



TECHNO INDIA UNIVERSITY

W E S T B E N G A L

**Course Structure of 4 years B.Sc. (H) Program
Environmental Science**



Department of Chemistry

**Techno India University, West Bengal
EM-4, EM Block, Sector V, Bidhannagar,
Kolkata -700091, West Bengal**



Curriculum: 4-Year B.Sc. (H) In Environmental Science

(Following NEP 2020 Framework)

SEMESTER I

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T11101	Major 1	Introduction to Environmental Science	3-1-0	4
TIU-UCH-MI-T11101	Minor 1	General Chemistry-I	3-0-0	3
TIU-UCH-MD-T11101	MDC 1	Chemistry in Daily Life	2-1-0	3
TIU-UEN-AEC-S1101	AEC 1	Communicative English - I	2-0-0	2
TIU-UES-CVA-T1101	CVA / VAC 1	Health, Hygiene & Nutrition for Daily Life	2-0-0	2
TIU-UES-MJ-L11101	Major 1 Lab	Introduction to Environment Lab	0-0-4	2
TIU-UCH-MI-L11101	Minor 1 Lab	General Chemistry-I Lab	0-0-2	1
TIU-UES-SEC-T1101	SEC 1	Instrumentation in Environmental Analysis	3-0-0	3
			Total	20



SEMESTER II

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T12101	Major 2	Environmental Ecology	3-1-0	4
TIU-UCH-MI-T12101	Minor 2	General Chemistry-II	3-0-0	3
TIU-UES-MD-T1202	MDC 2	Climate Change & Its Impact on Society	2-1-0	3
TIU-UEN-AEC-S1201	AEC 2	Communicative English - II	2-0-0	2
TIU-UES-SEC-T1201	SEC 2	Water, Soil Quality Analysis and Noise Monitoring	3-0-0	3
TIU-UCH-CVA-T1201	CVA / VAC 2	Artificial Intelligence (AI)	2-0-0	2
TIU-UES-MJ-L12101	Major 2 Lab	Environmental Ecology Lab	0-0-4	2
TIU-UCH-MI-L12101	Minor 2 Lab	General Chemistry-II Lab	0-0-2	1
Total				20



SEMESTER III

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T21201	Major 3	Environmental Chemistry	3-1-0	4
TIU-UES-MI-T21201	Minor 3	Environmental Microbiology	3-1-0	4
TIU-ULIB-MD-T2101	MDC 3	Energy and Environment	3-0-0	3
TIU-UEN-AEC-T2101	AEC 3	Heritage of Modern Indian Languages (Bengali/ Hindi/Sanskrit etc.)	2-0-0	2
TIU-UES-SEC-T2101	SEC 3	Air Quality Monitoring	3-0-0	3
TIU-UES-MJ-L21201	Major 3 Lab	Environmental Chemistry Lab	0-0-4	2
TIU-UES-MI-L21201	Minor 3 Lab	Environmental Microbiology Lab	0-0-4	2
Total				20



SEMESTER IV

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T22201	Major 4	Environmental Biology	3-1-0	4
TIU-UES-MJ-T22202	Major 5	Environmental Toxicology	3-1-0	4
TIU-UES-MI-T22201	Minor 4	Environmental Laws and Compliances	3-1-0	4
TIU-UEN-AEC-S2291A/B	AEC 4	Modern Indian Language - Hindi / Bengali	2-0-0	2
TIU-UWS-CVA-T2201	CVA / VAC 3	Gender Studies & Human Rights	2-0-0	2
TIU-UES-MJ-L22201	Major 4 Lab	Environmental Biology Lab	0-0-4	2
TIU-UES-MJ-L22202	Major 5 Lab	Environmental Toxicology Lab	0-0-4	2
Total				20



TECHNO INDIA UNIVERSITY

W E S T B E N G A L

SEMESTER V

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T31301	Major 6	Environmental Impact and Risk Assessment (EIRA)	3-1-0	4
TIU-UES-MJ-T31302	Major 7	Waste Management	3-1-0	4
TIU-UES-MI-T31203	Minor 5	Disaster Management	3-1-0	4
TIU-UES-MJ-L31302	Major 6 Lab	Environmental Impact and Risk Assessment (Case Studies & EIRA Report)	0-0-4	2
TIU-UES-MJ-L31351	Major 7 Lab	Waste Management Lab	0-0-4	2
TIU-UES-SEC-I3101	SEC 4	Internship	0-0-8	4
Total				20



TECHNO INDIA UNIVERSITY

W E S T B E N G A L

SEMESTER VI

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T32301	Major 8	Climate Change (Policy, Modeling and Interpretation)	3-1-0	4
TIU-UES-MJ-T32302	Major 9	Statistics and Data Analysis	3-1-0	4
TIU-UES-MJ-T32303	Major 10	Green Chemistry	3-1-0	4
TIU-UES-MI-T32201	Minor 6	Environmental Audit and Management	3-1-0	4
TIU-UES-MJ-L32301	Major 8 Lab	Climate Change (Policy, Modeling and Interpretation) Lab	0-0-4	2
TIU-UES-MJ-L32302	Major 9 Lab	Statistics and Data Analysis Lab	0-0-4	2
Total				20



TECHNO INDIA UNIVERSITY

W E S T B E N G A L

SEMESTER VII

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T41401	Major 11	Environmental Biotechnology	3-1-0	4
TIU-UES-MJ-T41402	Major 12	Environmental Economics	3-1-0	4
TIU-UES-MI-T41301	Minor 7	Intellectual Property Rights (IPR) & Research Ethics	3-1-0	4
TIU-UES-MJ-L41401	Major 11 Lab	Environmental Biotechnology Lab	0-0-4	2
TIU-UES-MJ-L41402	Major 12 Lab	Environmental Economics (Case Study & Project)	0-0-4	2
TIU-UES-SEC-P4101	Project	Project (Phase I: Literature Review, Proposal & Methodology)	0-0-8	4
			Total	20



SEMESTER VIII (With Research)

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T42401	Major 13	Environmental Documentation and Research Methodology	3-1-0	4
TIU-UES-MJ-T42402	Major 14	Industrial and Occupational Health Safety	3-1-0	4
TIU-UES-MI-T42301	Minor 8	Environmental Biochemistry	3-1-0	4
TIU-UES-SEC-P4201	Research Project	Research Project (Phase II: Execution, Thesis Writing & Viva Voce)	0-0-16	8
Total				20



SEMESTER VIII (Without Research)

Course Code	Course Type	Course Title	Contact Hrs./Week (L-T-P)	Credit
TIU-UES-MJ-T42401	Major 13	Environmental Documentation and Research Methodology	3-1-0	4
TIU-UES-MJ-T42402	Major 14	Industrial and Occupational Health Safety	3-1-0	4
TIU-UES-MI-T42301	Minor 8	Environmental Biochemistry	3-1-0	4
TIU-UES-MJ-T42403	Minor 9	Environment and Marine Ecology	3-1-0	4
TIU-UES-MJ-L42401	Major 13 Lab	Environmental Documentation and Research Methodology	0-0-4	2
TIU-UES-MJ-L42402	Major 14 Lab	Industrial and Occupational Health Safety	0-0-4	2
Total				20