BSc in Chemistry and Biological Chemistry with 2nd Major in Entrepreneurship (CHET)

AY2025 - 2026 Intake onwards FYP with Professional Internship

		Number of Academic Units (AU)							
Programme	Year of	Major Requirement		Interdisc	iplinary Collabora	Broadening and			
	Study	Core (C)	Major PE (MPE)	Common Core (CC)	Professional Series (PS)	Care, Serve and Learn (CSL)	Deepening Electives (BDE)	Total	
	1	18/19*		8			6	32/33*	
Chemistry and	2	22		6	3	3	6	40	
Biological Chemistry with 2nd major in	3	18	6		3		13	40	
Entrepreneurship	4		16		10 [10]			26 [10]	
	Total	58/59*	22	14	16 [10]	3	25	138/139* [10]	

Category		AU	Total AU
	Common Core (University-level)		
	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	14
	CC0006 Sustainability: Society, Economy & Environment	3	
nterdisciplinary	CC0007 Science & Technology for Humanity	3	
Collaborative			
Core (ICC)	Professional Series (College-level)		
	HW0218 Communication Across the Sciences	2	
	PS0002 Introduction to Data Science and Artificial Intelligence	3	16
	CM4081^ Professional Internship	10	16
	MLXXXX Profession Preparation	1	
	XXXXXX Care, Serve, Learn (University-level)	3	3
		•	
	CHEM Core		
	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	58/59*
Major	CM2041 Physical and Biophysical Chemistry 1	3	30/33
•	CM2062 Chemistry & Biological Chemistry Laboratory 2	3	
Requirement	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	22

	Compulsory Courses					
	ET5211 Technopreneurial Mindset	3				
	ET5212 Entrepreneurial Ecosystems	3				
	ET5213 Managing New Ventures	3				
	ET5214 Financing Entrepreneurial Ventures	3				
2nd Major in						
<u>Entrepreneurship</u>	Compulsory Experiential Programme		25^			
(BDEs)	CM4076 Overseas Entrepreneurship Programme (6-MONTH)					
	OR	10^				
	CM4081 [^] Professional Internship					
	Elective Courses (at least 4 courses)	13				
	Students are responsible to plan for their 2nd major courses	I	<u> </u>			
otal						

