Careerline Tech Center – Plumbing & Water Systems

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THE PLUMBING FIELD
According to the Bureau of Labor Statistics, the plumbing field has one of the highest numbers of workers and one of the highest incomes in the entire construction industry. Jobs exist in plumbing, water treatment, excavating, irrigation, etc.

PLUMBING AT CAREERLINE TECH CENTER
Students gain the knowledge and skills to work in a variety of career area related to plumbing.

MAIN AREAS OF FOCUS
General Plumbing  
Rainwater Harvesting  
Underground Systems  
Hydronic Heating Systems  
Green Technology  
Construction Basics  
Reverse Osmosis  
Plumbing/Heating Installation  
Applied Electricity  
Solar Water Heat  
Maintaining Systems

Learning Environment
Students explore the newest technology in renewable/sustainable energy systems including geothermal, hydronic heating, tankless water heaters, rainwater harvesting, and irrigation. Students learn the layout, design, and maintenance of water systems for homes, businesses, and golf courses. They develop skills in basic soldering, brazing, threading gas pipe, assembling PVC and cast iron drainage systems for residential, commercial, and industrial buildings. Students will learn basic electricity for wiring boilers and irrigation systems. All plumbing systems are tested with running hot and cold water including working drains. Real world experience is gained at the CTC Project House.

Early College
Students enrolled in the Engineering Design program may choose to participate in early college. Students will attend college classes during their senior year and for one additional year, and be placed in a paid internship with a local company. Completion of the program results in a certificate and up to 30 free college credits.
You will earn elective credit at your high school when you complete this course. You may be eligible to earn 4th year math-related credit, 3rd year science credit, VPAA credit, and credit for an online learning experience, too. See your high school counselor for more information.

**YOU MIGHT TAKE THIS CLASS IF YOU**

like to work with numbers  
are mechanically inclined  
like hands-on learning  
are good at problem-solving  
like to learn about multiple trades

**JOBS YOU CAN PREPARE FOR**  
**WITH FURTHER EDUCATION**

Master Plumber  
Journeyman  
Plumbing Inspector  
General Contractor  
Boilermaker  
Fire Protection  
Irrigation/Sprinkling  
Pipefitter/Steamfitter  
Water Treatment  
Maintenance Mechanic  
Plumbing Counter Clerk  
Excavator

**STUDENT LEADERSHIP**

Plumbing students have the opportunity for leadership, competition, and community service through membership in SkillsUSA

**CERTIFICATIONS**

10 Hour OSHA (Construction)  
10 Hour OSHA (Industrial)  
Ladder and Scaffolding

**COLLEGE CREDIT**

Students have the opportunity to earn college credit while still in high school through early college credit options and articulation agreements.
Direct Credit
Direct credit is actual college credit earned while in a Tech Center program. The credit appears on a college transcript and can be transferred to many colleges/universities throughout Michigan. A significantly reduced tuition is charged for each college class.

Articulated Credit
Articulated credit is credit that a specific college or university grants for classes taken at the Tech Center. Credit is posted to the transcript after the student has completed a certain number of classes. There is no charge for articulated credit and it cannot be transferred from one college to another.

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