Computer Engineering Tech (CPET)

CPET 1050 Assembling, Upgrading and Repairing Personal Computers **(CTAG) 2 Credits**
This course introduces students to a brief theory of operations, installation and operation instructions, and testing and diagnostic procedures for personal computers and peripheral hardware including CD-ROM drives, sound cards, scanners, hard drive, motherboards and memory modules. This material is suitable for both new computer owners and experienced technicians. Laboratory experience includes setting, interfacing, testing, diagnosing, and analyzing personal computer equipment to arrive at a repair or replace decision.
(3 contact hours: 1 lecture, 2 lab)

CPET 1120 C Programming for Engineering Technology **3 Credits**
This course introduces fundamental structured C programming concepts as applied to technical problem solving and hardware programming. Students will develop applications using branching, looping, disk input/output, arrays, pointers, operators, and structures. They will also develop, test, and debug hardware control and monitor applications in the laboratory. No previous programming experience is necessary.
(5 contact hours: 2 lecture, 3 lab)

CPET 2050 Advanced Assembly and Repair of Personal Computers **(CTAG) 2 Credits**
Prerequisite: CPET 1050.
This course, a continuation of CPET 1050 Assembling, Upgrading and Repairing Personal Computers, introduces students to preventive maintenance techniques for maximizing personal computer performance, troubleshooting board components, storage devices, communication hardware and workgroup networks, and diagnosing operating systems conflicts and failures. Laboratory experience includes troubleshooting and diagnosing components, printer maintenance, network components and systems, and building a functioning computer system from components.
(3 contact hours: 1 lecture, 2 lab)

CPET 2060 Preparation for A+ Certification **(CTAG) 2 Credits**
Prerequisite: CPET 2050, ELEC 1330.
This course serves as a capstone course for the A+ Certificate by integrating all previous learning and concepts with the current changes in the PC industry presented as case studies in order to prepare the students to take the A+ exam.
(3 contact hours: 1 lecture, 2 lab)

CPET 2560 Introduction to Telecommunications Principles **2 Credits**
Prerequisite: ELEC 1120 or permission of instructor.
This course covers noise, signal quality and measurement, modulation and demodulation principles, and transmission mediums as applied to over-the-air and landline telephony services.
(2 contact hours)