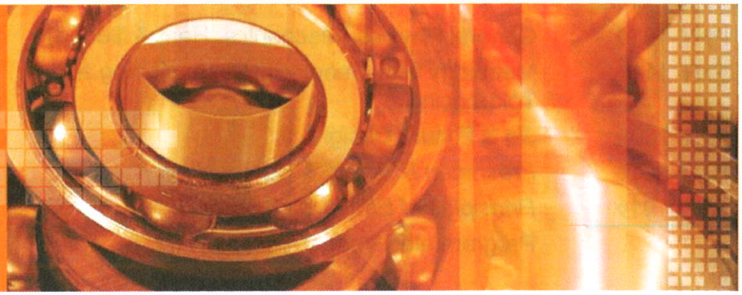


ENGINEERING TECHNOLOGY



C248V - Engineering Technology / Mechanical Design Degree

The Engineering Technology curriculum provides the learner with working knowledge of engineering technology, including basic and advanced drafting and design principles using various 2D and 3D CAD systems, integrating Lean principles in the design process and knowledge of working with various measurement devices used in determining Quality Assurance of prototypes and finished goods. While in the program, the learner will be able to seek out entry-level and internship opportunities in engineering departments, plant maintenance, production departments and technical sales and support.

Upon successful completion of the Engineering Technology program, the graduate will be able to:

- Identify quality improvement methods used in the industry, including being able to develop your own process improvement action plans.
- Develop and roll out a product development plan from knowledge gained in coursework covering the various processes for manufacturing a product.
- Utilize various methods of measuring for the purpose of reverse engineering and quality assurance needs in the design build process.
- Analyze a piece-part drawing and make an appropriate listing of operations to obtain the desired part in the most cost and time efficient manner.
- Identify and take into account the applied physics principles that come into play in the design-build process of a manufactured product.
- Know your responsibilities as part of a design team and the ethics that should be practiced in this process, appreciating the overall human context in which Engineering Technology activities take place.
- Have the opportunity to advance in your careers and continue your professional development through four-year transfer programs offered at institutions, such as Illinois State University, Purdue University, Illinois Institute of Technology, Southern Illinois University and others with related programs around the country.

Associate in Applied Science Degree

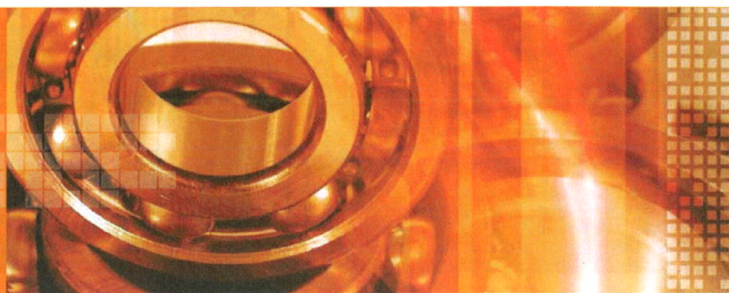
Semester One

| | | Credit Hours |
|------------|--|--------------|
| ENT-104 | Electricity I | 3 |
| ENT-110◇ | Production Drawings & CAD | 4 |
| # ENT-252◇ | Introduction to Mechanical AutoCAD | 3 |
| # MAT-170◇ | <i>Elementary Statistics</i> ¹ or | |
| MAT-103 | <i>Applied Intermediate Algebra</i> | 3-4 |
| # RHT-101◇ | Freshman Rhetoric & Composition I ² | 3 |
| | | <hr/> 16-17 |

Semester Two

| | | |
|------------|--|-------------|
| ENT-103◇ | Introduction to Automation | 3 |
| ENT-115◇ | Fluid Power | 3 |
| # ENT-232◇ | Descriptive Geometry | 3 |
| # MAT-111◇ | <i>Pre-Calculus</i> ¹ or | |
| # MAT-114◇ | <i>Plane Trigonometry</i> ¹ | 3-5 |
| | Program electives | 3 |
| | | <hr/> 15-17 |

ENGINEERING TECHNOLOGY



C448S - Engineering Technology / Fabrication Certificate

The Engineering Technology/Fabrication curriculum provides the student with field experience to advance their knowledge of modern elements of fabrication, from an introduction to manufacturing with shop safety and manual machining operations through the use of CAD/CAM software interfacing with automated CNC equipment. Also included in the certificate is a course on the basics of machine elements, needed in the repair and maintenance of the high-end equipment of today's automated manufacturing facilities.

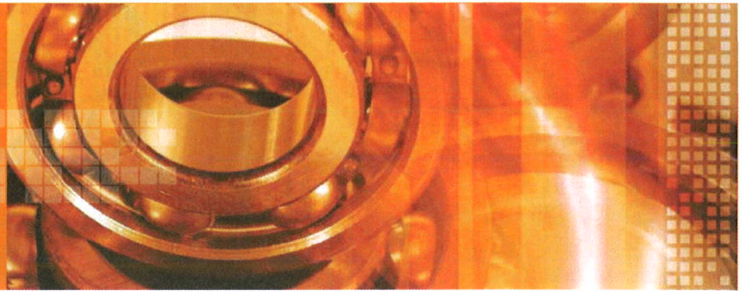
| Semester One | | Credit Hours |
|------------------------|---|----------------|
| ENT-100 | Introduction to Manufacturing | 4 |
| ENT-116◇ | Fabrication Processes | 4 |
| ENT-117◇ | Computer Numeric Controls I | 4 |
| | | <hr/> |
| | | 12 |
| Semester Two | | |
| ENT-110◇ | Production Drawings & CAD | 4 |
| # ENT-118◇ | Computer Numeric Controls II (or) | 3 - 4 |
| ENT-290 | Co-op Education | |
| ENT-111◇ | Metrology with Geometric Dimensioning and Tolerancing | 3 |
| # ENT-144◇ | Sheet Metal Fabrication | 3 |
| | | <hr/> |
| | | 13 - 14 |
| Total credits required | | 25 - 26 |

Coordinator: Antigone Sharris, (708) 456-0300, ext. 3622; Email: asharris@triton.edu; Cell Phone: (773) 580-8807



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ENGINEERING TECHNOLOGY



C448V - Engineering Technology/Mechatronics Certificate

The Engineering Technology/Mechatronics certificate curriculum is designed for individuals seeking to secure a position in industry requiring skills and knowledge working with automation equipment, industrial controls, and basic robotics.

| Semester One | | Credit Hours |
|------------------------|--|--------------|
| ENT-104 | Electricity I | 3 |
| ENT-204 | Programmable Logic Control I (PLC I) | 3 |
| ENT-115 | Fluid Power | 3 |
| | | <hr/> |
| | | 9 |
| Semester Two | | Credit Hours |
| ENT-205 | Robotics I | 4 |
| ENT-206 | Programmable Logic Control II (PLC II) | 4 |
| ENT-202 | Electricity II | 4 |
| | | <hr/> |
| | | 12 |
| Total credits required | | 21 |

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