# DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING





# DEPARTMENT OF **ENERGY** ENGINEERING

# **OUR LABS**

- Electrical Circuits Lab
- Electrical Machines Lab
- Highway Lab
- Geotechnical Engineering Lab
- Water and Waste Water Treatment Engineering Lab 🧇 Surveying Lab
- Water Chemistry lab
- Electric Drives Lab
- Power System Protection Lab
- Renewable Energy Lab
- Energy Lab

- Modelling and Simulation Lab
- Power Electronics Lab
- Hydraulics Lab
- Air Pollution Control Lab
- Engineering Geology Lab
- Power System Intergation Lab
- Building Materials Lab
- Energy Efficiency Lab

## **OUR FEATURES**

- State of the Art Laboratories and Workshops.
- Academic Programs Addressing of All Energy, Water, and Environment Challenges in Jordan and the Region.
- Interlinking Theory with Practice at all Stages of Learning Process.
- Applied Research in the Area of Energy, Water, and Environment Solutions.
- Highly Competitive Entrance Exam for Applicants to the Bachelor Programs.
- Applied Research in the Area of Energy, Water, and Environment Solutions, Environment Solutions.
- Strong Linkages with Many Industrial Partners in the Area of Renewable Energy, Water, and Environment.
- Green Technology Solutions for Campus.
- Market Ready Graduates.

School of Natural Resources Engineering and Management كلية هندسة الموارد الطبيعية وإدارتها

GERMAN JORDANIAN UNIVERSITY

## BACHELOR PROGRAMS

#### DEPARTMENT OF ENERGY ENGINEERING

- >> Renewable Energy Engineering 18oCH
- » Electrical Power Engineering 18oCH

#### DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

- Civil Engineering 18oCH
- >> Water And Environmental Engineering 18oCH

#### MASTER PROGRAMS

- >> Environmental and Renewable Energy Engineering 34CH
- » Humanitarian Water, Sanitation and Hygiene (WaSH) 36CH



#### RENEWABLE ENERGY ENGINEERING

# **Job Opportunities**

- » Project Engineer
- >> Energy Systems Engineer
- » Green Building Engineer

- > HVAC Engineer
- » Measurement and Verification Engineer
- >> Photovoltaic Power Systems Engineer

Solar Energy, Renewable Energy Lab, Energy Efficiency, Management and Laws, Modeling and Simulation Techniques of Energy Systems, Wind Energy Technology, PV Technology,

#### ELECTRICAL POWER ENGINEERING

## **Job Opportunities**

- Power Systems Engineer
- » Power Transmission Engineer
- Power Generation Engineer
- » Power Distribution Engineer
- » Protection Engineer
- » Automation Engineer
- >> Smart Grid Engineer
- » Plant Engineer

#### **Core Courses**

Digital electronics, Communication Systems and Networking, Smart-Grid Power Systems, Real Time Computer Control Systems, Electric Drives, Power Systems

### CIVIL ENGINEERING

# **Job Opportunities**

- Structural Design Engineer
- » Site Engineer
- » Highway Engineer

**Core Courses** 

- » Quality Control Engineer
- >> Construction and management Engineer
- Construction Materials and Soil Lab Engineer

Materials, Reinforced Concrete, Steel Structures, (Contracts,

General Chemistry II, Fluid Mechanics, Mechanics of Materials, Dynamics and Vibration,

Specifications and Quantity Surveying), Engineering Projects & Construction Management,

Surveying, Highway and Traffic Engineering, Pavement Design, Transportation Engineering,

German V, German VI, Statics, Structural analysis (1), Structural Analysis (2), Building

Engineering Geology, Geotechnical Engineering, Foundation Engineering, Hydrology,

Hydraulics, Water and Wastewater Treatment Engineering, Environmental Engineering

- » Geotechnical Engineer
- » Traffic Engineer
- Bridge Engineer
- Surveying Engineer
- Steel Construction Engineer

# » Wastewater Engineer

» Water Treatment Engineer

**Job Opportunities** 

» Water hygiene Engineer

Water resources Engineer

# **Core Courses**

Water Engineer

General Chemistry II, Fluid Mechanics, Mechanics of Materials, Dynamics and Vibration, German V, German VI, Statics, Structural analysis (1), Building Materials, Reinforced Concrete (1), Steel Structures, (Contracts, Specifications and Quantity Surveying), Engineering Projects & Construction Management, Hydraulics, Hydrology, Water Chemistry, Environmental Impact Assessment, Water and Wastewater Treatment Engineering, Water Resources Engineering, Solid Waste Management, Air Pollution Control, Surveying, Highway Engineering, Pavement Design, Engineering Geology, Foundation Engineering, Geotechnical Engineering

WATER AND ENVIRONMENTAL ENGINEERING

>> Water/Wastewater Plants Design Engineer

- » Drinking Water & Reuse Engineer
- >> Environmental Engineer
- Water Purification Engineer