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

AY2023 - 2024 Intake onwards

FYP with Professional Attachment

		Number of Academic Units (AU)								
	Year of	Major Red	quirement	Interdis	ciplinary	Broadening and				
Programme	Study	Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)	Deepening Electives (BDE)	Total			
	1	17/18*		9		6	32/33*			
Chemistry and	2	21		8	3	6	38			
Biological	3	18			7	19	44			
Chemistry	4		22			6	28			
	Total	56/57*	22	17	10	37	142/143*			

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

Category		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
	CC0006 Sustainability: Society, Economy & Environment	3	17
Interdisciplinary	CC0007 Science & Technology for Humanity	3	
Collaborative Core	ML0004 Career and Entrepreneurial Development for the Future		
(ICC)	World	2	
	Foundational Core (College-level)		1
	HW0218 Communication Across the Sciences	2	
	PS0002 Introduction to Data Science and Artificial Intelligence	3	10
	CM4082 Professional Attachment	5	
	CHEM Core		
	CM1001 Foundations of Chemistry I	4	
	CM1002 Foundations of Chemistry II	4	
	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	
Major	CM2041 Physical and Biophysical Chemistry 1	3	56/57*
Requirement	CM2062 Chemistry & Biological Chemistry Laboratory 2	3	
Requirement	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	

Total			142 - 149
BDE	Any 4 BDE	12	12
			T
	Students are responsible to plan for their 2nd major courses		
	MH4702 Probabilistic Methods in OR (4AU)		
	MH4512 Clinical Trials (4AU)		
	MH4320 Computational Economics (4AU) MH4511 Sampling and Survey (4AU) @		
	MH4302 Theory of Computing (4AU)		
	MH4513 Survival Analysis (4AU)		
	MH4500 Time Series Analysis (4AU)		
	MH3701 Basic Optimization (4AU)		
Analytics (BDEs)	MH3511 Data Analysis with Computer (3AU)	9 - 12	9 - 12
2nd Major in Data	MH3510 Regression Analysis (4AU)	<u>.</u>	
	MH3400 Algorithms for the Real World (4AU) MH3500 Statistics (4AU)		
	ES2001 Computational Earth Systems Science (4AU)		
	CM4044 ^{+^} Artificial Intelligence in Chemistry (3AU)		
	CM4043 ^{+^} Molecular Modelling: Principles and Applications (3AU)		
	BS4017 High-Throughput Bioinformatics (3AU)		
	BS3008 Computer Aided Drug Discovery (3AU)		
	BC2407 Analytics II: Advanced Predictive Techniques (4AU)		
	Data Analytics Electives (Read any 3)		
	30-102-1 Data Visualization (5/10)		
	Predictive Techniques (4AU) / SC4023 Big Data Management (3AU) / SC4024 Data Visualization (3AU)	3 - 4	
	7) Data Visualisation/Management: BC2406 Analytics I: Visual and		
	Analytics and Mining (3AU)		
	IE4483 Artificial Intelligence & Data Mining (3AU) / SC4020 Data	3 - 4	
	6) Data Mining: MH4510 Statistical Learning & Data Mining (4AU) /		
7 (2.2.23)	(3AU)	3-4	
Analytics (BDEs)	5) Database: BC2402 Designing & Developing Databases (4AU) / EE4791 Database Systems (3AU) / SC2207 Introduction to Database	3 - 4	16 - 19
2nd Major in Data	4) Algorithms: MH1403 Algorithms & Computing	3	
	Thinking		
	3) Data Analysis/Computing: PS0001 Introduction to Computational	NA	
	2) Linear Algebra: CM1804 Mathematics for Chemistry	NA	
	Statistics	4	
	Data Analytics Compulsory Courses 1) Probability and Statistics: MH2500 Probability and Introduction to		

[^]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.

