

Williston High School

CTE Technology Education

<p>Freshman Year</p> <p>½ credit Applying Technology ½ credit Inventions and Innovations</p>	<p>Sophomore Year</p> <p>½ credit Applying Technology ½ credit Inventions and Innovations ½ credit Exploring Manufacturing Technology ½ credit Construction Tech I ½ credit Construction Tech II 1 credit Electronic Technology</p>
<p>Junior Year</p> <p>½ credit Applying Technology ½ credit Inventions and Innovations ½ credit Construction Tech I ½ credit Construction Tech II 1 credit Drafting/Design Mech/Architectural ½ credit Drafting II 2 credits Building & Trades Tech I 2 credits Building & Trades Tech II ½ credit Production Technology 1 credit Electronic Technology</p>	<p>Senior Year</p> <p>½ credit Applying Technology ½ credit Inventions and Innovations ½ credit Construction Tech I ½ credit Construction Tech II 1 credit Drafting/Design Mech/Architectural ½ credit Drafting II 2 credits Building & Trades Tech I 2 credits Building & Trades Tech II ½ credit Production Technology 1 credit Electronic Technology</p>

◆ **Applying Technology**

Class Type: Elective

Grade Level: 9-12

Credit: ½

Pre-requisites: None

This class will introduce students to different types of technology with most of it hands on activities. You will be building robots, rockets, flying on a flight simulator, wiring electronic circuits together, designing and building a house. If you like hands on activities we have breakouts that the class also does.

◆ **Inventions and Innovations**

Class Type: Elective

Grade Level: 9-12

Credit: ½

Pre-requisites: None

Inventions and Innovations is a hands on class with many research and application projects. Students will assess their inventions and others projects when working in groups. This class will show you how to create, invent and research projects.

◆ **Production Technology**

Class Type: Elective
Grade Level: 11-12
Credit: 1/2
Pre-requisite: Interest in the oil production in Williston
Extra Costs: \$20 fee

Production Technology will introduce the students to the production of oil and gas in the Williston Basin. We will trace the production of oil from seismographing to refining of crude oil into fuels. Guest lecturers and professionals in the industry will give insight on new technology.

Field trips to WSC's new rig will help identify parts of the rig. The class will also cover different types of welding used on the rigs, pipe lines or the tipping of drilling bits. It's a great class to find out what is happening in the Williston Basin Oil Basin.

◆ **Electronic Technology**

Class Type: Elective
Grade Level: 10, 11, 12
Credit: ½
Pre-requisite: None
Extra Costs; None

Students will spend a majority of their time in a lab environment building, analyzing and troubleshooting basic electronic circuits. The electronics theory and lab experience prepares students for career paths such as communications, medical, computer networking, automotive, manufacturing, engineering, and consumer electronics repair and installation.

◆ **Exploring Manufacturing Technology**

Class Type: Elective
Grade Level: 10
Credit: 1/2
Pre-requisite: None
Extra Costs: None

Exploring Manufacturing Technology is a continuation of Exploring Technology Education offered at the 9th grade level. Offered are eight units of instruction on manufacturing starting with an overview of manufacturing through product marketing. Common manufacturing materials such as wood, metal, composites, plastics and earth materials will be studied.

◆ **Drafting/Design Mechanical/Architectural(Drafting I)**

Class Type: Elective
Grade Level: 11-12
Credit: 1
Pre-requisite: None
Costs: \$10.00

The Class will introduce students to careers in mechanical and architectural drafting. They will be exposed to lettering, drawing layouts and fundamental knowledge of graphical communication.

Computers will be used for both mechanical and architectural drawings.

◆ **Drafting II**

Class Type: Elective
Grade Level: 11-12
Credit: 2
Pre-requisite: Drafting I
Costs: \$10.00

This class is a continuation of Drafting/Design Mechanical/Architectural and Drafting I is a prerequisite to this class. It is a two hour class with more instruction in traditional Drafting and advanced CAD drafting. This is also a year long class worth two credits.

◆ **Construction Technology I**

Class Type: Elective
Grade Level: 10-12
Credit: 1/2
Pre-requisite: None
Extra Costs: \$10.00 (plus individual project costs)

Construction Technology I focuses on finished carpentry and woodworking. Individual projects, with a concentration in cabinet making will be offered. Anyone interested in operating power tools safely in woodworking and/or cabinet making should take this course.

◆ **Construction Technology II**

Class Type: Elective
Grade Level: 10-12
Credit: 1/2
Pre-requisite: Construction Technology I suggested
Costs: \$10.00 (plus individual project fees)

Construction Technology II is a basic carpentry course introducing the students to safe operation of power tools, the basic components or elements of light frame construction, new products in construction, an simple home repairs. This is an excellent hand on course for future homeowners or anyone interested in entering the building trades.

◆ **Building & Trades Technology I**

Class Type: Elective

Grade Level: 11,12

Credit: 2 (two hours a day, all year long)

Pre-requisite: Must complete application from instructor or counselor's office

Extra Costs: \$35.00

Building & Trades Technology I provides an orientation to the construction trade that meets industry standards. The course is standards based beginning with the Core Curriculum which includes Basic Safety, Construction Math, Introduction to Hand and Power Tools, Introduction to Blue Prints, Basic Rigging, Communication and Employability Skills. Fundamentals of Construction are introduced including Floor Systems, Wall Systems, Roof Systems and Structure Enclosure. Building & Trades Tech I is a prerequisite to Building & Trades Tech II.

◆ **Building & Trades Technology II**

Class Type: Elective

Grade Level: 12

Credit: 2 (two hours a day, all year long)

Pre-requisite: Building & Trades Tech I, Must complete application from instructor or counselor's office

Extra Costs: \$35.00

Building & Trades Technology II continues with the Fundamentals of Construction with advanced training in Floor, Wall and Roof Systems. Advanced enclosure techniques will be included. Enhanced safety protocol will be included with emphasis on safety practices on project and the use of a safety officer. Students who successfully complete course modules and meet all safety standards will be eligible to receive national recognition and can articulate the national recognition into college construction craft programs.