



**KENTUCKY STATE
UNIVERSITY**

MANUFACTURING ENGINEERING TECHNOLOGY

About Us

Welcome to the Manufacturing Engineering Technology Program at Kentucky State University! Our program is dedicated to prepare individuals to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. The program includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

This program can offer graduating students an opportunity to build a rewarding career in additive manufacturing that is more focused than other broad-based models in order to meet the need of semi-conductor/ chip manufacturing industry due to increasing demand for smart devices and smart automobiles. Our faculty members are experts in their respective fields and passionate educators and mentors committed to student success. With small class sizes, we ensure personalized attention and a collaborative atmosphere where students can thrive.

Mission

The mission of the Manufacturing Engineering Technology program at Kentucky State University is to provide a high-quality, ABET-accredited education that prepares students for successful careers in the manufacturing industry. We aim to equip our graduates with the technical expertise, critical thinking skills, and ethical standards necessary to excel in a rapidly evolving global marketplace. Through a combination of rigorous coursework, hands-on laboratory experiences, and industry partnerships, we strive to foster innovation, sustainability, and continuous improvement in manufacturing processes and technologies.

Vision

Our vision is to be a recognized leader in manufacturing engineering technology education, known for producing graduates who are highly sought after by employers for their practical skills, innovative mindset, and commitment to lifelong learning. We aspire to create a dynamic learning environment that integrates cutting-edge technology, research, and industry collaboration, thereby contributing to the economic and technological advancement of Kentucky and beyond.

Core Values

1. Excellence in Education: We are committed to delivering a rigorous and relevant educational experience that meets the highest standards of quality and innovation in manufacturing engineering technology.

2. Hands-On Learning: We emphasize experiential learning through laboratory work, internships, and industry projects to ensure that our students are well-prepared for real-world challenges.
3. Innovation: We embrace creativity, adaptability, and forward-thinking approaches to address challenges and opportunities in the field of Manufacturing Engineering Technology.
4. Collaboration: We foster an inclusive and collaborative learning environment, promoting teamwork, interdisciplinary cooperation, and partnerships with industry, academia, and the community.
5. Integrity: We uphold honesty, transparency, and ethical conduct in our academic endeavors, research pursuits, and professional interactions.
6. Diversity: We celebrate diversity in perspectives, backgrounds, and experiences, recognizing the value of a multicultural and inclusive community in enriching learning and scholarship.
7. Lifelong Learning: We instill a passion for continuous learning, professional development, and intellectual curiosity, empowering our students to thrive in an ever-evolving technological landscape.
8. Impact: We strive to make a positive impact on society, industry, and the economy by producing graduates who are capable problem solvers, effective communicators, and responsible stewards of technological advancement.

KSU's Engineering programs are utilizing ABET outcomes (<https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-technology-programs-2024-2025/>) as the basis to begin moving for programmatic accreditation once approved by SACSCOC.

An accreditable degree program from ABET in manufacturing engineering technology will provide graduates with instruction in technical and leadership skills necessary for manufacturing competitiveness and to enter careers in manufacturing process and systems design, operations, quality, continuous improvement, lean manufacturing, and sustainability. Level and scope of career preparation will depend on the degree level and specific program orientation as portrayed by its program learning objectives. KSU's Engineering programs are utilizing ABET outcomes as the basis to begin moving for programmatic accreditation once approved by SACSCOC.

(Criteria from ABET Engineering Technology Accreditation Commission (<https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-technology-programs-2024-2025/>)) For baccalaureate degree program in manufacturing engineering, the student learning competencies:

- (1) an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline;
- (2) an ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems appropriate to the discipline;
- (3) an ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- (4) an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- (5) an ability to function effectively as a member as well as a leader on technical teams.

Manufacturing Engineering Curriculum Ladder (<https://kysu-public.courseleaf.com/undergraduate/business-engineering-technology/>)

[school-of-engineering-and-technology/manufacturing-engineering-technology-bs/bachelor-plan-of-study/](#))