



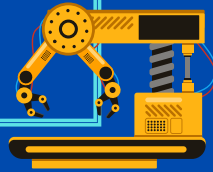
## MAJOR MAP

## WHO WE ARE

- The Department of Mechanical and Manufacturing Engineering at Tennessee State University is very passionate about unlocking the potentials of tomorrow's mechanical engineers.
- With several years of experience in the industry and academia, our faculty bring real-world insight to the classroom. Our approach goes beyond textbooks, integrating hands-on projects, cutting-edge research, and industry collaborations.
- We aim to inspire innovation, critical thinking, and problem-solving skills in our students, preparing them not just for today's challenges, but for shaping the future of engineering.

### What skills will students learn throughout this program?

- Students gain a solid understanding of fundamental engineering principles such as mechanics, thermodynamics, fluid dynamics, materials science, and heat transfer.
- Students develop skills in designing and analyzing mechanical systems and components, considering factors such as functionality, reliability, cost, and sustainability.
- Students will gain proficiency in statistical analysis, data interpretation, and data visualization techniques.



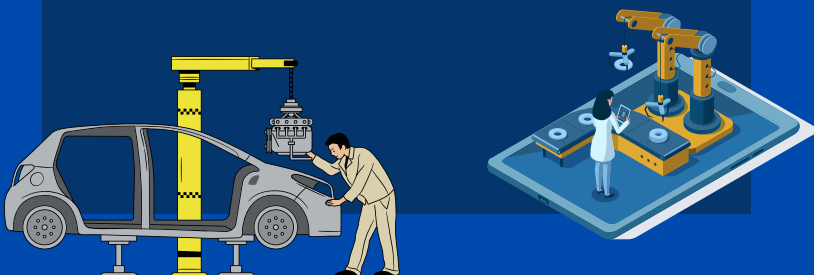
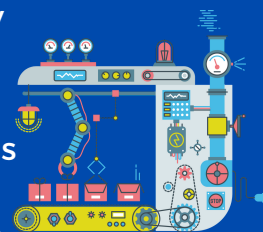
### CAREER OUTCOMES:

- Mechanical Engineer
- Product Engineer
- Manufacturing Engineer
- Project Engineer
- Quality Engineer
- Energy Engineer
- Automotive Engineer
- HVAC Engineer
- Materials Engineer
- Consulting Engineer
- Design Engineer
- Applications Engineer
- Field Engineer
- Research & Development Engineer



### WHAT SKILLS ARE YOUR FUTURE EMPLOYERS LOOKING FOR?

- Technical Proficiency
- Teamwork
- Professionalism
- Communication Skills
- Attention to Detail
- Project Management
- Continuous Learning
- Hands-On Experience
- Analytical and Problem-Solving Skills
- Computer-Aided Design (CAD)



For more information, [click here](https://www.tnstate.edu/me/)  
<https://www.tnstate.edu/me/>

# Undergraduate Experiential Major Map:



## First Year/Freshman

- Complete your Handshake Profile.
- Complete your four-year educational plan in UNIV 1000 during the fall semester.
- Focus on your studies and earn good grades.
- Visit the [Office of Student Success \(OSS\)](#) and connect with your advisor for help navigating college life and your classes. Make an appointment using the student planner app and view the OSS page for other hours and services.
- First Generation students connect with your [First Generation Specialist](#).
- Get to know professors. The best time to connect outside of class is during their office hours.
- Visit the [Academic Achievement and Retention Center](#) for access to study tips, connecting to academic coaches, tutoring, and other helpful resources.
- Attend the Career Fair (Sponsored by the [Career Development Center](#))
- Get involved - Attend organizational fairs, special/corporate events, and volunteer on and off campus.

## Sophomore & Junior

- Update your resume and remove high school activities. Have it critiqued by the [Career Development Center](#).
- Review and update LinkedIn and Handshake profiles.
- Attend the Career Fair (Sponsored by the [Career Development Center](#))
- Explore graduate school options.
- Begin preparing for GRE, LSAT, MCAT, GMAT, and other exams for graduate school admissions.
- Begin building your professional wardrobe.
- Meet with your [departmental academic advisor](#) to confirm degree progress and discuss your future academic and career goals.
- Attend institutional and departmental internship workshops.

## Senior

- Meet with your [departmental academic advisor](#) to confirm degree progress and discuss your future academic and career goals.
- Apply for [Graduate and Professional School](#) or jobs that fit your interests, skills, and career goals. Follow up on applications and keep a record of the status of each.  
*\*pay attention to due dates*
- Draft a cover letter that can be adapted for a variety of employers. Have it critiqued.
- Complete the Senior Exit Exam and First Destination Survey. ([Testing Center](#))

## Academic Success Checklist

- Book an appointment with your academic advisor for pre-registration and advising.
- Discover library resources.
- Visit the math, reading, writing, and tutoring center.
- Complete FAFSA and academic scholarship applications.

## Educational Planning Checklist

- Ask your academic advisor about High Impact Practices
- Participate in at least two High Impact Practices at TSU
- Join a student group.

## Career Development Checklist

- Create your HandShake Profile.
- Visit [What Can I Do With This Major](#)
- Attend the career fair to expand your network.
- Attend Academic Department workshops and seminars.
- Visit the [Academic Pathways & Partnerships](#)

### Think

Engaging in critical thinking and inquiry inside the classroom.

### Work

Pursue experiences that will allow you to grow as a leader and professional.

### Serve

Explore opportunities to contribute to the broader community and global marketplace.