



Bridges Career Academy

Carpentry

Swanville High School

The Carpentry Academy allows students to acquire not only basic construction knowledge, but students will also gain design and construction skills critical in the construction industry. In the carpentry courses, students will use mechanical drafting to design a personal project; experience hands-on activities that include machine operation, material fabrication and wood finishing. Students put blueprint reading, woodworking skills and mathematical skills to work in a practical way. With the variety of career opportunities in the construction industry, students will be prepared to go directly to employment when completing this Academy or continue in a construction program at a post-secondary college.

Academic Courses

- Woods I
- Woods II
- Woods III
- Career Investigation I/II

Career Experiences

- Tour local businesses
- Listen to industry speakers
- Attend the Bridges Career Exploration Day or other regional career fairs

Completion Standards

COMPLETE

3 of 4 courses

GRADES **B** ↑

Earn a **certificate** and **green cord** at graduation



Explore types of careers
www.careerwise.minnstate.edu/careers

Review the local job outlook
www.careerwise.minnstate.edu/jobs

Find postsecondary programs
www.careerwise.minnstate.edu/education

Job Skills

In addition to having technical skills, employers expect workers in this industry to have these skills:

- Understanding planning and time management
- Be an active member of a team
- Use critical thinking and problem-solving skills
- Work safely
- Work precisely and manage tools and equipment
- Understand blueprints



Carpentry Career Academy

Swanville High School

The Carpentry Academy allows students to acquire not only basic construction knowledge, but students will also gain design and construction skills critical in the construction industry. In the carpentry courses, students will use mechanical drafting to design a personal project; will experience hands-on activities that include machine operation, material fabrication and wood finishing. Students put blueprint reading, woodworking skills and mathematical skills to work in a practical way. With the variety of career opportunities in the construction industry, students will be prepared to go directly to employment when completing this Academy or continue in a construction program at a post-secondary college.

Academy Courses

Woods I

This course will introduce students to career related occupations and power & hand tools operations used in the woodworking trades. Some math will be involved in writing up their material list and figuring the final cost, as well as, drafting their project orthographically before they are allowed to start their project. Machine operation and safety will be emphasized, and basic projects can be constructed.

2 High School Credits

Woods II

This course will give students advanced skills in the construction of both large and small projects. Students will be responsible for not only the project's design, but also selecting the materials, estimating the project costs resulting in a completed project.

2 High School Credits

Woods III

Completion of **Woods II** is a prerequisite for this class. Students will apply design and construct a wood project of their choice. In this class, there will also be an opportunity for a group of students to construct a small shed. Students will be instructed on machine safety, machine operation, material fabrication, and wood finishing. Before their project is started they will need a detailed materials list turned in with total costs. Throughout the course students will be evaluated on classroom participation, work habits and the ability to complete a complex project that is constructed out of veneers and solid wood.

2 High School Credits

Career Investigation I/II

Students will research several career paths and have hands-on experience in each one. These include: Construction, Manufacturing, Automotive, Energy and Agriculture. Students will learn the safe working practices in each field. Students will be involved with tours of local businesses and colleges and have guest speakers give presentations on the career outlook, education required, and industry needs.

2 High School Credits

COMPLETION STANDARD

Students must earn a B or higher, grades lower than that will be cause for dropping from academy. Students may appeal before a board of administrators and teacher. Students must complete 3 of the 4 classes in order to receive Academy certification.

CAREER EXPERIENCES

Students will explore and research careers with industry speakers, work with professionals in the industry, tour a local cabinet shop, tour a locally-owned granite countertop shop, visit a new home construction, and participate in Bridges Career Exploration Day.

-OVER-



Carpentry Career Academy

Swanville High School

JOB SKILLS

In addition to having technical skills, employers expect their workers to have other skills such as:

- Understanding planning and time management
- Be an active member of a team
- Use critical thinking and problem-solving skills
- Work safely
- Work precisely and manage tools and equipment
- Understand blueprints

CAREER OPTIONS: www.careerwise.minnstate.edu/careers

JOB OUTLOOK: www.careerwise.minnstate.edu/jobs

POSTSECONDARY PROGRAMS: www.careerwise.minnstate.edu/education