^{^10}AU is taken from ICC Foundational Core

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

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

FYP with Pro	ofessional Internship						
Year 1 Semo	ester 1			Year 1 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM1001	Foundations of Chemistry I	С	4	CM1002	Foundations of Chemistry II	С	4
MH1802 CB1102	Calculus for the Sciences Introduction to Chemistry, Chemical	c c	4 1	CM1804 PH1011/	Mathematics for Chemistry Physics or	c c	3
	and Biomedical Engineering Inquiry & Communication in an				Physics A (For students without 'A'		
CC0001	Interdisciplinary World	CC	2	PH1012*	Level Physics) Ethics & Civics in a Multi-Cultural	С	4
CC0015	Health Wellbeing	CC	2	CC0003	World Career Design & Workplace	CC	2
ET5211	Technopreneurial Mindset	BDE	3	Readiness in the V.U.C.A World		CC	2
HW0001	ion [#]		ET5213	Managing New Ventures	BDE	3	
			16	-			16/1
* for studen	ts who have not cleared QET						
Year 2 Semo	ester 1	Туре	AU	Year 2 Sem Course	nester 2	Туре	AU
CM2011	Analytical and Bioanalytical	C	3	CM2031	Organic and Bioorganic Chemistry	C	3
CM2021	Chemistry Inorganic and Bioinorganic Chemistry	С	3	CM2041	Physical and Biophysical Chemistry 1	С	3
CM2061	Chemistry & Biological Chemistry	С	3	CM2041	Chemistry & Biological Chemistry	С	3
CIVIZOOI	Laboratory 1 Introduction to Computational	C	J	CIVIZOUZ	Laboratory 2 Introduction to Chemical and	C	3
PS0001	Thinking	С	3	CB2002	Biological Safety	С	1
CC0006	Sustainability: Society, Economy & Environment	CC	3	PS0002	Introduction to Data Science and Artificial Intelligence	PS	3
ET5212 XXXXXX	Entrepreneurial Ecosystems Care, Serve, Learn	BDE CSL	3 3	CC0007 ET5214	Science & Technology for Humanity Financing Entrepreneurial Ventures	CC BDE	3
			21				19
Year 3 Semo	ester 1	Type	AU		Year 3 Semester 2 Course		AU
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	Type C	3
CM3xxx ^{&}	CHEM-Core	С	3	CM3061	Chemistry & Biological Chemistry Laboratory 3	С	3
CM3xxx ^{&}	CHEM-Core	С	3	HW0218	Communication Across the Sciences	PS	2
CM3062	Chemistry & Biological Chemistry Laboratory 4	С	3		Entrepreneurship Elective 3	BDE	3
	Entrepreneurship Elective 1	BDE	3		Entrepreneurship Elective 4	BDE	3
MLxxxx	Entrepreneurship Elective 2 Profession Preparation	BDE PS	4 1		CHEM MPE 1 CHEM MPE 2	MPE MPE	3
			20				20
V 4.5				V	to:: 2		
Year 4 Semester 1 Course		Туре	AU	Year 4 Sem Course	Year 4 Semester 2 Course		AU
CM4076	Overseas Entrepreneurship	PS/		CM4080	Honours Project 1	Type MPE	10
	Programme (6-MONTH) OR	BDE	10	,	CHEM MPE 3	MPE	3
CM4081^	Professional Internship	PS/ BDE			CHEM MPE 4	MPE	3
			10				16
					Total (AU)		138/1

This study plan is meant as a guide.

^{^10}AU is taken from ICC Foundational Core

^{*}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 Entrepreneurship (CHET)

AY2025 - 2026 Intake onwards

with Professional Internship

Programme		Number of Academic Units (AU)								
	Year of Study	Major Red	quirement	Interdiscip	linary Collabo	Broadening and Deepening	Total			
	Core (C)	Major PE (MPE)	Common Core	Professional	Care, Serve and	Electives (BDE)				
		core (e)	iviajor i E (ivii E)	(CC)	Series (PS)	Learn (CSL)				
	1	18/19*		8			6	32/33*		
Chemistry and	2	22		6	3	3	6	40		
Biological Chemistry with 2nd major in Entrepreneurship	3	18			3		18	39		
	4		12		10 [10]			22 [10]		
,	Total	58/59*	12	14	16 [10]	3	30	133/134* [10]		

BSc in Chemistry and Biological Chemistry with 2nd Major in Entrepreneurship (CHET)

Category		AU	Total AU				
	Common Core (University-level)						
	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	14				
	CC0006 Sustainability: Society, Economy & Environment	3	3				
Interdisciplinary	CC0007 Science & Technology for Humanity	3					
Collaborative							
Core (ICC)	Professional Series (College-level)						
	HW0218 Communication Across the Sciences	2					
	PS0002 Introduction to Data Science and Artificial Intelligence	3	16				
	CM4081^ Professional Internship	10	16				
	MLXXXX Profession Preparation	1					
	, and the second						
	XXXXXX Care, Serve, Learn (University-level)	3	3				
		•	•				
	CHEM Core						
	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	58/59*				
Major	CM2041 Physical and Biophysical Chemistry 1	3					
Requirement	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				

	Entrepreneurship Compulsory Courses							
	ET5211 Technopreneurial Mindset		3					
	ET5212 Entrepreneurial Ecosystems		3					
	ET5213 Managing New Ventures		3					
	ET5214 Financing Entrepreneurial Ventu	ıres	3					
2nd Major in								
	Compulsory Experiential Programme			25^				
(BDEs)	CM4076 Overseas Entrepreneurship Prog	gramme (6-MONTH)						
	O	₹	10^					
	CM4081 [^] Professional Internship							
	Elective Courses (at least 4 courses)		13					
	Students are responsible to plan for their 2nd major courses							
Broadening and Deepening Electives (BDE)								
Total				133/134*				

