APPLIED ENGINEERING TECHNOLOGY (AET)

AET 102 (4 credit hours)
Introduction to Energy
Introduces the scientific principles of energy and fuels and investigates specific topics: nature and extent of energy resources, economics and environmental effects, alternative energy, energy technology, health and safety. Lecture/Lab: 4.0 credits (75 contact hours).
Attributes: Technical
Components: LEC: Lecture

AET 110 (4 credit hours)
Introduction to Circuit Analysis
Covers basic electrical components as well as DC/AC circuit configurations; introduces the theory and operation of solid state devices such as diodes, BJTs, FETs, and operational amplifiers; emphasizes circuit construction, analysis, and troubleshooting. Lecture/Lab: 4.0 credits (75 contact hours).
Co-requisite: MT 125 or Consent of Instructor.
Attributes: Technical
Components: LEC: Lecture

AET 114 (4 credit hours)
Solar and Wind Energy Generation
Introduces the methods and equipment necessary for the production of electrical energy by alternative means to include photovoltaic systems, wind turbines and solar water heating. Lecture/Lab: 4.0 credits (75 contact hours).
Pre-requisite: AET 110 or consent of instructor.
Attributes: Technical
Components: LEC: Lecture

AET 190 (4 credit hours)
Industrial Computer Programming Concepts
Covers programming concepts specifically directed toward industrial programmable devices such as PLCs. Lecture/Lab: 4.0 credits (75 contact hours).
Pre-requisite: Consent of instructor.
Attributes: Technical
Components: LEC: Lecture

AET 250 (4 credit hours)
PLC Networking
Introduces the basic concepts in PLC networking to include networking protocols specific to industrial controllers, ASCII codes, bus topologies, and handling of remote I/O. Lecture/Lab: 4.0 credits (75 contact hours).
Pre-requisite: AET 190.
Attributes: Technical
Components: LEC: Lecture

AET 270 (4 credit hours)
Advanced PLC Programming
Introduces the student to the wide range of capabilities, beyond basic programming needs, which are available to the modern PLC user. Includes data Manipulation; shift register and sequencer instructions; binary, octal and hexadecimal numbering systems; and analog inputs and outputs. Lecture/Lab: 4.0 credits (75 contact hours).
Pre-requisite: EET 276 and EET 277.
Attributes: Technical
Components: LEC: Lecture