

Faculty laboratories

• **Electrical Engineering Department Laboratories**

1. Preparatory Year PC Lab

It is located in the ground floor of the Electrical Engineering Department building (a). It serves preparatory year students in term of training them on computer applications. The computer lab has many network-access points.

2. Communication and Electronic Section PC Lab

It is located in the 1st floor of the Electrical Engineering Department building (a). It serves third-year and fourth-year students in the communication and electronic section with an average working hours of 10 hours a day. It has 10 network-access points.

3. Power and Machines Section PC Lab

It is located in the 1st floor of the Electrical Engineering Department building (a). It serves third-year and fourth-year students in the power and machines section with an average working hours of 10 hours a day. It has 10 network-access points.

4. Computer Engineering Section PC Lab

It is located in the 1st floor of the Electrical Engineering Department building (a). It serves third-year and fourth-year students in the computer engineering section with an average working hours of 10 hours a day. It has 5 network-access points.

5. Computer Services Room

It is the latest establishment in the electrical engineering department to provide services to all students in the department including: internet access, printing, and scanning. It is divided into two rooms. First room has 8 computers, 2 laser machines, 1 scanner, and 8 internet-access points. Second room has 5 computers, 1 laser machine, and 5 internet-access points.

6. Research Lab

It is located in the 2nd floor of the Electrical Engineering Department building (b). It serves faculty members in the department. It has PCs, 1 laser printer, 1 Scanner, and 2 projectors.

7. Power and Machines Labs

It is located in the ground floor of the electrical engineering department building (a). It has 10 specialized labs in addition to electricity generation room as well as a storage room for the department. The specialized labs serve undergraduate students and faculty members in the department as well as students in the mechanical engineering department. These labs include the following:

- a. DC Machinery Lab
- b. Induction Motors Lab
- c. Electric Power Systems Research Lab
- d. AC Machinery Lab
- e. Protection Systems and Transmission Lines Lab
- f. High Voltage Lab
- g. Industrial Electronics and Control Lab
- h. inear Motors Lab

8. Signal Processing Lab: 3rd floor building (a)

It serves third-year students in the communication and electronic section with an average working hours of 4-8 hours a day to implement, test experiments and for fourth-year project. It has one network-access points, air conditioned.

9. Communication Lab: 3rd floor building (a)

It serves fourth-year students in the communication and electronic section with an average working hours of 4-8 hours a day to implement, test experiments and for fourth-year project. It has one network-access points, air conditioned.

10. Microwave Lab: 3rd floor building (a)

It serves third-year students in the communication and electronic section with an average working hours of 4-8 hours a day to implement, test experiments and for fourth-year project. It has one network-access points, one wireless serves all 3rd floor, air conditioned.

11. Control Lab: 3rd floor building (a)

It serves third-year and fourth-year students in the computer Engineering section with an average working hours of 4-8 hours a day to implement, test experiments and for fourth-year project. It has one network-access points, air conditioned.

12. Electronics Lab (A): 4th floor building (a)

It serves first-year and second-year students in the electrical department with an average working hours of 4-8 hours a day to implement and test experiments. It has one network-access points, one wireless serves all 4th floor, air conditioned.

13. Electronics Lab (B): 4th floor building (a)

It serves first-year and second-year students in the electrical department with an average working hours of 4-8 hours a day to implement and test experiments. It has one network-access points, air conditioned .

14. Television and Laser Lab: 4th floor building (a)

It serves third-year and fourth-year students in the communication and electronic section with an average working hours of 4-8 hours a day to implement, test experiments and for fourth-year project. It has one network-access points, air conditioned.

15. Logic Circuits Lab: 4th floor building (a)

It serves second year students in the electrical department with an average working hours of 4-8 hours a day to implement and test experiments.

- **Civil Engineering Department Laboratories**

- 1- [Highway and Airport Engineering Laboratory.](#)

The lab has a great experience in conducting a wide range of laboratory tests and field surveys to investigate existing highway and airport pavement condition (including surface, base course and subgrade layers) and suggest proper maintenance and rehabilitation strategies.

