

SCHEME OF STUDIES CHEMISTRY

Batch 2021					
FIRST YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2021	CY-113	Inorganic Chemistry-I	3	0	3
	CY-114	Organic Chemistry-I	3	0	3
	CY-118	Industrial Chemistry Lab-I	0	1	1
	HS-104	Functional English	3	0	3
	PH-123	General Physics-I	2	1	3
MT-173	Calculus	3	0	3	
SPRING 2022	CY-120	Analytical Chemistry-I	3	0	3
	CY-117	Physical Chemistry-I	3	0	3
	CY-119	Industrial Chemistry Lab-II	0	1	1
	EE-119	Fundamentals of Electrical Engineering	3	1	4
	CT-158	Fundamental of Information Technology	2	0	2
	HS-105	Pakistan Studies OR			
	HS-127	Pakistan Studies (Foreigners)	2	0	2
	PH-124	General Physics-II	2	1	3
	HS-220	Chinese Language-I OR			
	***HS-231	Turkish Language-I			

* Vide Resolution No.AC-154.4(i)

Batch 2022					
FIRST YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2022	CY-113	Inorganic Chemistry-I	3	0	3
	CY-114	Organic Chemistry-I	3	0	3
	CY-118	Industrial Chemistry Lab-I	0	1	1
	HS-104	Functional English	3	0	3
	PH-123	General Physics-I	2	1	3
***MT-100	Introduction to Mathematics (for Pre-Medical)				
***CT-158	Fundamental of Information Technology	2	0	2	
***HS-105	Pakistan Studies OR				
***HS-127	Pakistan Studies (Foreigners)	2	0	2	
SPRING 2023	CY-120	Analytical Chemistry-I	3	0	3
	CY-117	Physical Chemistry-I	3	0	3
	CY-119	Industrial Chemistry Lab-II	0	1	1
	EE-119	Fundamentals of Electrical Engineering	3	1	4
	***MT-173	Calculus	3	0	3
	PH-124	General Physics-II	2	1	3
	HS-220	Chinese Language-I OR			
	HS-231	Turkish Language-I			
	HS-224	German Language-I			
	HS-226	French Language-I			

* Vide Resolution No.AC-155.6(iii)

Batch 2023					
FIRST YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2023	CY-113	Inorganic Chemistry-I	3	0	3
	CY-114	Organic Chemistry-I	3	0	3
	CY-118	Industrial Chemistry Lab-I	0	1	1
	***EA-104	Functional English	3	0	3
	PH-123	General Physics-I	2	1	3
***MT-100	Introduction to Mathematics (for Pre-Medical)				
***CT-158	Fundamental of Information Technology	2	0	2	
***ES-105	Pakistan Studies OR				
***ES-127	Pakistan Studies (Foreigners)	2	0	2	
SPRING 2024	CY-120	Analytical Chemistry-I	3	0	3
	CY-117	Physical Chemistry-I	3	0	3
	CY-119	Industrial Chemistry Lab-II	0	1	1
	EE-119	Fundamentals of Electrical Engineering	3	1	4
	***MT-173	Calculus	3	0	3
	PH-124	General Physics-II	2	1	3
	HS-220	Chinese Language-I OR			
	HS-231	Turkish Language-I			
	HS-224	German Language-I			
	HS-226	French Language-I			

* Vide Resolution No.AC-155.4(iii)
** Under Section 28(v) Office Order Acad/42(156)16911
*** Under Section 28(v) Office Order Acad/42(156)16909

Batch 2024					
FIRST YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2024	CY-113	Inorganic Chemistry-I	3	0	3
	CY-114	Organic Chemistry-I	3	0	3
	CY-118	Industrial Chemistry Lab-I	0	1	1
	EA-104	Functional English	3	0	3
	PH-123	General Physics-I	2	1	3
MT-100	Introduction to Mathematics (for Pre-Medical)				
CT-153	Programming Languages	2	1	3	
ES-105	Pakistan Studies OR				
ES-127	Pakistan Studies (Foreigners)	2	0	2	
SPRING 2025	CY-120	Analytical Chemistry-I	3	0	3
	CY-117	Physical Chemistry-I	3	0	3
	CY-119	Industrial Chemistry Lab-II	0	1	1
	EE-119	Fundamentals of Electrical Engineering	3	1	4
	MT-115	Calculus and Ordinary Differential Equation	3	0	3
	PH-124	General Physics-II	2	1	3