^{^10}AU is taken from ICC Foundational Core (PS)

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

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

BSc in Chem	nistry and Biological Chemistry with 2nd I	Major in	Entrepren	eurship (CHET)			
	tudy Plan for AY2025-2026 intake	•	-				
with Profess	ional Internship						
Year 1 Seme	oster 1			Year 1 Sem	nester 2		
Course	36.1	Туре	AU	Course	icster 2	Туре	AU
CM1001	Foundations of Chemistry I	C	4	CM1002	Foundations of Chemistry II	C	4
MH1802	Calculus for the Sciences	С	4	CM1804	Mathematics for Chemistry	С	2
CB1102	Introduction to Chemistry, Chemical and Biomedical Engineering	С	1	PH1011/	Physics <u>or</u>	С	3
CC0001	Inquiry & Communication in an Interdisciplinary World	CC	2	PH1012*	Physics A (For students without 'A' Level Physics)	С	4
CC0015	Health Wellbeing	CC	2	CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
ET5211	Technopreneurial Mindset	BDE	3	ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2
		#		ET5213	Managing New Ventures	BDE	3
HW0001	Introduction to Academic Communicati	on"					
			16				16/17*
# for student	s who have not cleared QET						•
V 2 C				V 2 C			
Year 2 Seme	ester 1	Туре	AU	Year 2 Sem Course	nester 2	Туре	AU
CM2011	Analytical and Bioanalytical	C	3	CM2031	Organic and Bioorganic Chemistry	C	3
CIVIZOTT	Chemistry	C	3	CIVIZUST	Organic and Bioorganic Chemistry	C	3
CM2021	Inorganic and Bioinorganic Chemistry	С	3	CM2041	Physical and Biophysical Chemistry 1	С	3
CM2061	Chemistry & Biological Chemistry	С	3	CM2062	Chemistry & Biological Chemistry		3
	Laboratory 1 Introduction to Computational				Laboratory 2 Introduction to Chemical and		
PS0001	Thinking	С	3	CB2002	Biological Safety	С	1
CC0006	Sustainability: Society, Economy & Environment	CC	3	PS0002	Introduction to Data Science and Artificial Intelligence	PS	3
ET5212	Entrepreneurial Ecosystems	BDE	3	CC0007	Science & Technology for Humanity	CC	3
xxxxx	Care, Serve, Learn	CSL	3	ET5214	Financing Entrepreneurial Ventures	BDE	3
			21				19
Year 3 Seme	ester 1			Year 3 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM3xxx ^{&}	CHEM-Core	С	3	CM3xxx ^{&}	CHEM-Core	С	3
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
	Entrepreneurship Elective 1	BDE	3	HW0218	Communication Across the Sciences	PS	2
	Entrepreneurship Elective 2	BDE	4		Entrepreneurship Elective 3	BDE	3
MLxxxx	Profession Preparation BDE 1	PS BDE	1 3		Entrepreneurship Elective 4 BDE 2	BDE BDE	3 2
	BDE 1	BDE	3		DDE Z	BDE	2
			20				19
Year 4 Seme	ester 1			Year 4 Sem	nester 2		
Course		Туре	AU	Course		Туре	AU
CM4076	Overseas Entrepreneurship Programme (6-MONTH)	PS/ BDE			CHEM MPE 1	MPE	3
	OR	DDL	10		CHEM MPE 2	MPE	3
CM4081^	Professional Internship	PS/ BDE			CHEM MPE 3	MPE	3
		BDE			CHEM MPE 4	MPE	3
			10				12
					Total (AU)		133/134*
1					. Juli (AU)		133/134

This study plan is meant as a guide.

^{^10}AU is taken from ICC Foundational Core

^{*}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