Facilities of Electrical and Electronic Engineering Technology Department

Offices and Classrooms

The department occupies a modern two-storied purpose-built building consisting of 7 large-sized workshops, 13 medium-sized laboratories, 2 terminal rooms, 20 classrooms, a conference room, a resource room/teaching aid center, prayer room, and common faculty room, in addition to a sufficient number of individual and shared offices for faculty members. All facilities are very well furnished with modern versatile benches and equipped with the necessary teaching aids, training and testing instruments, modules and systems in addition to software and computers. The building is well connected and networked to JIC internet and intranet services. The Electrical Engineering Technology faculty offices and department chairman's office are adjacent to each other, allowing excellent accessibility and meeting space. All faculty offices provide adequate space and privacy needed for student help and student advising. Faculty computers are updated periodically. If faculty research or teaching requires more computing capability, updates or upgrades are made as needed.

Classroom scheduling is coordinated and performed electronically by the SIS (Student Information System). The classrooms provide instructors access to multimedia presentation equipment such as projectors, computers, etc. The Media Centre provides supports for preparing handouts, presentations, tutorials, exams. Most of the laboratories in the EE buildings are equipped with the same audio visual equipment as in the classrooms. This allows laboratory instruction to be conducted in a manner similar to that in a dedicated classroom environment.

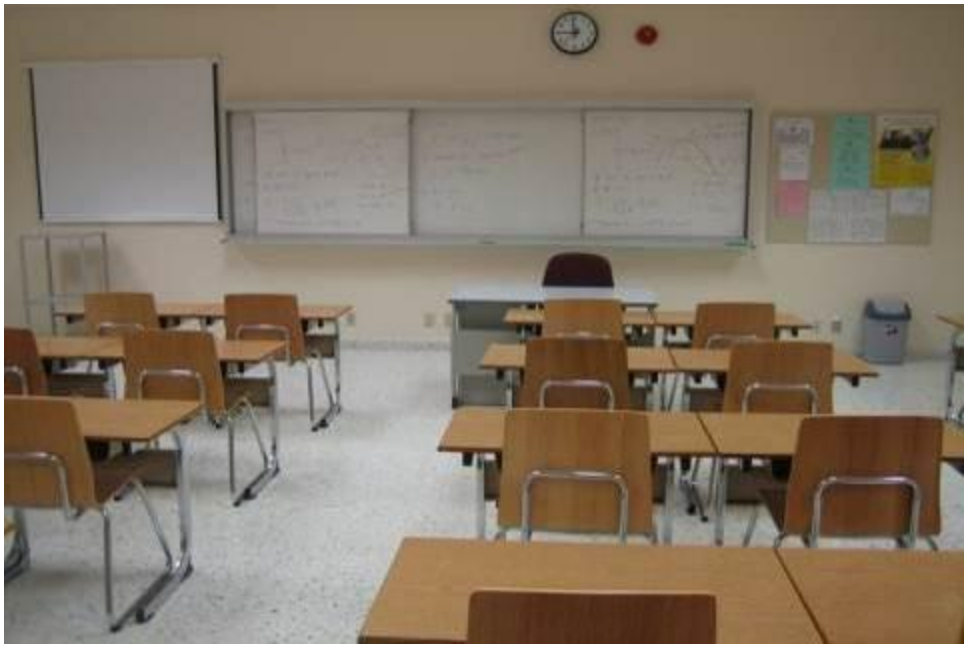

Fig: Classroom, Theory

A. **Facilities for Instrumentation and Control Engineering Technology (ICET)**

Following are the laboratory and computing facilities and the associated tools and equipment that support instruction in the Instrumentation and Control Engineering Technology program:

Labs for Instrumentation and Control Engineering Technology (ICET)

Sr. No.	Labs/Workshops	Location
1	Instrumentation & Measurement	E11
2	Digital Electronics	E56
3	Analogue Electronics	E57
4	Testing and Calibration	E42
5	Industrial Control	E07
6	DCS	E79
7	Networking Lab	E61
8	PLC	E77
9	Microprocessor	E45
10	Project Lab	E72
11	Computer Control and DAC	E63
12	Special Program Lab	E04

Instrumentation & Control Labs (E07, E011, E04, E063 , E079 and E042)

E011 is equipped with 8 complete Beamex MCS100 calibration laboratory benches with full sets of relevant modules, many different types of gauges, transducers, transmitters, SMART transmitters and testing devices.

