MET 122 Industrial Measurements 3 credits

This course teaches students how to read calipers, gauges, micrometers etc.; how to deal with fractions, decimals and the metric system; the advantages of simple machines such as levers, pulleys and screws.

2 lecture/2 laboratory hours

MET 123 Machine Shop Techniques I 2 credits

Prerequisite: MET 122

This course introduces the student to the various metal working equipment with focus on the use of the manual lathe. This course will prepare students to learn CNC machine programming and operation. Each student will create simple projects to show the skills learned.

1 lecture/2 laboratory hours

MET 124 Machine Shop Techniques II 2 credits

Prerequisite: MET 123

This course will introduce students to the use of the drill press and manual milling machine. This course along with MET123 will prepare students to learn CNC machine programming and operation. Each student will create simple projects to show the skills learned.

1 lecture/2 laboratory hours

MET 231 CNC Machines 2 credits

Prerequisite: MET 123

This course teaches basic programming and operation of CNC machines.

1 lecture/3 laboratory hours

EET 265 Introduction to Programmable Logic Controllers 3 credits

Prerequisite: EET 251

A very practical course in PLCs covering I/O instructions, ladder diagrams, as well as the programming of Allen Bradley controllers.

2 lecture/2 laboratory hours

EET 131 Electronic Devices and Circuits 4 credits

Prerequisite: EET 130

Covers discrete solid state devices (diodes, BJTs, FETs) and circuits in which they are used: power supplies, amplifiers and switches. This course also examines analog as well as digital devices and circuits.

3 lecture/3 laboratory hours

EET 141 Electrical Wiring and Cabling 3 credits

Prerequisite: EET 130

This course teaches electrical wiring techniques starting with 110/220volts. Students learn to connectorize and install Coax, CAT5/6, and F.O. cables. The codes and standards to be followed are emphasized along with the correct tools to be used. Lectures are reinforced with an equal number of hours of hands on practice.

2 lecture/2 laboratory hours

Process for Admission

Whether you are planning to study full or part-time, you must submit an admission application (free of charge) to the Enrollment Services Office. An online application is available at www.mccc.edu. A print version may be requested by calling the Enrollment Services Office at 609-570-3795. Applications submitted by regular mail should be sent to: Enrollment Services Office, Mercer County Community College, P.O. Box 17202, Trenton, NJ 08690. Students must also contact their high school or previous/current college and request that official transcripts be sent to the same address.

Students may also be required to take an academic placement test (free of charge) in English and/or math. The two-hour test is self-administered and does not affect admission to the college. Certain scores on the SAT/ACT or your transcript from another college may exempt you from portions of the test.

After taking the placement test, students meet with an advisor to select their courses and then register for classes.

Approved for Veterans

MCCC is an approved institution for veteran's training under various GI bills. For more information, call 609-570-3240.

Contact Us

We encourage you to visit the college and meet with faculty and staff. To arrange a campus tour or request additional information, contact the Enrollment Services Office on either campus.

West Windsor Campus: 609-570-3795
Trenton Campus: 609-570-3139
(Monday-Friday, 9 a.m. to 5 p.m.)

For more information, contact Electronics Engineering Technology Professor Dominick DeFino at 609-570-3456 or email definod@mccc.edu.

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ADVANCED MANUFACTURING TECHNOLOGY

Certificate of Proficiency

The Advanced Manufacturing Technology program is designed to prepare students for the modern manufacturing environment. This certificate of proficiency is attractive to employers who implement team-oriented design, production, quality, and maintenance systems within the manufacturing environment.

American manufacturers are becoming increasingly dependent upon the use of high-tech equipment that involves multiple, integrated systems. It is crucial that these companies be able to recruit and employ individuals who know how to operate, troubleshoot, and maintain it.

The certificate program, which is centered around NIMS Certification, prepares students for apprentice/entry-level positions in shops and manufacturing facilities not only in the local area but almost anywhere in the country. Typical tasks include setting up and operating equipment such as engine or turret lathes, milling machines, and power presses. More advanced tasks may involve operating computer-controlled manufacturing equipment (CNC) as well as programmable logic controllers (PLCs) or robots for assembly lines.

Admission to the program requires a high school diploma or its equivalent with one year of algebra or applied mathematics.

Successful graduates of the program will be able to:

- read prints and schematics;
- use instruments such as micrometers, calipers and scales;
- set up and operate a milling machine;
- set up and operate a lathe;
- maintain a safe and organized work space;
- make certain mathematical calculations related to shop work;
- populate and repair printed circuit boards;
- succeed in future courses such as those involving PLC and CNC systems;
- fulfill NIMS Certification requirements.

CURRICULUM

Code	Course (Lecture/Lab Hours)	Credits
ECO 103	Basic Economics (3/0)	3
ENG 101	English Composition I (3/0)	3
EET 130	Fundamentals of Electronics (2/2)	3
EET 140	Electronic Construction (1/3)	2
IST 101	Computer Concepts with Applications (2/2)	3
MAT 110	Elementary Technical Mathematics (3/0) [1]	3
DRA 190	Introduction to Computer-Aided Drafting (1/2)	2
ENT 116	Engineering Graphics (1/2)	2
MET 122	Industrial Measurements (2/2)	4
MET 123	Machine Shop Techniques I (1/2)	2
MET 124	Machine Shop Techniques II (1/2)	2
— —	Technical Electives [2]	3-4
		32-33

[1] MAT 115, 116, 135, 140, 146 or 151 are acceptable alternatives.

[2] Select from CIV 106; DRA 251; EET 131, 251; MET 291 (Manufacturing Field Experience); PHY 111.