

ASSOCIATE OF APPLIED SCIENCES DEGREE

Programs of Instruction

ENGINEERING TECHNOLOGY

PROGRAM DESCRIPTION

This program prepares students for employment in a variety of industries that use technicians or technology specialists to support engineering staff. A strong emphasis is placed on applications, problem solving, critical thinking, and communication skills. Upon graduation, students will be able to use project management processes to plan, organize, and carry out engineering technology projects. Graduates of this program will demonstrate knowledge of hydraulics, pneumatics, CADD, blueprint reading, electronics, and mechanics. Engineering and science courses are important parts of this program.

EMPLOYMENT INFORMATION

Governments, businesses, organizations, and private contractors connected to engineering research and technology fields recognize an ongoing need for skilled/trained engineering technicians and technologists. The U.S. Department of Labor reports that opportunities for engineering technicians will be best for individuals with an associate degree or extensive job training in engineering technology. Overall employment of engineering technicians and technologists is expected to increase as much as 17 percent for all occupations through 2014. A wide variety of job opportunities exist in manufacturing, electronics, production and processing, operations, and research and development.

For more information, contact Teri Weston, 410-836-4472, tweston@harford.edu; or academic advising, 410-836-4301.

Note: The following codes identify courses which satisfy the General Education core requirements. For more information see pages 22-23.

- GB** Behavioral/Social Science
- GE** English Composition
- GH** Arts/Humanities
- GI** Interdisciplinary and Emerging Issues
- GL** Biological/Physical Laboratory Science
- GM** Mathematics
- GS** Biological/Physical Science

TO SATISFY THE GENERAL EDUCATION CORE REQUIREMENTS:

- Behavioral/Social Science and Arts/Humanities electives must be selected from two different disciplines;
- A maximum of 8 credits from Interdisciplinary and Emerging Issues **GI** may be applied.

TO SATISFY THE DIVERSITY REQUIREMENT:

Associate degree students must complete one 3-credit diversity course **D**. It is recommended that students select one of the 3-credit **GB**, **GH**, or **GI** course electives from those that also appear on the approved list of diversity courses (see page 24).

DEGREE REQUIREMENTS

Recommended Course Sequence

• First Semester	Sem. Hrs.
CIS 102Introduction to Info. Science GI	3
ENG 101English Composition GE	3
ENGR 101 ..Engineering Drawing I	2
ENGT 101....Intro. to Engineering Technology	3
ENGT 102....Blueprint Reading	1
MATH 103 ..Trigonometry GM	3
Physical Education Fitness elective	1
Semester Total	16

• Second Semester	Sem. Hrs.
CADD 101 ..Introduction to CADD	3
CHEM 100 ..Chemistry for Changing Times GL	4
CMST 105....Interpersonal Communication GI D	3
ELEC 105Introduction to Electronics.....	4
ENGT 104....Measurement and Testing*	2
Physical Education elective.....	1
Semester Total	17

• Third Semester	Sem. Hrs.
ENGR 203 ..Engineering Materials	3
ENGT 105....Electrical Control Systems	3
ENGT 201....Principles of Lean Thinking*	3
ENGT 223....Principles of Mechanics and Problem Solving*	4
PHIL 221.....Business Ethics GH	3
Semester Total	16

• Fourth Semester	Sem. Hrs.
BA 225Project Management	3
ENG 209Technical Writing.....	3
ENGT 107....Principles of Hydraulics/Pneumatics.....	3
SCI 107Physical Science II GS	3
SCI 108Physical Science Course Observations and Investigations: Energy GL	1
Beh./Soc. Science elective GB	3
Semester Total	16

Total Number of Credits65

*Course to be developed.