

# Engineering, Manufacturing and Tech Career Pathways

## **High School Classes**

*Consider taking one of these classes here at NHS to further explore your interest in engineering-related fields:*

Technologies  
Auto Maintenance

Auto Mechanics I  
Small Engines/Drafting  
Robotics

Welding  
Advanced Manufacturing  
Principles of Engineering  
Introduction of Engineering  
Civil Engineering and Architecture

## **Find more information from the high school's course registration guide:**

<http://northfieldschools.org/nhs/support/counseling/registration/>

## **High School Articulated Classes**

Did you know that a local community college may recognize your high school class for college-level credit? It's true! Talk with Mark Voitalla about which NHS classes may be recognized by local colleges, including Dakota County Technical College in Rosemount. Mark can be reached at [mvoitalla@northfieldschools.org](mailto:mvoitalla@northfieldschools.org).

*An articulated high school course is one in which a determination has been made that a course offered at the secondary level is comparable to a specific community college course.*

## **Transferring college credit from one institution to another**

Find more information about **Minnesota's "Project Lead the Way"** initiative, which allows students to earn credit from a school that will transfer to other Minnesota schools  
<http://www.mnpltw.org/parents-students/college-credit/>

## **Local colleges that offer engineering-related degrees**

**Inver Hills Community College:** Earn an A.S. in Engineering Fundamentals and can enroll into another university as a junior

<https://www.inverhills.edu/DegreesAndPrograms/Engineering/index.aspx>

**Dakota County Technical College:** Earn an A.A.S. Degree in Civil Engineering Technology

<http://www.dctc.edu/academics/programs-majors/industry-careers/civil-engineering-technology/>

**Riverland Community College:** Earn a degree in Electrical Maintenance Technology  
<http://www.riverland.edu/pos/program.cfm?progID=144>

**South Central:** Earn an Energy Technical Specialist A.A.S. Degree  
<http://www.southcentral.edu/Majors-and-Programs/energy-technical-specialist-program.html>

**Additional local colleges/universities that offer engineering-related degrees**

School Name	School Type and Setting	Engineering Degrees Offered
Anoka-Ramsey Community College	2-year, public, large suburb	Associate of Science
Century College	2-year, public, large suburb	Associate of Science
Iowa State University – Ames, IA	4-year, public, small city	Bachelor of Science, Master of Engineering, Master of Science
Minnesota State University - Mankato	4-year, public, remote city	Bachelor of Science, Master of Engineering
Normandale Community College	2-year, public, small city	Associate of Science
North Hennepin Community College	2-year, public, large suburb	Associate of Science
Saint Cloud State University	4-year, public, small city	Bachelor of Science
University of Minnesota - Crookston	4-year, public, distant town	Bachelor of Science
University of Minnesota - Duluth	4-year, public, small city	Bachelor of Science, Master of Engineering, Master of Science
University of Minnesota - Twin Cities	4-year, public, large city	Bachelor's, Master of Science, Master's, Doctor of Philosophy
University of St. Thomas	4-year, private, not-for-profit, large city	Bachelor of Science, Master of Science

## Jobs you can get with these degrees

Electronics Engineering Technician  
Architectural and Engineering Managers  
Mechanical Engineering Technician  
Industrial Engineering Technician

Mechanical Engineer  
Civil Engineer  
Automotive Industrial Technician  
*and many, many more!*

### **Find more information about these and related jobs:**

- **On Naviance!** Every NHS student has access to Naviance, where you can explore post-secondary program options, consider eligibility requirements to be accepted to a program, and much more! Talk with an NHS counselor for more information – Mark Ensrud, Kathy Wiertsema-Miller, and Deb Rasmussen.
- **On O\*NET Online**, another tool for career exploration and job analysis! O\*NET Online has detailed descriptions of the world of work for use by job seekers and students.  
<https://www.onetonline.org/>