-	mistry and Biological Chemistry) with 2r Study Plan for AY2023-2024 intake	nd major	in Data Ana	alytics (CHDA)			
	rofessional Attachment						
				W 4.6			
rear 1 Sem Course	nester 1	Туре	AU	Year 1 Sem Course	nester 2	Туре	AU
CM1001	Foundations of Chemistry I	C	4	CM1002	Foundations of Chemistry II	C	4
ЛН1802	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	СС	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	3
HW0001	Introduction to Academic Communicati	ion [#]			BDE 2	BDE	3
for studen	nts who have not cleared QET		15				17/1
ear 2 Sem	nester 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
ЛL0004	Career and Entrepreneurial Development for the Future World	СС	2	MH1403	Algorithms & Computing (CHDA-Core)	BDE	3
	BDE 3	BDE	3		55.57		
			20				18
Year 3 Sem	nester 1			Year 3 Sem	nester 2		
Course	0.1514.0	Туре	AU	Course	0.1514.0	Туре	AU
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	C	3
CM3xxx ^{&} CM3062	CHEM-Core Chemistry & Biological Chemistry	c c	3	CM3xxx ^{&} CM3061	CHEM-Core Chemistry & Biological Chemistry	C C	3
	Laboratory 4 Designing & Developing Databases				Laboratory 3		
3C2402	(CHDA-Core) Analytics I: Visual and Predictive	BDE	4	HW0218	Communication Across the Sciences	FC	2
3C2406	Techniques (CHDA-Core)	BDE	4	MH3500	Statistics (CHDA-Elective 1)	BDE	4
MH2500	Probability and Introduction to Statistics (CHDA-Core)	BDE	4		CHDA-Elective 2	BDE	3
				Year 3 Spe	cial Sem		
				CM4082	Professional Attachment	FC	5
			21				23
rear 4 Sem Course	nester 1	Туре	AU	Year 4 Sem Course	nester 2	Туре	AU
M4044 ⁺ ^	Artificial Intelligence in Chemistry	MPE	3	CM4080	Honours Project 1	MPE	10
	CHEM MPE2	MPE	3				
	CHEM MPE3	MPE	3				
	CHEM MPE4	MPE	3				
E4483	Artificial Intelligence & Data Mining (CHDA-Core)	BDE	3				
	BDE 4	BDE	3				
			18				10
					Total (AU)		142/1

[^]Counted towards 2nd major in Data Analytic requirements

^{&#}x27;+Counted towards CHEM MPE

^{*}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 Data Analytics (CHDA)

AY2023 - 2024 Intake onwards

with Professional Internship

			ľ	Number of Acad	lemic Units (AU	1)		
	Year of	Major Red	quirement	Interdis	ciplinary	Broadening and		
Programme	Study	Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)	Deepening Electives (BDE)	Total	
	1	17/18*		9		6	32/33*	
Chemistry and	2	21		8	3	9	41	
Biological	3	18			2	21	41	
Chemistry	4		12		10	6	28	
	Total	56/57*	12	17	15	42	142/143*	

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

Category			AU	Total AU
	Common C	ore (University-level)		
	CC0001 Inc	uiry and Communication in the Interdisciplinary World	2	
	CC0002 Na	vigating the Digital World	2	
	CC0003 Eth	nics & Civics in a Multi-Cultural World	2	
	CC0005 He	althy Living & Wellbeing	3	
	CC0006 Sus	stainability: Society, Economy & Environment	3	17
Interdisciplinary	CC0007 Sci	ence & Technology for Humanity	3	
Collaborative	NAL 000 4 C-	are and Enterpolation of Development for the Enterpolation	2	
Core (ICC)	MILUUU4 Ca	reer and Entrepreneurial Development for the Future World	2	
	Foundation	nal Core (College-level)		
		ommunication Across the Sciences	2	4.5
	PS0002 Int	roduction to Data Science and Artificial Intelligence	3	15
	CM4081 Pr	ofessional Internship	10	
	•	·		•
	CHEM Core	2		
	CM1001	Foundations of Chemistry I	4	
	CM1002	Foundations of Chemistry II	4	
	MH1082	Calculus for the Sciences	4	
	CM1804^	Mathematics for Chemistry	2	
	PH1011	Physics <u>or</u> 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	FC/F7*
Major	CM2041	Physical and Biophysical Chemistry 1	3	56/57*
Requirement	CM2062	Chemistry & Biological Chemistry Laboratory 2	3	
	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	
	1	or Prescribed Electives (MPE)		
	4 x MPEs		12	12

