NDSU COLLEGE OF ENGINEERING

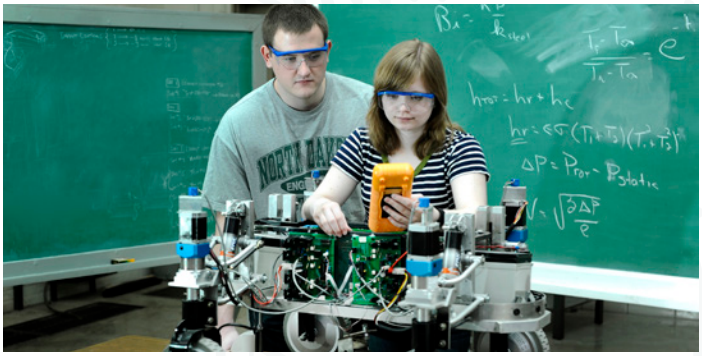
ROBOTICS MINOR

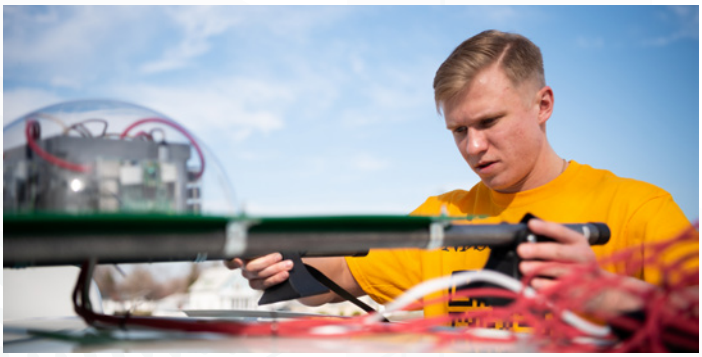
The College of Engineering's robotics minor is open to any student in the college and is designed to give you the skills needed to design and develop robotic devices and use those devices to solve real-life problems.

The robotics minor will require 18 credits chosen from new and existing courses including:

- Microprocessor programming
- Perception sensors
- Instrumentation
- Actuation systems
- Control principles
- Robot manipulation

Courses are designed to have extensive hands-on activities so students can directly relate what they learn to the real world.





JOB-READY SKILLS

There has been rapid growth in the need for engineers and computer scientists with the technical skills needed to work in the field of robotics. Students completing a minor in robotics will be ready to work for a wide range of industries including:

- Drone manufacturers
- Civil structure inspection agencies
- Precision agriculture
- Industrial manufacturers
- Automotive companies
- Aerospace companies
- Energy and mining

CORE COURSES

Core courses are aligned in four areas:

- Robotics principles
- Core programming
- Controls and applications
- Measurements and actuation

All students take Introduction to Robotics (Robotics Principles), and will choose an additional course from two of the remaining three core areas.

APPROVED COURSES

Students earn an additional nine credits from approved courses covering a variety of areas:

- Artificial intelligence and machine learning
- Perception and data processing
- Electric machines and control systems
- Kinematics and dynamics of machines
- Applications of unmanned systems

LEARN MORE

ndsu.edu/coe/robotics

NORTH DAKOTA STATE UNIVERSITY