The lab serves the following:

The third-year and the fourth-year civil engineering students with a rate of 2 hours/week for each. The Engineering Studies and Consultant Center, daily from 8:00am to 2:00pm.

Scientific research for faculty members, daily from 8:00am to 2:00pm.

- 2- [Water Facilities and Hydraulics Laboratory](#)

The lab conducts all Irrigation and Hydraulics tests in the department. In addition, the lab carries out many studies related to the modeling of water structures as well as identifying their hydraulics and structural characteristics.

The lab serves the following:

- * The Engineering Studies and Consultant Center, daily from 8:00am to 2:00pm.

- * Scientific research for faculty members, daily from 8:00am to 2:00pm.

3- Soil Mechanics and Foundations Laboratory

The lab conducts appropriate tests for examining the soil by means of soil mechanics qualified staff and technicians besides preparing the required technical reports.

The lab serves the following:

- * The second-year and the third-year civil engineering students with a rate of 2 hours/week for each group.
- * The Engineering Studies and Consultant Center, daily from 8:00am to 2:00pm.
- * Scientific research for faculty members, daily from 8:00am to 2:00pm.

4- Concrete and Materials Testing Laboratory

The lab conducts all necessary tests for construction materials such as: cement, gravel, sand, brick and steel. The lab serves the following:

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- * The first-year and the second- year civil engineering students with a rate of 2 hours/week for each group.
- * The first-year mechanical engineering students with a rate of 1 hours/week.
- * The second- year architectural engineering students with a rate of 2 hours/week.
- * The Engineering Studies and Consultant Center, daily from 8:00am to 2:00pm.
- * Scientific research for faculty members, daily from 8:00am to 2:00pm.

5- Sanitary Engineering Laboratory

The lab conducts all necessary sewage treatment tests and various sanitary works.

The lab serves the following:

- * The third-year and the fourth-year civil engineering students with a rate of 2 hours/week for each.
- * Scientific research for faculty members, daily from 8:00am to 2:00pm.

6- Chemicals of Construction Materials Laboratory

The lab conducts all chemical tests necessary for construction materials such as: cement, gravel, sand, brick and steel.

The lab serves the following:

- * The Engineering Studies and Consultant Center, daily from 8:00am to 2:00pm.
- * Scientific research for faculty members, daily from 8:00am to 2:00pm.

7- Steel Facilities Laboratory

The lab serves the following:

- * The first-year civil engineering students with a rate of 1 hours/week.

8- Surveying Laboratory

The lab serves the following:

- * The first-year, the second-year and the third-year civil engineering students.

9- Computer Laboratories

The civil engineering department has four computer labs; two for students, one for teaching assistants and one for faculty members. Computers are distributed among these four labs, besides providing computers to some faculty members' offices as well as classrooms.

• **Architecture Engineering Laboratories**

1- Computer Labs:

Computers are distributed in the architecture department in three major labs; first one for undergraduate students, second one for graduate students and the third one for all engineering students (Information and Technology Club).

In 1999, a change in computer labs has been accomplished to include 20 computers, laser printer, scanner and the data Show.

2- Permanent Architecture Exhibition:

The exhibition has three halls with a total area of 610 m², where exhibits include outstanding student projects in architectural design, urban planning, interior design, and construction methods, also include an exhibition of construction materials and interior and exterior finishing materials to facilitate identifying them by students. The exhibition contains more than 300 model and 600 large and small sizes displays.

- **Mechanical Engineering Department Laboratories**

7 thermal labs
1 agriculture lab
beside 11 labs

- **Mining and Metallurgical Department Laboratories**

1- 14 labs serving students and faculty members as following:

* Mining lab	* Ore dressing lab	* laboratory air flotation
* Metallurgical lab	* Furnaces lab	* Computer lab
* Ventilation lab	* Rock Mechanics lab	* Geological Engineering lab
* Photo elasticity lab	* Mining Surveying lab	* Pollution measurements lab
* Ores evaluation lab	* Research laboratory of geological mining	

2- A Computer lab for students