Total			142 - 149
BDE	Any 6 BDE	17	17
	Students are responsible to plan for their 2nd major courses		
	MH4702 Probabilistic Methods in OR (4AU)		
	MH4512 Clinical Trials (4AU)		
	MH4511 Sampling and Survey (4AU) @		
	MH4320 Computational Economics (4AU)		
	MH4302 Theory of Computing (4AU)		
	MH4500 Time Series Analysis (4AU) MH4513 Survival Analysis (4AU)		
	MH3701 Basic Optimization (4AU)		
(BDEs)	MH3511 Data Analysis with Computer (3AU)		-
Data Analytics	MH3510 Regression Analysis (4AU)	9 - 12	9 - 12
2nd Major in	MH3500 Statistics (4AU)		
	MH3400 Algorithms for the Real World (4AU)		
	ES2001 Computational Earth Systems Science (4AU)		
	CM4044+^ Artificial Intelligence in Chemistry (3AU)		
	CM4043+^ Molecular Modelling: Principles and Applications (3AU)		
	BS4017 High-Throughput Bioinformatics (3AU)		
	BS3008 Computer Aided Drug Discovery (3AU)		
	BC2407 Analytics II: Advanced Predictive Techniques (4AU)		
	Data Analytics Electives (Read any 3)		
	SC4024 Data Visualization (3AU)		
	Predictive Techniques (4AU) / SC4023 Big Data Management (3AU) /	3 - 4	
	7) Data Visualisation/Management: BC2406 Analytics I: Visual and		
	IE4483 Artificial Intelligence & Data Mining (3AU) / SC4020 Data Analytics and Mining (3AU)	3 - 4	
	6) Data Mining: MH4510 Statistical Learning & Data Mining (4AU) /		
(BDEs)	Database Systems (3AU) / SC2207 Introduction to Database (3AU)	3 - 4	
Data Analytics	5) Database: BC2402 Designing & Developing Databases (4AU) / EE4791	2 4	16 - 19
2nd Major in	4) Algorithms: MH1403 Algorithms & Computing	3	
	3) Data Analysis/Computing: PS0001 Introduction to Computational Thinking	NA	
	2) Linear Algebra: CM1804 Mathematics for Chemistry	NA	
	Statistics	4	
	Data Analytics Compulsory Courses 1) Probability and Statistics: MH2500 Probability and Introduction to		

[^]Counted towards 2nd major in Data Analytic Compulsory Course

[†] Counted towards CHEM MPE

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

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

Year 1 Sem	ester 1			Year 1 Sem	ester 2		
Course		Type	AU	Course		Type	AL
CM1001	Foundations of Chemistry I	С	4	CM1002	Foundations of Chemistry II	С	4
ИН1802	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	СС	2
HW0001	Introduction to Academic Communicat.	ion [#]			BDE 1 BDE 2	BDE BDE	3 3
			15				17/1
for studer	its who have not cleared QET						•
ear 2 Sem	ester 1			Year 2 Sem	ester 2		
Course		Туре	AU	Course		Туре	AU
	Analytical and Bioanalytical				Organic and Picergania Chamista		
CM2011	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
°S0001^	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
√L0004	Career and Entrepreneurial Development for the Future World	CC	2	MH1403	Algorithms & Computing (CHDA- Core)	BDE	3
	BDE 3	BDE	3		BDE 4	BDE	3
			20				21
rear 3 Sem	ester 1	Tuno	AU	Year 3 Sem	ester 2	Tuno	A11
Course &	CHEM-Core	Type C	3	Course CN42&	CHEM-Core	Type C	AU 3
CM3xxx ^{&}				CM3xxx ^{&}			
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
CM3062	Chemistry & Biological Chemistry Laboratory 4	С	3	CM3061	Chemistry & Biological Chemistry Laboratory 3	С	3
3C2402	Designing & Developing Databases (CHDA-Core)	BDE	4	HW0218	Communication Across the Sciences	FC	2
3C2406	Analytics I: Visual and Predictive Techniques (CHDA-Core)	BDE	4	MH3500	Statistics (CHDA-Elective 1)	BDE	4
ИН2500	Probability and Introduction to Statistics (CHDA-Core)	פטר	Λ		CHDA-Elective 2	BDE	3
	Statistics (CHDA-Core)	BDE	4		BDE 5	BDE	2
			21				20
Year 4 Sem	ester 1			Year 4 Sem	ester 2		
Course		Туре	AU	Course		Туре	ΑL
CM4081	Professional Internship	FC	10	CM4043+^	Molecular Modelling: Principles and Applications	MPE	3
					CHEM MPE2	BDE	3
					CHEM MPE 3	MPE	3
					CHEM MPE 4	MPE	3
					CHDA-Core	BDE	3
					BDE 6	BDE	3
			10				18

B.Sci. (Chemistry and Biological Chemistry) with 2nd major in Data Analytics (CHDA)

[^]Counted towards 2nd major in Data Analytic requirements

^{&#}x27;+Counted towards CHEM MPE

^{*}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 Data Analytics (CHDA)

