

Scholarships

- Each semester GPA merit based full tuition fee waiver scholarships per 30 students intake capacity
- Need and merit based partial tuition fee waiver scholarships as per KU provision.
- Loan Scholarship



Admission Eligibility

Must have taken PCM (Physics, Chemistry, and Mathematics) in both XI and XII. Minimum grade of C individually in all courses.

OR,

If the student has been evaluated in a percentage system, a minimum 50% in aggregate of PCM.

Cost of Program

Total cost of the four-year program for 2021 intake is NRs. 800,000.



Faculty

Prof. Dr. Subodh Sharma (Registrar - KU)
Prof. Dr. Bibhuti Ranjan Jha
Dr. Rijan Bhakta Kayastha (Head of the Department)
Dr. Bed Mani Dahal
Dr. Kumud Raj Kafle
Mrs. Sabita Aryal Khanna
Mr. Sandeep Shrestha
Dr. Rabindra Pokhrel
Dr. Smriti Gurung
Dr. Kundan Lal Shrestha
Dr. Bikash Adhikari
Dr. Nani Raut
Dr. Anish Ghimire (Coordinator - Environmental Engineering)
Er. Subodh Luitel

Teaching Assistants

Ms. Shreeya Manandhar
Er. Shreesha Bhattarai

Office Staff

Mr. Sambhu Raya

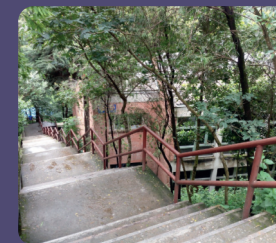


Department of Environmental Science and Engineering

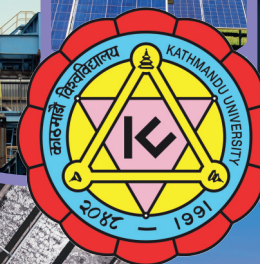
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B. Tech. in Environmental Engineering



2021



Department of Environmental Science and Engineering

<http://ese.ku.edu.np>

Program

Kathmandu University (KU) was established by the act of parliament of Nepal in November 1991, as an autonomous, not-for-profit, non-government institution dedicated to maintaining high standards of academic excellence.

The Bachelor of Technology in Environmental Engineering program, the first such program in Nepal, was launched by KU in August 2005 and has already successfully produced more than 200 graduates, who are recognized and registered as Environmental Engineers by Nepal Engineering Council.

The sustainable development of any country needs to recognize the intimate and intricate relationship between the human activities and the environment. With the rise in haphazard development processes, we risk irrecoverable damage to our environment through urgent and pervasive problems like pollution and impact of the built environment on our ecosystem. Hence, this program aims to equip the students with a sound knowledge-base of technical and environmental engineering principles to assess, reduce and eliminate the environmental problems by striving for a sustainable environment.



Code	Course	Cr.	Code	Course	Cr.
Year I Semester I			Year III Semester I		
MATH 101	Calculus & Linear Algebra	3	ESEE 301	Meteorology & Climate Studies	3
COMP 102	Computer Programming	3	ENVE 301	Engineering Geology	3
PHYS 101	General Physics I	3	ESEE 302	GIS and Remote Sensing	1
CHEM 101	General Chemistry	3	ESEE 341	GIS & Remote Sensing lab	2
ENGG 101	Engineering Project Preparation and Workshop Practice	2	MEEG 306	Heat Transfer	3
EDRG 101	Engineering Drawing I	2	ENVE 302	Water Supply Engineering	3
ENGG 111	Elements of Engineering I	3	ENVE 341	Water Supply Engineering Practical	1
		19	ESEE 303	Environmental Sociology & Human Ecology	3
			ESEE 351	Environmental Data Analysis Project	2
					21
Year I Semester II			Year III Semester II		
MATH 104	Advanced Calculus	3	ENVE 303	Air and Noise Pollution Control Engineering	3
COMP 116	Object Oriented Programming	3	ENVE 342	Air and Noise Pollution Practical	1
PHYS 102	General Physics II	3	ESEE 307	Applied Hydrology	3
ENGT 105	Technical Communication	3	ESEE 342	Hydrology Practical	1
ENGG 102	Engineering Project	2	ESEE 309	Energy Resource Engineering	3
EDRG 102	Engineering Drawing II	2	ENVE 304	Wastewater and Sanitary Engineering	3
ENVE 101	Introduction to Environmental Engineering	2	ENVE 341	Wastewater and Sanitary Engineering Practical	1
ENGG 112	Elements of Engineering II	3	MGTS 301	Engineering Economics	3
		21	ESEE 310	Environmental Survey	3
					21
Year II Semester I			Year IV Semester I		
MATH 207	Differential Equations and Complex Variables	4	ENVE 451	Environmental Engineering Design	4
MEEG 216	Engineering Mechanics	3	ESEE 401	Solid Waste Engineering	3
CHEM 215	Analytical Chemistry	3	ESEE 402	Environmental Impact Assessment	2
CHEM 216	Analytical Chemistry Laboratory	1	ESEE 451	Environmental Impact Assessment Project	1
ENVE 204	Chemical Process Calculation	3	ESEE 403	Environmental Modeling	3
MEEG 218	Fluid Mechanics	3	MGTS 402	Engineering Entrepreneurship Development	3
ENVS 201	Fundamentals of Ecology	2	ESEE 452	Environmental Research Methods	2
ENVS 241	Ecology Practical	1	***	Elective	3
		20			21
Year II Semester II			Year IV Semester II		
MCSC 202	Numerical Methods	3	ESEE 453	Final Year Project	6
ENVE 205	Mechanics of Materials	3	ESEE 454	Internship	1
MATH 208	Statistics & Probability	3			
CIEG 201	Construction Materials & Technology	3			
MEEG 207	Engineering Thermodynamics	3			
BIOL 207	Microbiology	2			
BIOL 208	Microbiology Lab	1			
		18			7
Total Credits of 4 years: 148					
Electives					
ESEE 305	Environmental Hazards & Disaster Preparedness	3	ENVS 203	Forest Environment	3
ESEE 304	Environmental and Occupational Health	3	ENVE 431	Hydropower Engineering	3
ESEE 201	Environmental Laws and Policies	2	ESEE 405	Integrated Watershed Management	3
ESEE 431	Faecal Sludge Management	3	ESEE 432	Landscape & Bioengineering	3
ENVE 455	Sewerage and Pumping System Design	3	ENVS 204	Soil Science	3
ESEE 410	Hazardous Waste Engineering	3	ESEE 306	Urbanization and Sustainable Development	3

