

# **1- About the programme**

## **Programme Aim**

- a. Preparing the specialized scientific and professional competencies necessary to work in scientific, research and scientific journals in the field of electrical engineering / Electrical power engineering techniques needed by the Ministry of Higher Education and Scientific Research, the Ministry of Electricity, the Ministry of Oil, the private sector and other related departments.
- b. Developing the capabilities of students and encouraging scientific research and directing it to serve the industrial, service and academic sectors and stimulating the movement of research and publication in international scientific journals.

## **Mode and Duration of Study**

The higher diploma program extends over one academic year consisting of two semesters and a graduation project of 30 academic units.

Academic courses are offered on a standard basis that allows students to focus on the subspecialty areas of electrical power engineering techniques. There are 11 subjects per academic year and each subject lasts from ten to twelve weeks, including the week of exams.

Higher diploma students take two-semester courses, and one selective subject for each semester.

## **Medium and Course Assessment**

The higher diploma program is taught in English.

Students attend and take courses both on campus and online to help students understand advanced concepts of electrical power engineering techniques. The evaluation of each course includes assignments and mid- and late-term exams and a graduation project. Higher diploma students are required to successfully complete eleven subjects (24 units). Students who fail in one or more subjects are required to take a second round test. An attendance rate of 70% is required for all courses, and failure to meet this requirement will lead to a failure rate in the course stage.

# **2- Curriculum Structure**

Total units required: 30

24 course units

13 units for the first course

11 units for the second course

6 units for the graduation project

### 3- Courses

#### First course

Subject	Credit no.
Power system analysis	3
Advanced Control Theory	2
Advanced Electrical Machine Theory	2
*Selective topic	2
Engineering and Numerical Analysis	2
English	2

#### Second course

Subject	Credit no.
Protection System	3
Advanced Power Electronics	2
Renewable Energy	2
Microprocessor and microcontroller	2
*Selective topic	2
Project	6