AY2023 - 2024 Intake onwards

with Professional Internship and FYP

			N	umber of Acad	demic Units (Al	J)		
D	Year of	Major Requirement		Interdis	ciplinary	Broadening and		
Programme	Study	Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)		Total	
	1	17/18*		9		7	33/34*	
Chemistry and	2	21		8	3	3	35	
Biological	3	18	3		2	19	42	
Chemistry	4		19		10	3	32	
	Total	56/57*	22	17	15	32	142/143*	

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

Category			AU	Total AU
	Common C	Core (University-level)		
	CC0001 Inc	quiry and Communication in the Interdisciplinary World	2	
		vigating the Digital World	2	
	CC0003 Etl	nics & Civics in a Multi-Cultural World	2	
	CC0005 He	althy Living & Wellbeing	3	47
	CC0006 Su	stainability: Society, Economy & Environment	3	17
nterdisciplinary	CC0007 Sci	ence & Technology for Humanity	3	
Collaborative Core (ICC)	ML0004 Ca World	areer and Entrepreneurial Development for the Future	2	
	Foundatio	nal Core (College-level)		
	HW0218 C	ommunication Across the Sciences	2	
	PS0002 Int	roduction to Data Science and Artificial Intelligence	3	15
	CM4081 Pi	rofessional Internship	10	
	CHEM Core			
	CM1001	Foundations of Chemistry I	4	
	CM1002	Foundations of Chemistry II	4	
	MH1082	Calculus for the Sciences	4	
	CM1804^	Mathematics for Chemistry	2	
	PH1011	Physics <u>or</u> 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	56/57*
Major	CM2041	Physical and Biophysical Chemistry 1	3	30,37
Requirement	CM2062	Chemistry & Biological Chemistry Laboratory 2	3	
	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	
	<u> </u>	or Prescribed Electives (MPE)		
	CM4080	Honours Project 1	10	22
	4 x MPEs		12	

Гotal			142 - 149
BDE	Any 2 BDE	7	7
	Students are responsible to plan for their 2nd major courses		
	MH4702 Probabilistic Methods in OR (4AU)		
	MH4511 Sampling and Survey (4AU) @ MH4512 Clinical Trials (4AU)		
	MH4320 Computational Economics (4AU)		
	MH4302 Theory of Computing (4AU)		
	MH4500 Time Series Analysis (4AU) MH4513 Survival Analysis (4AU)		
	MH3701 Basic Optimization (4AU)		
(BDEs)	MH3511 Data Analysis with Computer (3AU)	J - 12	J - 12
Data Analytics	MH3510 Regression Analysis (4AU)	9 - 12	9 - 12
2nd Major in	MH3500 Statistics (4AU)		
	MH3400 Algorithms for the Real World (4AU)		
	ES2001 Computational Earth Systems Science (4AU)		
	CM4043+^ Molecular Modelling: Principles and Applications (3AU) CM4044+^ Artificial Intelligence in Chemistry (3AU)		
	BS4017 High-Throughput Bioinformatics (3AU)		
	BS3008 Computer Aided Drug Discovery (3AU)		
	BC2407 Analytics II: Advanced Predictive Techniques (4AU)		
	Data Analytics Electives (Read any 3)		
_			
	SC4024 Data Visualization (3AU)	J - T	
	7) Data Visualisation/Management: BC2406 Analytics I: Visual and Predictive Techniques (4AU) / SC4023 Big Data Management (3AU) /	3 - 4	
	Analytics and Mining (3AU)		
	IE4483 Artificial Intelligence & Data Mining (3AU) / SC4020 Data	3 - 4	
	6) Data Mining: MH4510 Statistical Learning & Data Mining (4AU) /		
(BDEs)	(3AU)		
Data Analytics	EE4791 Database Systems (3AU) / SC2207 Introduction to Database	3 - 4	16 - 19
2nd Major in	5) Database: BC2402 Designing & Developing Databases (4AU) /	3	
	Thinking 4) Algorithms: MH1403 Algorithms & Computing		
	3) Data Analysis/Computing: PS0001 Introduction to Computational	NA	
	2) Linear Algebra: CM1804 Mathematics for Chemistry	NA	
	1) Probability and Statistics: MH2500 Probability and Introduction to Statistics	4	
	Data Analytics Compulsory Courses		