Changed with new nomenclature vide Resolution No. SYN-210.4(a)

Batch 2025					
FIRST YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2025	CY-113	Inorganic Chemistry-I	3	0	3
	CY-125	Organic Chemistry-I	3	1	4
	EA-128	Functional English-I	3	0	3
	ES-206	Islamic Studies OR			
	ES-209	Ethical Behavior (for Non-Muslim)	2	0	2
ES-108	Ideology and Constitution of Pakistan	2	0	2	
MT-101	Quantitative Reasoning I	3	0	3	
MT-100	Introduction to Mathematics				
SPRING 2026	CY-126	Analytical Chemistry-I	3	1	4
	CY-127	Physical Chemistry-I	3	1	4
	ES-105	Pakistan Studies OR			
	ES-127	Pakistan Studies (Foreigners)	2	0	2
	AF-101	IT Fundamentals and Applications	2	1	3
	MT-102	Quantitative Reasoning-II	3	0	3

Changed with vide Resolution No. AC-168.7(iii)

Batch 2021					
SECOND YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2022	CY-205	Inorganic Chemistry-II	3	0	3
	CY-208	Organic Chemistry-II	3	0	3
	CY-206	Industrial Chemistry Lab-III	0	1	1
	HS-205	Islamic Studies OR	2	0	2
	HS-209	Ethical Behavior (for Non-Muslim)	3	0	3
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3	
MT-331	Probability & Statistics	3	0	3	
CT-153	Programming Languages	2	1	3	
HS-221	Chinese Language-II				
***HS-232	Turkish Language-II				
SPRING 2023	CY-209	Analytical Chemistry-II	3	0	3
	CY-210	Physical Chemistry-II	3	0	3
	CY-207	Industrial Chemistry Lab-IV	0	1	1
	HS-201	Oral Communication	2	1	3
	CH-202	Fluid Mechanics-I	3	1	4
	EL-102	Basic Electronics	3	1	4
	HS-200	Community Service			

* Vide Resolution No.AC-154.4(i)

Batch 2022					
SECOND YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2023	CY-205	Inorganic Chemistry-II	3	0	3
	CY-208	Organic Chemistry-II	3	0	3
	CY-206	Industrial Chemistry Lab-III	0	1	1
	***ES-205	Islamic Studies OR	2	0	2
	***ES-209	Ethical Behavior (for Non-Muslim)	3	0	3
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3	
MT-331	Probability & Statistics	3	0	3	
CT-153	Programming Languages	2	1	3	
***HS-221	Chinese Language-II				
***EA-232	German Language-II				
***EA-225	French Language-II				
***EA-227	French Language-II				
SPRING 2024	CY-209	Analytical Chemistry-II	3	0	3
	CY-210	Physical Chemistry-II	3	0	3
	CY-207	Industrial Chemistry Lab-IV	0	1	1
	HS-201	Oral Communication	2	1	3
	CH-202	Fluid Mechanics-I	3	1	4
	EL-102	Basic Electronics	3	1	4
	***EA-200	Community Service			

** Under Section 28(v) Office Order Acad/42(156)16911
*** Under Section 28(v) Office Order Acad/42(156)16909

Batch 2023					
SECOND YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2024	CY-205	Inorganic Chemistry-II	3	0	3
	CY-208	Organic Chemistry-II	3	0	3
	CY-206	Industrial Chemistry Lab-III	0	1	1
	ES-205	Islamic Studies OR	2	0	2
	ES-209	Ethical Behavior (for Non-Muslim)	3	0	3
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3	
MT-331	Probability & Statistics	3	0	3	
CT-153	Programming Languages	2	1	3	
CY-209	Analytical Chemistry-II	3	0	3	
CY-210	Physical Chemistry-II	3	0	3	
SPRING 2025	CY-207	Industrial Chemistry Lab-IV	0	1	1
	CH-202	Fluid Mechanics-I	3	1	4
	EL-102	Basic Electronics	3	1	4
	EA-200	Community Service			

