

**Department of Environmental Science
School of Environmental Science and Management
Independent University, Bangladesh**

Requirement for Graduation from SESM 123 - 125 Credits

1. Foundation Courses (University requirement) 39-41 Credit

These courses are designed to provide minimum enabling skills for higher studies for students entering the university from different backgrounds. Some of these courses are classified as remedial and therefore carry no university credit. Exemptions are allowed from particular courses on proof of consequences. The foundation courses are:

A. Communication Skills	9 Credits (3 courses)
ENG 101: Listening and Speaking Skills	3
ENG 102: English Reading Skills	3
ENG 105*: Business English	3
ENG106: Advanced English Skills	3
ENG 201: Introduction to English Literature	3
*Prerequisite ENG 101 & ENG 102 Note: students not exempted from ENG 101 and ENG 102 will have to take ENG 101,ENG 102 and ENG 105. Note: students exempted from ENG 101 and ENG 102 will have to take ENG 105, ENG 106,ENG 201	
B. Computer Skills	3 credits
CIS 101*: Fundamentals of Computer System	
CSC 101**: Introduction to Computer Science	
* For students without basic knowledge of computer. ** For students with basic knowledge of computer and mandatory for students with Major in CSC and CIS.	
C. Numeracy	6 credits
MAT 100*: Basic University Mathematics I	3
MAT 210*: Basic University Mathematics II	3
*MAT 100 and MAT 210 mandatory for SLASS Majors (English, Media & Communication, Anthropology) other than Sociology	
MAT 102 [§] : Introduction to Linear Algebra & Calculus	3
MAT 212 [§] : Probability & Statistics for Sc. & Engr.	3
§ MAT 102 and MAT 212 is mandatory for students with major in Engineering and Computer Science ** MAT 102 and MAT 212 supercedes the requirements of MAT101 and MAT211	

D. Natural Science		6-8 Credits
CHE101*: Concepts in Chemistry		3
CHE101*: Concepts in Chemistry Lab		1
PHY101**: University Physics- I		3
PHY101**: University Physics- I I- Lab		1
PHY 102** University Physics –II		
PHY 102L** University Physics –II Lab		1
BIO 102: Biology and Society		3
BIO 102T : Biology and Society Tutorial		1
CHE 102: Chemistry and Society		3
ENV101: Introduction to Environmental Science		3
ENV 102: Physical Geography		3
ENV 102: Physical Geography Tutorial		1
ENV 104: Introduction to Global Climate Change		3
PSY 201: Principles of Psychology		3
* Mandatory for the students with Major in SESM **Mandatory for the students with Major in CSC & CIS		
E. Social Science		6 Credits
ANT 101: Introduction to Anthropology		3
SOC 101: Introduction to Sociology		3
HEA 101: Health and Society		3
ECN 200: Introduction to Economics		3
CMN 201: Introduction to Communication		3
SOC 202: Social Psychology		3
SOC 301: Social Science Research Method		3
SOC 310: Sociology of Organization		3
F. Humanities		6 Credits
NCH 101: National Culture and Heritage-I	Any of these three is mandatory	3
BLA 101: Bangla Literature & Art		3
BPH 101: Bangladesh Political History		3
BNG 201: Bangla Literature		3
HST 103 History and Civilization		3
AAT 101: Art and Aesthetics		3
MUS 101: Music Appreciation		3
FRN 101: Elementary French I		3
PHL 101: Introduction to Philosophy		
PHL 206: Philosophy of Religion		
Note: Students must take one of the following NCH101, BPH101 and BLA101 and any other course from the Humanities category to fulfill the requirements of taking 6 credits.		
G. Live-in Field Experience		
LFE 201: Live-in Field Experience		3

2. Core Courses		36 Credits
Course	Credits	
ENV 201: Environmental Chemistry with Lab	4	
ENV 202: Environmental Biology with Lab	4	
ENV 205: Energy and Environment	3	
ENV 212: Environmental Geography	3	
ENV 302: Geographic Information System with Lab	4	
ENV 316: Environmental Management System (EMS)	3	
ENV 325: Solid Waste Management	3	
ENV 401: Environmental Impact Assessment (EIA)	3	
ENV 403: Environmental Toxicology	3	
ENV 410: Environmental Law	3	
ENV 415: Global Climate Change and its Impacts	3	

3. Major Requirement for Environmental Science

3.1 Compulsory

21 credits

Course	Credits
ENV 203: Application of Chemistry for Understanding Environmental Phenomena	3
ENV 204: Principles of Sustainable Development	3
ENV 216: Water Pollution and its Remediation	3
ENV 301: Environmental Economics	3
ENV 315: Air pollution and Control	3
ENV 347: Green Environment	3
ENV 445: Methods of Environmental Analysis	3

3.2 Optional

3 credits

Courses	Credits
ENV 220: Introduction to Aquatic Science	3
ENV 304: Environmental Microbiology	3
ENV 307: Natural Hazards and Disaster Management	3
ENV 314: Sustainable Natural Resources	3
ENV 360: Environmental Modeling	3
ENV 380: Principles of Environmental Engineering	3
ENV 406: Environmental Information Systems	3
ENV 409: Wastewater Management	3
ENV 450: Environmental Biotechnology	3

3.3 Senior Project and Internship

9 credits

Courses	Credits
ENV 498: Senior Project	6
ENV 499: Internship	3