

ENGINEERING TECHNOLOGY (AAS)

Award: Associate of Applied Sciences Degree

No. of credits required: 60

For more information: Contact David Antol, Coordinator for Applied Technology at 443-412-2472, dantol@harford.edu; or Admissions, 443-412-2109.

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 these skills to organize, and carry out engineering technology projects. Graduates of this program will demonstrate knowledge of CADD, electronics, hydraulics, pneumatics, blueprint reading, and mechanics. Engineering and science courses are important parts of this program.

Program Goals

Upon successful completion of this program of study students will be able to:

1. Apply appropriate communications skills to work independently and collaboratively within an organization to promote the goals and objectives of the work unit.
2. Recognize how to facilitate successful completion of technical projects.
3. Demonstrate competency in using technical tools, technology, methods, and processes.
4. Recognize professional and ethical behavior.
5. Apply problem solving skills to technical problems.

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. According to the *Occupational Outlook Handbook, 2016-2017 Edition*, overall employment of engineering technicians and technologists is expected to be 136,000 by 2024. A wide variety of job opportunities exist in manufacturing, electronics, production and processing, operations, and research and development.

Degree Requirements

Recommended Course Sequence

Course	Title	Credits
First Semester		
CADD 101	Introduction to CADD	3
CIS 102	Introduction to Information Sciences (GI)	3
ENGT 101	Introduction to Engineering Technology	3
ENGT 102	Blueprint Reading	1
MATH 103	Trigonometry (GM)	3

ENGR 101	Engineering Drawing I	2
Credits		15
Second Semester		
ENG 101	English Composition (GE)	3
ENGT 108/ELEC 105	Introduction to Electronics	4
ENGT 109	LabVIEW Fundamentals	3
ENGT 223	Principles of Mechanics	3
BA 273 or CIS 115	Cooperative Education III: Business Administration or Fundamentals of Programming	3
Credits		16
Third Semester		
ENGT 105	Electrical Control Systems	3
ENGR 203	Engineering Materials	3
ENGT 224	Quality Assurance for Technicians	2
Biological/Physical Lab Science Elective (GL) (https://catalog.harford.edu/general-education/#biological-physical-laboratory-science)		4
PHIL Elective (GH)		3
Credits		15
Fourth Semester		
ENG 209	Technical Writing	3
ENGT 107	Principles of Hydraulics and Pneumatics	4
Physical Education Elective		1
Behavioral/Social Science Elective (GB) (https://catalog.harford.edu/general-education/#behavioral-social-science)		3
CMST 105	Interpersonal Communication (GI) (D)	3
Credits		14
Total Credits		60

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

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