MANUFACTURING TECHNICIAN CERTIFICATE

Award: Certificate
No. of credits required: 15
For more information: *Contact Business & Applied Technology at bat@harford.edu; or Admissions, 443-412-2109.*

Program Description

This certificate program prepares students for employment in advanced manufacturing and a variety of other 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 completion, 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

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

Data illustrates a significant demand for well-educated and highly-skilled additive manufacturing workers in Harford County and in the State of Maryland. In 2015 Maryland's 3,680 manufacturing businesses generated $20.2 billion in gross state product and employed more than 109,000 persons. The state supports numerous 21st century manufacturing industries including defense electronics, aeronautics, systems engineering, medical diagnostics, specialty chemicals, software and aircraft engines. Sixty percent of these manufacturers are advanced, producing a profound multiplier effect on Maryland's economy. High-technology manufacturers in Maryland generate almost two additional jobs for each new manufacturing job created.

Certificate Requirements

In order to earn a certificate from Harford Community College, students must demonstrate basic competencies in English, reading, and mathematics by completing: ENG 018 Integrated Reading and Writing, MATH 020 Pre-Algebra I, and/or a qualifying exam must be passed.

Required Courses

Code	Title	Credits
ENGT 101	Introduction to Engineering Technology	3
ENGT 150	Machining I	3
ENGT 152	Machining II	3
ENGT 160	Welding I	3
ENGT 162	Welding II	3
Total Credits		**15**