



## SPECIALIST CERTIFICATIONS

- Technologies for Environmental Sustainability
- Environmental Impact Assessment and Risk Management
- Environmental Management
- Conservation and Environmental Health

SCHOOL OF ENGINEERING



# ENVIRONMENTAL ENGINEERING

The Environmental Engineering Undergraduate Program prepares well-rounded professionals capable of leading environmental and cultural transformation. Their theoretical and practical training enables graduates to understand the interactions between productive activities and the environment and to develop sound, innovative solutions for designing and implementing engineering systems that support sustainable processes.

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	LEVEL 9	LEVEL 10
LANGUAGE AND COMMUNICATION I 4	LANGUAGE AND COMMUNICATION II 3	APPLIED ARTIFICIAL INTELLIGENCE * 3	PRINCIPLES OF SUSTAINABLE ENGINEERING 3	APPLIED STATISTICS 4	SUSTAINABLE WASTE MANAGEMENT 3	ENVIRONMENT AND SOCIETY 3	ENVIRONMENTAL IMPACT ASSESSMENT 3	ENVIRONMENTAL ECOTOXICOLOGY 3	APPLIED ENGINEERING PROJECT II 4
PSYCHOLOGICAL PROCESSES 3	APPLIED PHILOSOPHY 3	GEOGRAPHIC INFORMATION SYSTEMS 3	STATISTICS AND PROBABILITY * 4	ENVIRONMENTAL LAW AND LEGISLATION 3	COSTING OF ENVIRONMENTAL PROJECTS 3	NATURAL RESOURCES AND ECOSYSTEMS 3	HYDROLOGY 4	APPLIED ENGINEERING PROJECT I 4	ENVIRONMENTAL RESTORATION AND COMPENSATION 3
CIVIC ETHICS 2	FUNDAMENTALS OF ECONOMICS 3	FUNDAMENTALS OF PROGRAMMING * 3	ENVIRONMENTAL BIOLOGY 4	CLIMATE CHANGE 3	CONTROL TECHNIQUES FOR AIR POLLUTION 4	CONTROL TECHNIQUES FOR WATER POLLUTION 4	CONTROL TECHNIQUES FOR SOIL POLLUTION 4	SUSTAINABLE PROJECT FORMULATION AND DESIGN 3	PROJECT MANAGEMENT * 3
INTRODUCTION TO ENGINEERING 3	INTRODUCTION TO INTERNATIONAL TRADE 3	PHYSICS I * 5	PHYSICS II * 5	THERMODYNAMICS 3	RENEWABLE ENERGY 3	ETHICS AND SOCIAL RESPONSIBILITY 3	BUSINESS INTELLIGENCE * 3	ELECTIVE 3	ELECTIVE 3
RESEARCH METHODOLOGIES 3	LINEAR ALGEBRA 3	GENERAL CHEMISTRY * 4	ENVIRONMENTAL CHEMISTRY 4	SOIL SCIENCE 3	FLUID MECHANICS 3	INTEGRATED MANAGEMENT SYSTEMS * 3	ENERGY RESOURCE MANAGEMENT 3	ELECTIVE 3	ELECTIVE 3
PRECALCULUS 5	CALCULUS I 5	CALCULUS II * 5	CALCULUS III 3	INSTRUMENTAL ANALYSIS TECHNIQUES 4	ENVIRONMENTAL MICROBIOLOGY 3	ENVIRONMENTAL ECONOMICS 3	ELECTIVE 3	MANDATORY CREDITS 10	MANDATORY CREDITS 10
MANDATORY CREDITS 20	MANDATORY CREDITS 20	MANDATORY CREDITS 23	MANDATORY CREDITS 23	MANDATORY CREDITS 20	ELECTIVE 3	ELECTIVE 3	ELECTIVE 3		
					MANDATORY CREDITS 19	MANDATORY CREDITS 19	MANDATORY CREDITS 17		

Elective Subjects:

ECOSYSTEM SERVICES 3	LIFE CYCLE ANALYSIS 3	RISK ASSESSMENT AND HAZARDOUS CHEMICAL MANAGEMENT 3	PREVENTION AND NEGOTIATION OF ENVIRONMENTAL CONFLICTS 3	ENVIRONMENTAL BIOTECHNOLOGY 3	ENVIRONMENTAL SYSTEM MODELING AND SIMULATION 3	OCCUPATIONAL SAFETY, HEALTH, AND ORGANIZATIONAL WELL-BEING * 3
ECOLOGY 3	SOLAR PHOTOVOLTAIC TECHNOLOGY 3	ENVIRONMENTAL DETERIORATION AND HUMAN HEALTH 3	ENVIRONMENTAL RISK MANAGEMENT 3	DESIGN AND PROTOTYPE * 3	BIOREMEDIATION TECHNOLOGY 3	
CIRCULAR ECONOMY 3	INDOOR AIR QUALITY 3	GREEN LOGISTICS AND SUSTAINABLE SUPPLY CHAIN 3	BUSINESS STRATEGIES FOR DECARBONIZATION 3	IOT APPLICATIONS FOR ENVIRONMENTAL SUSTAINABILITY 3	CONTAMINATED SITE MANAGEMENT 3	

To choose these subjects, it is necessary to meet the requirements set out in this curriculum.

Mandatory subjects of the General Studies Program

Mandatory subjects of the Environmental Engineering Undergraduate Program

Elective subjects of the Environmental Engineering Undergraduate Program

Subjects in common among undergraduate programs of the School \*\*



CREDIT SUMMARY	CREDITS	TYPE OF CREDIT
General Studies	40	Mandatory
School	141	Mandatory
Total Elective Subjects	24	Elective
Total Credits	205	

\*\*The School of Engineering comprises the Civil Engineering, Industrial Engineering, Systems Engineering, Mechatronics Engineering, and Environmental Engineering undergraduate programs.

Subject to curricular change.