

MECHANICAL ENGINEERING

Transfer Program with UNL

Mechanical engineers design and oversee the manufacture of many products such as medical devices and batteries. They design power-producing machines, such as electric generators, and power-using machines, such as refrigeration and air-conditioning systems. A degree in Mechanical Engineering will give you the expertise in areas like energy conversion and transmission; the flow of fluids and heat; the development, manufacturing, and operation of machinery and equipment; and transportation. The Mechanical Engineering program at Wayne State is a guided pathway with the University of Nebraska-Lincoln College of Engineering. You will complete your first years of coursework at Wayne State, then transfer to UNL's College of Engineering in Lincoln, Neb. to complete your B.S. in Mechanical Engineering. With a Mechanical Engineering degree, you'll be well-prepared in the fundamental areas of solid mechanics, thermal-fluid sciences, systems and design engineering, and materials engineering.

fast facts

Credit hours: Up to 80 at Wayne State College; 60 at the University of Nebraska-Lincoln

Program details: This is a joint program between Wayne State College and University of Nebraska-Lincoln College of Engineering. You will complete your first years of coursework at Wayne State, then transfer to UNL to complete your B.S. in Mechanical Engineering.

Department: Physical Sciences and Mathematics

School: Science, Health, and Criminal Justice

focus on results

Skills Learned

- Mechanical design
- Research and development
- Mathematics
- Physical science
- Computer-based measurement and analysis tools
- Organizational, listening, communication, and interpersonal skills
- Lead and work effectively in teams

Possible Careers

- Quality assurance officer
- Project engineer
- Systems engineer
- Mechatronics engineer
- Materials analyst
- Combustion technician
- Aerodynamics researcher
- New product developer
- Instrumentation designer
- Control systems specialist

Types of Employers

- Aerospace firms
- Automotive firms
- Civil engineering firms
- Power plants
- Manufacturing companies
- Research lab
- Transportation companies
- Computer and electronic products companies
- Construction companies

outside the classroom



Visit www.wsc.edu/clubs to learn more about clubs and organizations on campus.

Activities / Opportunities

- Conduct research projects
- Conferences and presentations
- Peer mentoring and tutoring
- Service-Learning
- Study Abroad

Clubs / Organizations

- Biology Club
- Drafting and Design Club
- Kappa Mu Epsilon (Math Honorary)

Program courses

2026-27 Academic Year

The following courses are required for the program of study described on this sheet. Every effort is made to ensure this information is current, but please be aware that some content may have changed. To develop a plan for registering and taking these courses, please consult the current academic catalog and your advisor.

Program courses

The following courses, which include General Education courses, can be taken at Wayne State prior to transferring to the University of Nebraska.

Business and Technology Courses

CSC 150 Programming Fundamentals	3
ITE 219 Mechanical Engineering and Drafting.....	3
Select one of the following.....	3
ECO 202 Principles of Macroeconomics (3)	
ECO 203 Principles of Microeconomics (3)	

Humanities Courses

ENG 102 Composition Skills.....	3
ENG 200 Expository Writing.....	3
Select one of the following.....	3
CNA 201 Small Group Communication (3)	
CNA 210 Interpersonal Communication (3)	
Select one of the following.....	3
ART 110 Drawing I (3)	
ART 244 Art History I (3)	
ART 245 Art History II (3)	
CNA 101 Intro to Theatre (3)	
ENG 202 Poetry Workshop (3)	
ENG 203 Fiction Workshop (3)	

Math Courses

MAT 140 Calculus I	5
MAT 240 Calculus II.....	5
MAT 250 Differential Equations	3
MAT 340 Calculus III	5
MAT 350 Linear Algebra.....	3

Natural Science Courses

CHE 106 General Chemistry I	4
CHE 107 General Chemistry II	4
PHY 115 Professionalism in Science and Engineering	2
PHY 214 Applied Statics.....	3
PHY 215 Applied Dynamics	3
PHY 301 University Physics I	4
PHY 302 University Physics II.....	4
PHY 321 University Physics I Lab.....	1
PHY 322 University Physics II Lab.....	1
PHY 345 Thermodynamics	3

Social Science Courses

Select one of the following.....	3
GEO 120 World Regional Geography (3)	
GEO 300 Human Geography (3)	
HIS 120 World History (3)	
HIS 170 World Civilization I (3)	
HIS 171 World Civilization II (3)	
PHI 105 Ethics and Values (3)	
POS 110 Intro to World Politics (3)	
SOC 110 Intro to Anthropology (3)	
SOC 220 Social Problems (3)	
SOC 415 The Family (3)	
Select one of the following.....	3
HIS 280 America, 15,000 B.C. to 1845 (3)	
HIS 281 America, 1845 to 1945 (3)	

pre-engineering faculty



Visit www.wsc.edu/physical-sciences-mathematics-department to learn more about the Department Physical Sciences and Mathematics.

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