

# CIVIL ENGINEERING

## Transfer Program with UNL

Civil engineers design, build, and oversee the infrastructure of buildings and projects in both the public and private sector. They design infrastructures such as roads, buildings, airports, tunnels, dams, bridges, and other systems for electrical, water, and gas supplies. A degree in Civil Engineering will give you expertise in areas like construction, structural engineering, geotechnical, and transportation. With a Civil Engineering degree, you'll be well-prepared in the fundamental areas of construction, architecture, fluid dynamics, systems and design engineering, and materials engineering.

**Engineering Readiness Activities:** This academic option includes mentoring, tutoring, and experiential learning such as hands-on projects and summer academies to prepare you for the rigors of an Engineering program. Acclimation trips to UNL provide the opportunity to meet and network with UNL and WSC engineering ambassadors.

## fast facts

### Hours:

Up to 80 hours at Wayne State College  
60 hours at the University of Nebraska

**Degrees offered:** 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's College of Engineering in Lincoln or Scott Campus at the University of Nebraska-Omaha, to complete your B.S. in civil engineering.

**Department:** Physical Sciences and Mathematics

**School:** Science, Health, and Criminal Justice

## focus on results

### Skills Learned

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

### Possible Careers

- Building services engineer
- Project engineer
- Systems engineer
- Water engineer
- Nuclear engineer
- Sustainability consultant
- Geotechnical engineer
- Fire risk assessor
- Patent attorney
- Urban designer
- Control systems specialist

### Types of Employers

- Government – public sector
- Production firms
- Water engineering 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](http://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
- Kappa Mu Epsilon (Math Honorary)

# Sample program of study

2024-25 Academic Year

Every effort is made to ensure this information is current, but please be aware that some content may have changed. There is no substitute for developing a careful course registration plan in consultation with your advisor. The class sequence listed is suggested only. The final decision rests with the student and academic advisor.

The following courses can be taken at Wayne State College prior to transferring to the University of Nebraska:

## Business and Technology

CSC 150 Programming Fundamentals .....	3
ITE 109 Mechanical Engineering and Drafting .....	3
Choose one of the following:	
ECO 202 Principles of Macroeconomics .....	3
ECO 203 Principles of Microeconomics .....	3

## Humanities

CNA 252 Public Address.....	3
ENG 102 Composition Skills.....	3
ENG 200 Expository Writing.....	3
Choose one of the following:	
ART 110 Drawing I .....	3
ART 344 Art History I .....	3
ART 345 Art History II .....	3
CNA 101 Intro to Theatre.....	3
ENG 202 Poetry Workshop.....	3
ENG 203 Fiction Workshop.....	3

## Math

MAT 140 Calculus I .....	5
MAT 180 Applied Probability and Statistics.....	3
MAT 240 Calculus II.....	5
MAT 250 Differential Equations .....	3
MAT 340 Calculus III .....	5

## Natural Science

BIO 102 Biology for General Studies and Laboratory.....	4
CHE 106 General Chemistry I .....	4
CHE 107 General Chemistry II .....	4
EAS 120 Introduction to Geology.....	3
PHY 115 Professionalism in Science and Engineering .....	2
PHY 214 Engineering Statics.....	3
PHY 215 Applied Dynamics .....	3
PHY 301 University Physics I .....	4
PHY 302 University Physics II.....	4

## Social Science

Choose one of the following:	
GEO 120 World Regional Geography .....	3
GEO 300 Human Geography.....	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
Choose one of the following:	
HIS 180 American Experience I.....	3
HIS 181 American Experience II .....	3

## pre-engineering faculty



Visit [www.wsc.edu/psm](http://www.wsc.edu/psm) to learn more about the Department Physical Sciences and Mathematics.

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