Batch 2024					
SECOND YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2025	CY-205	Inorganic Chemistry-II	3	0	3
	CY-208	Organic Chemistry-II	3	0	3
	CY-206	Industrial Chemistry Lab-III	0	1	1
	***ES-206	Islamic Studies OR	2	0	2
	ES-209	Ethical Behavior (for Non-Muslim)	3	0	3
CT-262	Introduction to Artificial Intelligence	2	1	3	
MT-331	Probability & Statistics	3	0	3	
***CT-155	Fundamentals of Information Technology	3	0	3	
SPRING 2026	CY-209	Analytical Chemistry-II	3	0	3
	CY-210	Physical Chemistry-II	3	0	3
	CY-207	Industrial Chemistry Lab-IV	0	1	1
	CH-202	Fluid Mechanics-I	3	1	4
	EL-102	Basic Electronics	3	1	4
	EA-200	Community Service			

Changed with new nomenclature vide Resolution No. SYN-210.4(a)
* Changed Vide Resolution No.AC-164.5(vi)
** Changed Vide Resolution No.1st Emergent AC 2025

Batch 2025					
SECOND YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2026	CY-215	Inorganic Chemistry-II	3	1	4
	CY-216	Organic Chemistry-II	3	1	4
	EA-321	Logic and Critical Thinking	2	0	2
	AF-201	Civics and Community Engagement	2	0	2
	CY-218	Principles of Biochemistry	2	1	3
CY-220	Professional Ethics	2	0	2	
SPRING 2027	CY-217	Analytical Chemistry-II	3	1	4
	CY-210	Physical Chemistry-II	3	0	3
	CT-262	Introduction to Artificial Intelligence	2	1	3
	MT-235	Statistics for Chemists	3	0	3
	PH-211	General Physics	2	1	3
	AF-200	Community Service			

Changed with vide Resolution No. AC-168.7(iii)

Batch 2021					
THIRD YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2023	***EA-301	Business & Organizational Communication	3	0	3
	CH-206	Thermodynamics	3	1	4
	CY-312	Spectroscopy	3	0	3
	CY-313	Polymer Science	3	0	3
	CY-305	Industrial Stoichiometry	3	0	3
CY-310	Industrial Chemistry Lab V	0	1	1	
SPRING 2024	CY-404	Separation Techniques	3	0	3
	CY-303	Reaction Kinetics	3	0	3
	CY-308	Unit Processes	3	0	3
	CY-311	Industrial Chemistry Lab VI	0	1	1
	CY-314	Natural Products	3	0	3
	CY-315	Nuclear & Radiation Chemistry	3	0	3
	CH-203	Chemical Process Industries	3	0	3

* Under Section 28(v) Office Order Acad/42(156)16909

Batch 2022					
THIRD YEAR ----- SEMESTER SYSTEM					
Course Code	Course Title	Crds		Hrs	
		Th	Pr	T	
Chemistry					
FALL 2024	EA-301	Business & Organizational Communication	3	0	3
	CH-206	Thermodynamics	3	1	4
	CY-312	Spectroscopy	3	0	3
	CY-313	Polymer Science	3	0	3
	CY-305	Industrial Stoichiometry	3	0	3
CY-310	Industrial Chemistry Lab V	0	1	1	
SPRING 2025	CY-404	Separation Techniques	3	0	3
	CY-303	Reaction Kinetics	3	0	3
	CY-311	Industrial Chemistry Lab VI	0	1	1
	CY-314	Natural Products	3	0	3
	CY-315	Nuclear & Radiation Chemistry	3	0	3
	***CY-316	Chemical Industries	3	0	3

* Changed Vide Resolution No.1st Emergent AC 2025