

Introduction to Construction Trades

Explore elements of each career field in the construction cluster



Students explore and build knowledge in four skilled areas of the construction field: carpentry, HVAC/plumbing, electrical and heavy equipment.

Units of Study

- Basic Safety
- Intro to Hand Tools
- Intro to Power Tools
- Construction Math
- Intro to Blueprints
- Carpentry
- Basic Electricity
- Plumbing
- Heavy Equipment
- HVAC
- Employability Skills

Licensing / Industry- Based Certification

OSHA 10

Classroom Support

The Introduction to Construction program is directly aligned to viable employment options and to the CDOS credential. In order to support students with special needs, this program has a lower student-to-teacher ratio.

Work-Based Learning

CTE programs bring students into the workplace for real life experiences. Work experiences are gained in Introduction to Construction Trades program through:

- Hamlin Beach State Park
- Homesteads for Hope
- Orleans Millworks



Career Outlook

All CTE programs correlate to many careers paths. Use the links below to explore more. One example:

Job Projections for General Maintenance Worker: 12% projected growth in New York State jobs 2016-2026.

New York State salary range:
\$28,030 entry level- \$54,720 experienced

Education Requirements: Jobs in this occupation typically require a high school diploma or equivalent. General maintenance and repair workers often learn their skills on the job for several years.

Explore more:

<https://www.careerzone.ny.gov/>
<https://www.onetonline.org/find/>

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Employability Profile

<u>Career Readiness</u>	
Attendance	_____
Punctuality	_____
Appropriate workplace appearance	_____
Takes initiative	_____
High quality work	_____
Knowledge of workplace ethics	_____
Responsive to supervisor	_____
Effective communication skills	_____
Solves problems	_____
Makes decisions	_____
Cooperates with others	_____
Resolves conflict	_____
Observes critically	_____
Takes responsibility for learning	_____
Reads with understanding	_____
Solves problems using math	_____
Complies with health and safety rules	_____
Uses technology appropriately	_____

<u>Basic Safety</u>	
Use PPE	_____
Identify workplace hazards	_____
Read and interpret MSDS	_____
Dress appropriately for the job and conditions	_____
Select and use fire extinguishers	_____
Use proper hearing protection	_____
Use proper lifting techniques	_____

<u>Hand and Power Tools</u>	
Select correct hand tool for proper application	_____
Select correct power tool for proper application	_____
Demonstrate proper maintenance of hand and power tools	_____
Use hand and power tools in a safe and appropriate manner	_____

<u>Introduction to Construction Math</u>	
Add, subtract, multiply and divide whole numbers, fractions and decimals	_____
Explain and use decimal-fraction, fraction-decimal conversions	_____
Read and interpret measurements	_____
Use and read measurement tools	_____

<u>Introduction to Construction Drawings</u>	
Recognize and label terms, components and symbols on construction drawings	_____
Read and interpret construction drawings	_____
Recognize and identify each of the 6 classifications of construction drawings	_____
Use construction drawing	_____

<u>Basic Communication Skills</u>	
Interpret information presented in verbal and written formats	_____
Demonstrate effective written and verbal communication	_____
Use electronic communication	_____
Effectively speak in front of an audience	_____

<u>Introduction to Materials Handling</u>	
Define a loads	_____
Create a pre-task plan	_____
Select and use appropriate equipment for materials and tasks	_____