

BS Environmental Sciences Scheme of Studies for Session 2024

Course No.	Title	Credit Hours	
		Th	Lab
SEMESTER 1			
ES-101	Introduction to Environmental Science	3	0
CY-142	Physical and Analytical Chemistry	2	0
CY-142L	Physical and Analytical Chemistry	0	1
MA-110	Basic Mathematics	3	0
HU-111L	Communication Skills	0	1
ES-109	Basics of Environmental Pollution	2	0
CSC-100	Applications of Information and Communication Technologies	2	0
CSC-100L	Applications of Information and Communication Technologies	0	1
MGT-102	Sociology	3	0
Subtotal		18	
SEMESTER 2			
ES-103	Introduction to Earth Sciences	2	0
ES-103L	Introduction to Earth Sciences	0	1
MA-123	Calculus	3	0
IS-102	Islamic Studies/Ethics	3	0
PHY-113	Applied Physics	2	0
PHY-113L	Applied Physics	0	1
ES-102	Environmental Biochemistry	2	0
ES-102L	Environmental Biochemistry	0	1
QT-101	Translation of Holy Quran-1	1	0
Subtotal		16	
1 st Year Total		34	
SEMESTER 3			
IS-202	Ideology and Constitution of Pakistan	3	0
PHY-211	Environmental Physics	3	0
ES-202	Economic Aspects of Environmental Protection	3	0
CY-221	Inorganic and Organic Chemistry	2	0
CY-221L	Inorganic and Organic Chemistry	0	1
MA-154	Quantitative Reasoning-I	3	0
ES-214	Psychology & Ethics	2	0
QT-201	Translation of Holy Quran-2	1	0
Subtotal		18	
SEMESTER 4			
ES-204	Ecology & Environment	3	0
ES-205	Microbiology and Environment	2	0

Scheme of Studies			
Course No.	Title	Credit Hours	
		Th	Lab
ES-205L	Microbiology and Environment	0	1
ES-206	Environmental Chemistry	2	0
ES-206L	Environmental Chemistry	0	1
HU-212	Civic and Community Engagement	2	0
HU-200	Technical Report Writing	3	0
MA-259	Quantitative Reasoning-II	3	0
	Subtotal	17	
2nd Year Total		35	
SEMESTER 5			
ES-301	Environmental Toxicology	2	0
ES-301L	Environmental Toxicology	0	1
ES-302	Environmental Profile of Pakistan	2	0
ES-304	Analytical Techniques in Environmental Sciences	2	0
ES-304L	Analytical Techniques in Environmental Sciences	0	1
ES-305	Project Planning & Management	3	0
ES-306	Hydrology & Water Pollution	2	0
ES-307	Energy & Environment	2	0
ES-307L	Energy & Environment	0	1
	Subtotal	16	
SEMESTER 6			
CRP-302	GIS and Remote Sensing	2	0
CRP-302L	GIS and Remote Sensing	0	1
ES-309	Environmental Management Systems	2	0
ES-309L	Environmental Management Systems	0	1
ES-310	Biodiversity & Conservation	2	0
ES-310L	Biodiversity & Conservation	0	1
ES-311	Solid Waste Management	2	0
ES-399	Internship*	0	0
QT-301	Translation of Holy Quran-3	1	0
ES-312	Occupational Safety, Health & Environment	2	0
ES-312L	Occupational Safety, Health & Environment	0	1
MGT-349	Entrepreneurship	2	0
	Subtotal	17	
3rd Year Total		33	
SEMESTER 7			
ES-401	Air Pollution	2	0
ES-402	Environmental Impact Assessment	2	0

Revised Scheme of Studies			
Course No.	Title	Credit Hours	
		Th	Lab
ES-402L	Environmental Impact Assessment	0	1
ES-403	Research Methods in Environmental Sciences	3	0
ES-404	Environmental Sampling & Monitoring	2	0
ES-404L	Environmental Sampling & Monitoring	0	1
ES-414	Environmental Nanotechnology	2	0
ES-496A	Final Year Project-I	0	3
QT-401	Translation of Holy Quran-4	1	0
Subtotal		17	
SEMESTER 8			
ES-405	Environmental Governance	2	0
ES-406	Climate Change	3	0
ES-408	Pollution Control Technologies	2	0
ES-409	Natural Resource Management	2	0
ES-413	Urban Environmental Management	2	0
ES-496B	Final Year Project	0	3
HU-003	International Language**	0	0
Subtotal		14	
4 th Year Total		31	
Grand Total		133	

