COMPUTER ENGINEERING TECHNOLOGY (CENT)

CENT 1010 Electric Circuits for Technology (4 Credits)
Introduces DC and AC circuit fundamentals, including Ohm's law, Kirchhoff's laws, power and energy relationships. Students learn to analyze DC and AC series, parallel, and series-parallel circuits using basic circuit analysis techniques. Students also learn the fundamentals of capacitors and inductors and analyze DC and AC circuits with these components. In the lab, students construct a variety of circuits and utilize basic circuit analysis techniques use instrumentation including power supplies, digital multimeters, function generators, and oscilloscopes.
Prerequisites: CENT 1016 and MATH 1001 or higher
Additional fees may apply
Previous: Legacy Equivalent(s): CET*I110

CENT 1016 Computer Applications for Technology (3 Credits)
Introduces technology-driven reporting requirements for text, data and graphics, virtual instrumentation, computer simulations for technology problem solving, and determination of computer tools for technology issues. Stresses technical report preparation, including graphical and tabulated analysis of data, with appropriate calculations and conclusions displayed in a variety of formats. Computer skills used to access and apply technical information will also be included.
Additional fees may apply
Previous: Legacy Equivalent(s): CET* 116

CENT 1024 Structured Programming (4 Credits)
Covers structured programming techniques as tools for problem solving in engineering and technology applications. Emphasizes program development, structure, and testing. Lab assignments reinforce the topics discussed in lecture.
Prerequisites: CENT 1016
Additional fees may apply
Previous: Legacy Equivalent(s): CET* 124

CENT 1026 Computer Servicing (4 Credits)
Presents an overview of a microprocessing system with emphasis on hardware design, operation, troubleshooting, and servicing. The lab provides practical experience with electronic troubleshooting techniques. Actual servicing will take place on a basic microcomputing system.
Prerequisites: CENT 1016
Additional fees may apply
Previous: Legacy Equivalent(s): CET* 126

CENT 1036 Electronics for Technology (4 Credits)
Presents a variety of discrete electronic devices, including diodes, BJTs and FETs, and simple integrated circuits along with their operation and applications. Students will learn how to analyze circuits containing these devices. In the lab, students will construct various electronic circuits with the devices studies and will test and verify the circuits' performance and operation.
Prerequisites: CENT 1010 and MATH 1001 or higher
Additional fees may apply
Previous: Legacy Equivalent(s): CET*I120

CENT 2010 Computer Systems Software (4 Credits)
Investigates the computer's hardware-software interface. Topics include CPU architecture and programming, interfacing with I/O devices, memory management, file systems, and an introduction to networking. Laboratory assignments include installation and troubleshooting of system software for stand-alone and networked devices.
Additional fees may apply
Previous: Legacy Equivalent(s): CET* 210

CENT 2052 Digital Electronics for Technology (4 Credits)
From how logic sets the basis for number systems and data representations to the building-blocks of computers and so much more, this course explores the elements of digital logic & design, digital circuitry, and the fundamentals of modern digital systems through hands-on design exercises. This is an on-ground course. All meetings are held on campus.
Prerequisites: Eligibility for MATH 1610
Additional fees may apply

CENT 2095 Computer Engineering Technology Practicum (3 Credits)
Provides students with experience within the Computer Engineering Technology workplace. Students will gain knowledge and experience through technical training working closely with others to service users and customers under the supervision of a team leader, supervisor, or proctor. Students are required to attend four weeks of class prior to performing 50 hours of internship over the remainder of the semester. Uniforms, some travel and physical work may be required.
Prerequisites: CENT 2010
Previous: Legacy Equivalent(s): CET* 270