

**Common Course Outline**  
**ELEI208**  
**MICROPROCESSORS INTERFACING**  
**3 Semester Hours**

**The Community College of Baltimore County**

**Description**

**Microprocessors Interfacing**

Presents the theory behind the personal computer including input/output devices, magnetic storage, video displays, printers, introductory data communications and multimedia; discusses preventive maintenance and safety. 2 lecture hours, 2 lab hours, per week.

Prerequisite: ELEI205 or consent of the program director

**Overall Course Objectives.**

Upon completion of this course the student will be able to:

use diagnostic software, e.g. CheckIt, PC-Check, QAPLus, to evaluate system performance; use POST cards to evaluate system performance; produce QBASIC programs to run diagnostics on a PC-based system; install RAM modules and properly configure the hardware, the CMOS, and the operating system to use the additional memory; run Memmaker to optimize system memory usage; document the types of symptoms produced by systemboard problems; develop utility programs in QBASIC; identify components associated with the various operations of the system; perform system tests at the board and at the component levels; use system documentation to locate enabling and configuration jumpers in the system; observe the types of symptoms produced by power supply problems; develop logical steps for isolating keyboard-type problems; develop logical steps for isolating video display problems; use a commercial diagnostic program to test the VGA-adaptor color palette; manipulate the windows color palette; manipulate screen attributes; develop logical steps for isolating floppy-disk problems; perform HDD installation; format a HDD for operation; run software diagnostics on an HDD to check its operating parameters; install and setup a CD-ROM.

**Major Topics**

Input/Output Devices; Magnetic Storage; Video Displays; Printers; Introductory Data Communications; Multimedia; Preventive Maintenance and Safety.

**Course Requirements**

The instructor will administer tests (60%), Lab work (30%), Assignments (10%),

**Other course information**

**Additional information about this course or any other Industrial electricity/electronic course can be obtained by contacting the IEE/Telecommunications program director.**