

Engineering Technology Major Requirements

(2023 - 2024)

78 credit hours minimum

- <u>TEC 100</u>: Professional Development in Technology
- <u>TEC 111</u>: Fundamentals of Power Technology
- <u>TEC 116</u>: Intro Technical Drawing & Constraint-Based Solid Modeling
- <u>TEC 130</u>: Introduction to Manufacturing Processes
- <u>TEC 151</u>: Introduction to Computer Systems Technology
- TEC 216: Constraint-Based Solid Modeling and Production Drawings
- TEC 233: Computer Numerical Control (CNC) & Machining
- <u>TEC 234</u>: Robotic Systems Integration
- TEC 240: Electric Circuits & Machines
- TEC 263: Automated Fluid Power Systems
- TEC 270: Managing Technological Systems
- TEC 285: Industrial Plastics
- TEC 293: Mechanical Properties of Materials
- <u>TEC 313</u>: Quality Systems for Technology
- TEC 320: Project Management
- <u>TEC 330</u>: Applied Economic Analysis for Technologists
- <u>TEC 392</u>: Manufacturing Organization and Management⁺
- <u>CHE 102</u>: Chemistry and Society
- <u>HSC 271</u>: Safety Technology
- MAT 120: Finite Mathematics
- MAT 121: Applied Calculus
- MQM 100: Statistical Reasoning
- PHY 105: Fundamentals of Physics
- **PSY 110:** Fundamentals of Psychology

Engineering Technology electives (choose 6 hours)

- TEC 243: Computer Networking Systems
- <u>TEC 244</u>: Digital Electronics
- TEC 333: Geometric Dimensioning and tolerancing
- TEC 345: Process Control Networks
- TEC 370: Supply Chain Logistics
- TEC 398A02: Professional Practice: Internship in Technology
- <u>ACC 131</u>: Financial Accounting
- ECO 101: Principles of Microeconomics
- FIL 185: Legal, Ethical and Social Environment of Engineering Technology Career Opportunities





Description of the Major

The mission of the ET sequence is to prepare technically-oriented managerial professionals and leaders for business, industry, government, and education by articulating and integrating student experiences and core competencies in engineering technology.

Skills & Knowledge Developed in this Field of Study

The courses in the ET sequence focus on the management of people, processes, and materials through application-oriented activities. As a result, our students are well equipped to become project managers.

Our students learn in three integrated ways. First, students learn by theory, internalizing ideas necessary to succeed in the field. Then they learn by practice, familiarizing themselves with the processes needed to complete tasks. Finally, they learn by doing, using our modern facilities to gain experience with the equipment and processes they will be dealing with in their future careers.

Employment Opportunities

Career Titles

Graduates of the engineering technology program are actively recruited for leadership roles. Initial placement positions include the following:

- Application engineer
- Automated systems engineer
- Design engineer
- Diesel application engineer
- Energy service associate
- Integration engineer
- Manufacturing engineer
- Manufacturing specialist
- Mechanical designer
- Mold design engineer

Employers That Have Hired Our Graduates

- ABB Robotics
- Ameren
- Bosch
- Brandt
- Bridgestone America
- Caterpillar, Inc.
- Custom Aluminum Products, Inc.
- Eakus Corp.
- Genesis Systems Group
- Hurco Companies, Inc.
- Hydro-Gear
- IVPlastics, Inc.
- Matrix Design, Inc.
- Medical Murray

- Project manager
- Process engineer
- Production engineer
- Project coordinator
- Regional project engineer specialist
- R&D engineer
- Robot programmer
- Robotics service engineer/technician
- Rotational engineer
- Sustaining reliability engineering tech
- Molex
- Pro Mold & Die
- Renishaw
- Ring Container Technologies
- Rivian
- Siemens
- SMC Corporation
- Taylor Communications
- Transco Products, Inc.
- UPS
- Vizient Manufacturing
- We Are Alexander
- Weather Tech
- Wolf Robotics

Salary and Placement Statistics

The typical starting salary as reported in the alumni follow up surveys is between \$40,000 and \$60,000 with the average salary at \$55,000.

+400 hours of engineering technology related work experience is required before taking TEC 392