



Bridges Career Academy

Building Trades

Brainerd High School

Learn basic construction skills and the information needed to understand the residential and commercial construction industry. Be involved with the construction of a residential home while learning blue print reading, developing wood working skills and learning the documentation processes required for building a structure. Gain entry-level employment or continue education.

Academic Courses

- Building Trades I
- Building Trades II
- CAD I or II

Career Experiences

- Learn from industry speakers
- Work with professionals in plumbing, wiring, HVAC and cabinetry
- Attend the Bridges Career Exploration Day or other regional career fairs

Completion Standards

COMPLETE

Building Trades I AND II

CAD I OR II

GRADES **B** ↑



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



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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



Building Trades Career Academy

Brainerd High School

The Building Trades Academy allows students to acquire not only basic construction skills but also the information needed to understand the residential and commercial construction industry. In the building trade's courses, students will be involved with the construction of a residential home while they learn blue print reading, develop wood working skills and learn the documentation processes required for building a structure. Students will be prepared to go directly to employment or continue education when completing this Academy.

ACADEMY COURSES

Building Trades I — 1 High School Credit

The primary activity of this course will be building a two bedroom residential home. Students will learn and be involved with all aspects of the building process from planning to installation of shingles, floors, walls and roof framing. Professionals will assist with wiring, HVAC, and plumbing. All phases of construction will be covered extensively through the Modern Carpentry curriculum.

Building Trades II — 1 High School Credit

In this course, students continue with the building a two-bedroom residential home. Students will learn and be involved with all aspects of the building process from planning to installing insulation and vapor barrier, interior finishing installing drywall, v-groove pine, interior doors and trim, installing cabinets and exterior finishing including installing siding and soffit. Professionals will also aid in the processes installing cabinets in the spring semester. The course will be covered extensively through the Modern Carpentry curriculum.

CAD I — 1 High School Credit

This class, the focus will be on Fundamentals of CAD software and understanding how to utilize both programs. The students' imagination and creativity will be challenged with individual and various assigned projects. Both Auto CAD and Inventor programs will be utilized for both Architectural and Mechanical drafting purposes.

CAD II — 1 High School Credit

This class will be a continuation of CAD I. Fundamentals of design will again be stressed. The students' imagination and creativity will be challenged with individual and various assigned projects. Both Auto CAD and Inventor programs will be utilized for both Architectural and Mechanical drafting purposes.

COMPLETION STANDARD

Students wishing to receive a certification must complete both Building Trades I and II courses and either CAD I or CAD II with a minimum of 85% average. Students will also participate in the ACT National Career Readiness Certificate (NCRC) as part of this Academy Standard.

CAREER EXPERIENCES

Students will explore and research careers with industry speakers, work with professionals in the industry in areas of plumbing, wiring, HVAC and cabinetry, and participate in Bridges Career Exploration Day.

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

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www.BridgesConnection.org/Brainerd