COMPUTER ENGINEERING TECHNOLOGY (CET)

CET 304 Digital System Design (3 Credits)
Study of the building blocks of digital system design: encoders, decoders, comparators, multiplexers, demultiplexers, adders, subtractors, arithmetic logic unit, programmable logic devices and an introduction to microprocessors.
Prerequisites: Take CIT-204. Take CIT-204L.

CET 304L Digital Systems Design Laboratory (1 Credits)
Practical experience in building and testing digital systems and methods with emphasis on programmable logic devices, programming and introduction to microcontrollers.
Prerequisites: Take CIT-204. Take CIT-204L.

CET 305 Computer Organization (3 Credits)
Overview of computer system and architecture. This course is the study of how the various components of computer systems fit together and interact in both hardware and software. Topics include data representation, signal conversion and processing, data transmission, data processing and control, Memory, I/O and storage devices, and CPU architectures.

CET 305L Computer Organization Laboratory (1 Credits)
This lab complements CET-305 Computer Organization. It provides hands-on experience to understand how various computer system components interact in hardware and software. Topics include system components, peripheral devices, storage, system implementation, file management, and system management.

CET 315 Microprocessors (3 Credits)
This course introduces students to small microprocessor-based systems, emphasizing embedded system hardware and software design. Topics will include microprocessor architecture and structure, with an overview of 8-, 16-, and 32-bit systems, assembly language programming, and the use of high-level languages.

CET 315L Microprocessor Laboratory (1 Credits)
This lab complements CET 315 Microprocessors. It provides hands-on experience to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and tests.
Prerequisites: Take CIT-304. Take CIT-304L. Take CIT-315., Take CIT-315.

CET 336 Computer Networks Technology (3 Credits)
Introduction to the administration of computer networks with emphasis on management of user's workstation and other system resources, including the Internet and intranets.

CET 336L Computer Networks Technology I Lab (1 Credits)
This course is the laboratory component of CET 336 Computer Networks I lecture. Students will perform laboratory exercises on such topics as cabling, programming network devices and setting up simple networks.
Prerequisites: Take CIT-336.

CET 340 Soil and Foundations (3 Credits)
Contact the department for specific course information

CET 432 Computer Interfaces/Peripheral Devices (3 Credits)
Study of computer interfaces and peripheral devices, the programming, operation, and interfacing of the microprocessor, and the programming/operation of the numeric co-processor, which provide an understanding of applications such as control systems, video graphics, and computer-aided design (CAD) with emphasis on The Advanced Intel Microprocessor Family.

CET 432L Computer Interfaces Laboratory (1 Credits)
Course consists of individual or small group projects of building a Microprocessor-controlled robot.
Prerequisites: Take CIT-315. Take CIT-315L., Take CIT-432.

CET 436 Computer Networks Technology II (3 Credits)
The study of advanced networking concepts. Topics include variable length, subnet masking, link state router protocols, Internet Protocol Version 6 (IPV6), Virtual Lans (VLANS), Asynchronous Transfer Mode (ATM), Virtual Private Networks, Security, Voice over Internet Protocol (VOIP) and optical networking.
Prerequisites: Take CIT-336. Take CIT-336L. Take CIT-436L, Take CIT-436L.

CET 436L Computer Networks Technology II Lab (1 Credits)
This course is the laboratory component for CET 436 lecture. The student will perform laboratory exercises related to computer network design, development and troubleshooting.
Prerequisites: Take CIT-336. Take CIT-336L. Take CIT-436., Take CIT-436