

ENGINEERING TECHNOLOGY: INDUSTRIAL ENGINEERING TECHNICIAN (CERT)

CERTIFICATE OF ACHIEVEMENT

By completing the certificate, students acquire knowledge of the fundamentals of engineering Industrial Engineering Technology with emphasize on maintenance and servicing of electromechanical industrial systems. Careers in engineering technology involve assisting engineers in researching, developing, manufacturing, servicing, and maintaining a wide variety of products

Program Student Learning Outcomes

- Student read blueprints up to Industry Standards
- Student applies principle of electrical circuits and electronics in troubleshooting industrial equipment
- Student develop machine tools maintenance program and perform maintenance of industrial equipment L, ET, NPFD
- Student implement and troubleshoot four major plastics manufacturing processes at the shop floor
- Student design, implement and troubleshoot industrial motors control

Program Requirements

Code Number	Course Title	Units
Major Core Requirement		
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
Additional Required Electives		
ENGT 111	Plastics Technology	3.0
ENGT 116	Blueprint Reading and Production	4.0
ET 102	Electronics for Engineering Technologists	3.0
MTT 110	Mechanical Maintenance of Machine Tools	3.0
MTT 180	Robotics for Computer Numerically Controlled Machines	3.0
Total Units		26

Recommended Courses

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