[^]Counted towards 2nd major in Data Analytic Compulsory Course

[†] Counted towards CHEM MPE

^{*}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 2r Study Plan for AY2023-2024 intake	nd major	in Data An	alytics (CHDA)			
00	ssional Internship and FYP						
,	•						
Year 1 Sem	nester 1	Tuna	A11	Year 1 Sem	ester 2	Tuna	A.I.I
Course CM1001	Foundations of Chemistry I	Type C	AU 4	Course CM1002	Foundations of Chemistry II	Type C	AU 4
MH1802	Calculus for the Sciences	C	4	CM1804^	Mathematics for Chemistry	C	2
	Inquiry and Communication in the	66	2	DU4044/	·	6	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
HW0001	Introduction to Academic Communicat	ion [#]			BDE 1 BDE 2	BDE BDE	3 4
							40/40*
# for studen	nts who have not cleared QET		15				18/19*
Year 2 Sem	nester 1	Typo	All	Year 2 Sem	ester 2	Typo	AU
Course	Analytical and Bioanalytical	Туре	AU	Course		Туре	AU
CM2011	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
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	MH1403	Algorithms & Computing (CHDA- Core)	BDE	3
			17				18
Year 3 Sem	nester 1			Year 3 Sem	ester 2		
Course	iester 1	Туре	AU	Course		Type	AU
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
	Chamistry & Dialogical Chamistry				Chemistry & Biological Chemistry		3
CM2062	Chemistry & Biological Chemistry	_	2	CN12061		_	5
CM3062	Laboratory 4	С	3	CM3061	Laboratory 3	С	
CM3062 BC2402	Laboratory 4 Designing & Developing Databases (CHDA-Core)	C BDE	3	CM3061 HW0218	Laboratory 3 Communication Across the Sciences	C FC	2
	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core)				•		2
BC2402	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to	BDE BDE	4	HW0218	Communication Across the Sciences	FC	
BC2402 BC2406	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core)	BDE	4	HW0218	Communication Across the Sciences Statistics (CHDA-Elective 1)	FC BDE	4
BC2402 BC2406	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to	BDE BDE	4	HW0218	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2	FC BDE BDE	4
BC2402 BC2406	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE	4 4	HW0218	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1	FC BDE BDE	4 3 3
BC2402 BC2406 MH2500 Year 4 Sem Course	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE Type	4 4 4 21	HW0218 MH3500 Year 4 Sem Course	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1	FC BDE BDE MPE	4 3 3
BC2402 BC2406 MH2500 Year 4 Sem	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE BDE	4 4 4	HW0218 MH3500 Year 4 Sem	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1 ester 2 Honours Project 1	FC BDE BDE MPE	4 3 3 21
BC2402 BC2406 MH2500 Year 4 Sem Course	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE Type	4 4 4 21	HW0218 MH3500 Year 4 Sem Course	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1 ester 2 Honours Project 1 Molecular Modelling: Principles and Applications	FC BDE BDE MPE Type MPE MPE	4 3 3 21 AU 10 3
BC2402 BC2406 MH2500 Year 4 Sem Course	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE Type	4 4 4 21	HW0218 MH3500 Year 4 Sem Course CM4080	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1 ester 2 Honours Project 1 Molecular Modelling: Principles and Applications CHEM MPE 3	FC BDE BDE MPE Type MPE MPE MPE	4 3 3 21 AU 10 3 3
BC2402 BC2406 MH2500 Year 4 Sem Course	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE Type	4 4 4 21	HW0218 MH3500 Year 4 Sem Course CM4080	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1 ester 2 Honours Project 1 Molecular Modelling: Principles and Applications	FC BDE BDE MPE Type MPE MPE	4 3 3 21 AU 10 3
BC2402 BC2406 MH2500 Year 4 Sem Course	Laboratory 4 Designing & Developing Databases (CHDA-Core) Analytics I: Visual and Predictive Techniques (CHDA-Core) Probability and Introduction to Statistics (CHDA-Core)	BDE BDE Type	4 4 4 21	HW0218 MH3500 Year 4 Sem Course CM4080	Communication Across the Sciences Statistics (CHDA-Elective 1) CHDA-Elective 2 CHEM MPE 1 ester 2 Honours Project 1 Molecular Modelling: Principles and Applications CHEM MPE 3 CHEM MPE 4	FC BDE BDE MPE Type MPE MPE MPE MPE MPE	4 3 3 21 AU 10 3 3 3

This study plan is meant as a guide.

[^]Counted towards 2nd major in Data Analytic requirements

^{&#}x27;+Counted towards CHEM MPE

^{*}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