ENGINEERING TECHNOLOGY (A.S.)

The Engineering Technology program prepares students for employment in engineering technology. By completing the Associate of Science, students acquire knowledge of the fundamentals of engineering technology and choose to specialize in one of three options. The first option is Electrical and Electronic Engineering Technology, the second option is Mechanical Engineering Technology, and the third option is Industrial Engineering Technology. Careers in engineering technology includes research and development, manufacturing, servicing, and maintaining a wide variety of products and production processes.

Program Requirements

Course Title

Code Number

Major Core Requirements			
ET 101	Principles of Engineering Technology	3.0	
ET 103	Industrial Process Control	2.0	
ET 105	Industrial Motor Control	2.0	
ENGT 103	Introduction to Engineering Design Using Inventor	3.0	
Subtotal		10	
Select one of the following options: 14.0-17.0			
Option 1: Emphasis in Electrical and Electronic Engineering Technician (15 units)			
ET 102	Electronics for Engineering Technologists (3)		
MATH 140	Trigonometry (3)		
MTT 111	Programmable Logic Controllers In Automated Manufacturing (3)		
MTT 112	Variable Frequency Drives in Automated Manufacturing (3)		
MTT 180	Robotics for Computer Numerically Controlled Machines (3)		
Option 2: Emphasi units)	s in Industrial Engineering Technician (14		
ET 102	Electronics for Engineering Technologists (3)		
ENGT 111	Plastics Technology (3)		
ENGT 116	Blueprint Reading and Production (4)		
MTT 110	Mechanical Maintenance of Machine Tools (3)		
MTT 180	Robotics for Computer Numerically Controlled Machines		
Option 3: Emphasis in Mechanical Engineering Technician (17 units)			
ENGT 116	Blueprint Reading and Production (4)		
ENGT 117 & ENGT 111	Geometrical Dimensioning and Tolerancing and Model Based Definition and Plastics Technology (4)		
ENGT 259	Solidworks Introduction (4)		
MTT 100	Machine Tool Introduction (2)		
Total Units		24-27	

Recommended Courses

Units

Code Number	Course Title	Units
ENGT 100	Soft Skills for Manufacturing, Technology and Engineering Professionals	3.0
ENGT 102	Arduino for Internet of Things (IoT) and Embedded Systems Design	2.0
ENGT 104	Principles of Aerospace Design Technology	4.0
ENGT 105	Product Design, Development, and Prototype Fabrication	2.0
ENGT 106	Introduction to Drone Technology	4.0
ENGT 153	Machine Design Applications Using Solid Modeling	3.0
ENGT 237	Statics and Strength of Materials Using Simulation	3.0
ENGT 258	Tools and Fixtures Applications Using Solid Modeling	4.0
ENGT 260	Advanced Modeling Using SolidWorks	4.0
ENGT 261	SolidWorks for Sustainable Design	4.0
ENGT 262	SolidWorks for Weldments Design	4.0
ENGT 263	SolidWorks for Industrial Mold Tools Design	4.0

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

Complete 60 units to include (1) completion of core courses (2) completion of one of the above options for major requirements, (3) completion of the General Education requirements; and (4) electives as needed.