E004 is equipped with all necessary electrical modules, discrete instruments, testing & measurement equipment for basic hands-on skills & vocational training of industrial trainees.

E079 is equipped with complete Centum, Yokogawa DCS systems with 8 terminals.

E042 is equipped with 8 Beamex calibration stations.

E008 is equipped with a GUNT mini-plants [Pressure, Level, Temperature and Flow], complete Emerson Plant web automation system, Emerson Wireless transmitters, ISA Control Simulator etc.

Fig: Lab E011: Instrumentation Workshop

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FFig : Lab E007: Emerson Plant Automation System

Fig Lab E007: Gunt 4-Variable Process Control module

FFig : Lab E007: Delta V DCS Systmes

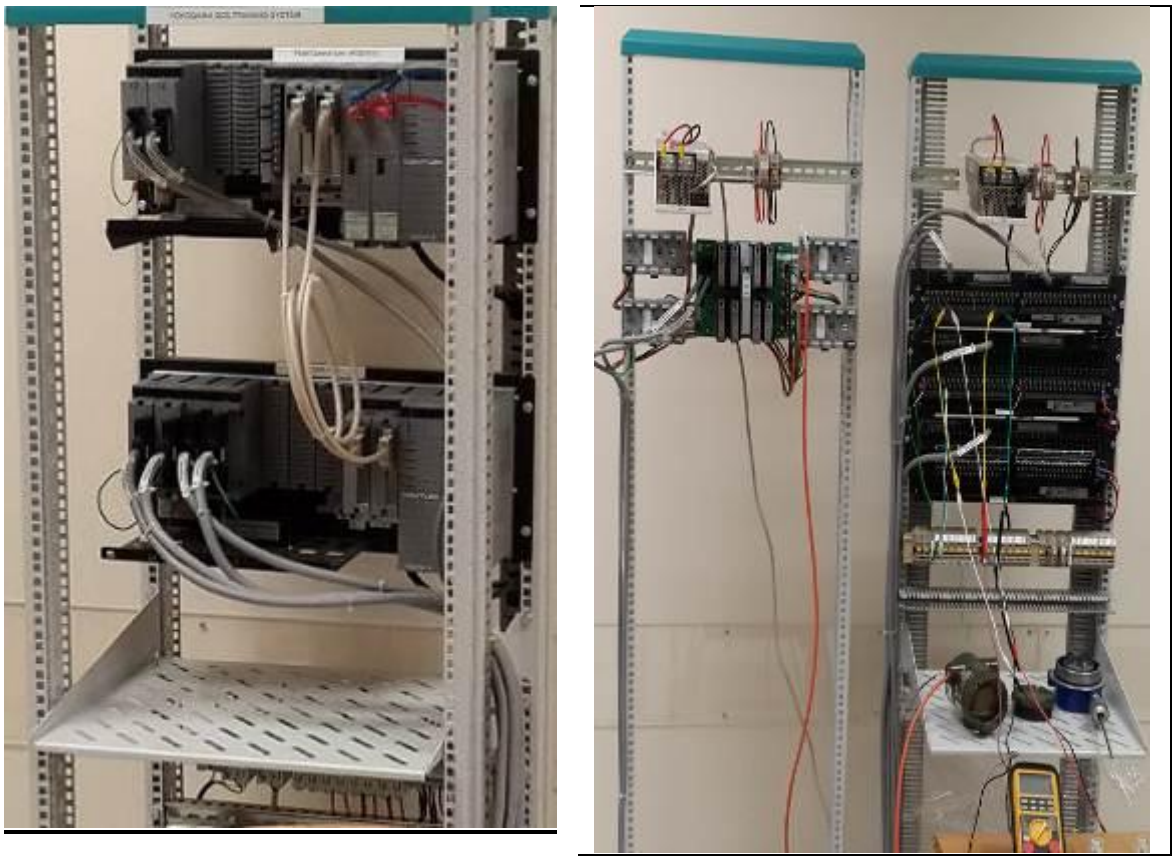
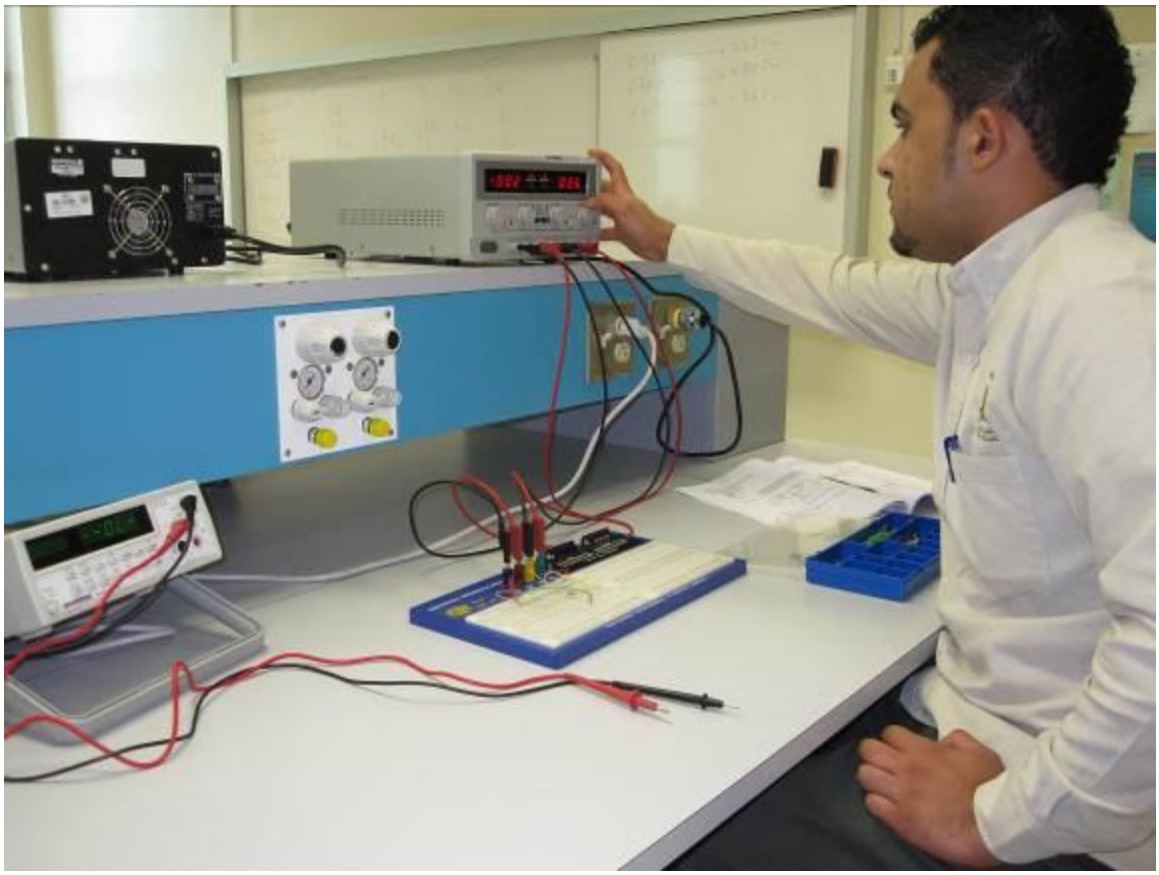


Fig: Lab E079: Yokogawa DCS system

Analogue & Digital Electronics Laboratories (E056 , E057 and E061)

Equipped with adequate sets of: power supplies, oscilloscopes, function generators, testing devices, digital tester chip-master compact, and Analog& Digital breadboard training system, electronics components with needed electronics tools.

FFig : Lab E056: Digital Electronics Lab



FFig : Lab E057 Analog Electronics Lab

PLC Laboratory (E077)

Equipped with 12 complete sets of Siemens LD (S7-313C) training stations with application units, LD Profi-Cassy units, power supplies, testing devices and 12 Allen-Bradley (SLC-100) training stations. It is also equipped with six new sets of Siemens SCADA win CC modules.

FFig : Lab E077 PLC LAB

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Microprocessor / Microcomputer Laboratory (E045)

Equipped with adequate sets of PC's, Data acquisition cards through the serial and parallel ports, interface cards, power supplies, oscilloscopes, etc.

FFig 7.15: E045 Microprocessor /Microcomputer Lab

B. **Facilities for Electrical Power Engineering Technology (ELET)**