

# AUTOMOTIVE ENGINEERING TECHNOLOGY

Automotive Engineering Technology (AET) is a four-year BS degree located within the College of Science, Engineering and Technology. According to the Society of Automotive Engineers, automotive engineering technology refers not only to passenger cars but all forms of ground vehicles and equipment intended for the movement of goods and people. Areas include agricultural equipment, high-performance vehicles, industrial equipment, recreational vehicles, trucks, buses, and aircraft.

## PROGRAMS



### DEGREES AND CERTIFICATES

- Bachelor of Science in Automotive Engineering Technology
- Automotive Engineering Technology Minor

### ABOUT THE PROGRAM

The Automotive Engineering Technology degree program prepares graduates for careers in product research, design and development, manufacturing, and technical sales in the original equipment and aftermarket industries. Since 1974, the Automotive Engineering Technology Program has been involved in the production of experimental cars. The 33 cars built to date have been entered in 24 national competitions that provide real-life experience in design, testing, deadlines, budgets, and conforming to established regulations.

## REAL-WORLD CONNECTIONS



### SKILLS AND TALENTS

- Engineering, Science and Technology
- CAD
- Design Skills and Knowledge
- Analytical Skills
- Math and Physics
- Machine Tool Skills

### CAREERS

- Automotive Engineer
- Manufacturing Engineer
- Design Engineer
- Test Engineer
- Process Planner
- Engineering Technician

### EMPLOYERS

- Bosch USA
- Cummins Power Generation
- Ford Motor Company
- Toro
- Polaris Industries
- MTU

## INSPIRED ACTION



### EMPLOYMENT RATE

**98%**  
of program graduates begin their careers within one year of graduation.

Graduates: 122  
Respondents: 104  
[link.mnsu.edu/graduate-follow-up](https://link.mnsu.edu/graduate-follow-up)

### MEDIAN SALARY

**\$99,510**

The median annual wage for Mechanical Engineers in May 2023.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Mechanical Engineers, at [link.mnsu.edu/automotive-engineering-technology-salary](https://link.mnsu.edu/automotive-engineering-technology-salary)

### PROGRAM WEBSITE



[cset.mnsu.edu/aet](https://cset.mnsu.edu/aet)



# SAMPLE FOUR-YEAR PLAN - AUTOMOTIVE ENGINEERING TECHNOLOGY, BS

First Year (Fall)	First Year (Spring)
AET 102 Introduction to Automotive Engineering Technology (1) AET 160 Auto Technology & Systems (4) ENG 101 Foundations of Writing & Rhetoric (4) MATH 115 Precalculus Mathematics (4) MET 142 Introduction to Parametric Modeling (3)	COMM 100 Fundamentals of Communication (3) OR COMM 102 Public Speaking (3) CHEM 104 Introduction to Chemistry (3) EET 113 DC Circuits (3) MATH 121 Calculus I (4) AET 261 Auto Drivability & Diagnosis (4)
Second Year (Fall)	Second Year (Spring)
MATH 122 Calculus II (4) PHYS 211 Principles of Physics I (4) AET 262 Auto Computers & Electronics (4) MET 275 Manufacturing Processes I (4) General Education (2)	STAT 154 Elementary Statistics (4) ECON 202 Principles of Microeconomics (3) PHYS 212 Principles of Physics II (4) ENG 271W Technical Communication (4) AET 280 Data Acquisition & Analytics (3)
Third Year (Fall)	Third Year (Spring)
MET 323 Statics (3) MET 341 Advanced Parametric Modeling (3) AET 364 Chassis Design & Perf Testing (4) MET 375 Manufacturing Processes II (4) MET 425 Project and Value Management (4)	MET 324 Strength of Materials & Dynamics (4) AET 334 Fluid Power (3) AET 366 Auto Thermo Dynamics (3) AET 387 Junior Design Project (3) Elective Course in Major (3)
Fourth Year (Fall)	Fourth Year (Spring)
MET 424 Industrial Safety (2) AET 468 Auto Research Methods (4) AET 488W Senior Design I (3) General Education Course (5)	AET 436 Hybrid / Electric Vehicles (3) AET 465 Automotive Lab (2) AET 489W Senior Design II (3) General Education Course (4)

For more information about program requirements, visit:  
[mnsu.edu/academics/academic-catalog](https://mnsu.edu/academics/academic-catalog)

## LEARN MORE

**Department of Automotive and  
Manufacturing Engineering Technology**

205 Trafton Science Center E  
507-389-6383

## NOTES

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