			
	CM1001	Foundations of Chemistry I	4	58/59*
	CM1002	Foundations of Chemistry II	4	
	CB1102	Introduction to Chemistry, Chemical and Biomedical Engineering	1	
	MH1082	Calculus for the Sciences	4	
	CM1804^	Mathematics for Chemistry	2	
	PH1011	Physics or PH1012* Physics A	3/4*	
	CM2011	Analytical and Bioanalytical Chemistry	3	
	CM2021	Inorganic and Bioinorganic Chemistry	3	
	CM2061	Chemistry & Biological Chemistry Laboratory 1	3	
	CM2031	Organic and Bioorganic Chemistry	3	
	CM2041	Physical and Biophysical Chemistry 1	3	
	CM2062	Chemistry & Biological Chemistry Laboratory 2	3	
	CB2002	Introduction to Chemical and Biological Safety	1	
	PS0001^	Introduction to Computational Thinking	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 Data Analytics (BDEs)	**Data Analytics Compulsory Courses** 1) Probability and Statistics: MH2500 Probability and Introduction to Statistics 2) Linear Algebra: CM1804 Mathematics for Chemistry 3) Data Analysis/Computing: PS0001 Introduction to Computational Thinking 4) Algorithms: MH1403 Algorithms & Computing 5) Database: BC2402 Designing & Developing Databases (4AU) / EE4791 Database Systems (3AU) / SC2207 Introduction to Database (3AU) 6) Data Mining: MH4510 Statistical Learning & Data Mining (4AU) / IE4483 Artificial Intelligence & Data Mining (3AU) / SC4020 Data Analytics and Mining (3AU) 7) Data Visualisation/Management: BC2406 Analytics I: Visual and Predictive Techniques (4AU) / SC4023 Big Data Management (3AU) / SC4024 Data Visualization (3AU)	4 NA NA 3 3 - 4 3 - 4 3 - 4	16 - 19
2nd Major in Data Analytics (BDEs)	**Data Analytics Electives (Read any 3)** BC2407 Analytics II: Advanced Predictive Techniques (4AU) BS3008 Computer Aided Drug Discovery (3AU) BS4017 High-Throughput Bioinformatics (3AU) CM4043+^ Molecular Modelling: Principles and Applications (3AU) CM4044+^ Artificial Intelligence in Chemistry (3AU) ES2001 Computational Earth Systems Science (4AU) MH3400 Algorithms for the Real World (4AU) MH3500 Statistics (4AU) MH3510 Regression Analysis (4AU) MH3511 Data Analysis with Computer (3AU) MH3701 Basic Optimization (4AU) MH4500 Time Series Analysis (4AU) MH4513 Survival Analysis (4AU) MH4302 Theory of Computing (4AU) MH4320 Computational Economics (4AU) MH4511 Sampling and Survey (4AU) MH4512 Clinical Trials (4AU) MH4702 Probabilistic Methods in OR (4AU)	9 - 12	9 - 12
	Students are responsible to plan for their 2nd major courses		
BDE	Any 5 BDE	14	14
Total			**142 - 149**

^Counted towards 2nd major in Data Analytic Compulsory Course

[+] Counted towards CHEM MPE

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

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

B.Sci. (Chemistry and Biological Chemistry) with 2nd major in Data Analytics (CHDA)
Suggested Study Plan for AY2025-2026 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
CB1102	Introduction to Chemistry, Chemical and Biomedical Engineering	C	1
CC0001	Inquiry & Communication in an Interdisciplinary World	CC	2
CC0015	Health & Wellbeing	CC	2
	BDE 1	BDE	3
HW0001	*Introduction to Academic Communication* [#]		
			16

Year 1 Semester 2

Course		Type	AU
CM1002	Foundations of Chemistry II	C	4
CM1804^	Mathematics for Chemistry	C	2
PH1011/	Physics or	C	3
PH1012*	Physics A *(For students without 'A' Level Physics)*	C	4
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2
	BDE 2	BDE	3
			16/17*

[#] *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
MH2500	Probability and Introduction to Statistics (CHDA-Core 3)	BDE	4
XXXXXX	Care, Serve, Learn	CSL	3
			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
CB2002	Introduction to Chemical and Biological Safety	C	1
PS0002	Introduction to Data Science and Artificial Intelligence	PS	3
CC0007	Science & Technology for Humanity	CC	3
MH1403	Algorithms & Computing (CHDA-Core 4)	BDE	3
	BDE 3	BDE	3
			22

Year 3 Semester 1

Course		Type	AU
CM3xxx[&]	CHEM-Core	C	3
CM3xxx[&]	CHEM-Core	C	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	C	3
	CHDA-Core 5	BDE	4
	CHDA-Core 6	BDE	4
CM4044[+]	Artificial Intelligence in Chemistry	MPE	3
MLxxxx	Profession Preparation	PS	1
			21

Year 3 Semester 2

Course		Type	AU
CM3xxx[&]	CHEM-Core	C	3
CM3xxx[&]	CHEM-Core	C	3
CM3061	Chemistry & Biological Chemistry Laboratory 3	C	3
HW0218	Communication Across the Sciences	PS	2
	CHDA-Core 7	BDE	3
	CHDA-Elective 1	BDE	4
	BDE 4	BDE	3
			21

Year 4 Semester 1

Course		Type	AU
CM4081	Professional Internship	PS	10
			10

Year 4 Semester 2

Course		Type	AU
CM4043[+]	Molecular Modelling: Principles and Applications	MPE	3
	CHEM MPE 3	MPE	3
	CHEM MPE 4	MPE	3
	BDE 5	BDE	3
	BDE 6	BDE	2
			14
	Total (AU)		**142/143***

This study plan is meant as a guide.
^Counted towards 2nd major in Data Analytic Compulsory Course
[+] *Counted towards CHEM MPE*
**Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).*
[&] *CM3011, CM3021. CM3031, CM3041 are offered in both semesters.*