7- ENVIRONMENTAL ENGINEERING PROGRAM

ARTICLE 67

INTRODUCTION

This program is offered by the Department of Environmental Engineering (ENV), School of Energy, Environment, and Chemicals and Petrochemicals Engineering. The Department of Environmental Engineering presents wide range of knowledge on environmental engineering applications, deep understanding for theories of design and code of practice, which is applied in the fields of degradation in natural resources, water supply systems, integrated wastewater treatment, solid waste management and air quality. Through the graduate program, students will be acquainted with environmental surveying, recognizing sources of pollution, identifying low cost technologies and principles of sustainable developments both on national and international levels. Moreover, students will significantly increase their background on environmental laws and regulations, environmental assessment methodology and integrated Environmental Management Systems (EMS) process and techniques.

ARTICLE 68

VISION OF ENV DEPARTMENT

The vision for the Department of Environmental Engineering is to achieve Environmental Sustainable Development and to be a unique regional program with latest innovative technologies in the field of Environmental Engineering; and to utilize the available natural resources integrated with the green environmental requirements.

ARTICLE 69

MISSION OF ENV DEPARTMENT

The mission of Department of Environmental Engineering is to prepare students well acquainted with the basics of theoretical and practical knowledge of environmental requirements, and also to be acquainted with the research tools and professional skills to tackle the current environmental problems. This includes undertaking research topics in the fields of limited natural resources, waste, and Air quality. Water Resources Management, Wastewater Recycling, Solid Waste Reuse, and Air pollution monitoring and assessment technologies to create new investment opportunities.

ARTICLE 70

ENV PROGRAM OBJECTIVES

1. To prepare graduates able to interact with the community towards better environmental conditions.
2. To prepare creative graduate to design and apply Environmental Impact Assessment (EIA) studies.
3. To prepare graduates able to be Environmental Engineering professional for addressing sustainability and Pollution Prevention Programs.
4. To select appropriate and develop advanced technological designs that serve water and wastewater treatment plants.
5. To prepare graduates be able to apply latest technology for the improvement of life quality concerning natural resources and sustainability.
6. To establish strong integrated teamwork skills and effective cooperation with different national and international universities, research institutes , centers, and industrial sector.
7. To give an equal opportunity for students from all countries to enroll to the environmental engineering programs.
8. To develop integrated teamwork skills interacting with other members from different EJUST programs (Interdisciplinary research work).

ARTICLE 71

PROGRAM COURSES

Course Code	Course Name	Credit Hours
Compulsory Courses		
ENV 501	Environmental Management System	3
ENV 502	Principles of Environmental Engineering	3
Level 500 Elective Courses		
ENV 503	Water Quality and Treatment	3
ENV 504	Advanced Water supply Engineering	3

Course Code	Course Name	Credit Hours
ENV 505	Ground Water Engineering and Management	3
ENV 506	Advanced Wastewater Treatment	3
ENV 507	Air Pollution and Control Technology	3
ENV 508	Environmental Pollution and Control Engineering	3
ENV 509	Solid Waste Management	3
ENV 510	Global Environment	3
ENV 511	Water Resources Management	3
ENV 512	Transport Phenomena	3
Level 600 Courses		
ENV 601	Seawater and Brackish Water Desalination	3
ENV 602	Environmental Economics	3
ENV 603	Hazardous Waste Management	3
ENV 604	Environmental Processes and Systems	3
ENV 605	Life Cycle Assessment	3
ENV 606	Risk and Hazard Management in Environment and Energy	3
ENV 607	Environmental Performance Measures and Indices	3
ENV 608	Industrial Waste Treatment	3
Project-based learning/Advance Research Seminar Courses		
ENV 701	Project Based Learning on Environmental Engineering	3
ENV 702	Advanced Research Seminar on Environmental Engineering	3
ENV 703	Research Seminar on Recent Topics Environmental Engineering	3