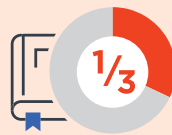




CONSTRUCTION AND DEVELOPMENT

DID YOU KNOW?



1/3 of CTE Students can earn **college credit** and/or **industry certification** through CTE.¹



CTE Graduates earn **significantly more** than those who majored in academic fields.²



6 in 10 Students plan to **pursue a career related to the CTE area** they explored in high school.³



CTE Graduates with technical or applied science associates degrees **out-earn** bachelor's degree holders by **\$11,000**.⁴

¹ Source: My College Options®/ACTE research study (2016). National sample includes 40,192 high school CTE students., ² Jacobson and Mokher, Florida Study of Career and Technical Education, 2014, as cited in the 2014 National Assessment of CTE Final Report, ³ NRCCUA® and ACTE 2016, ⁴ Schneider 2013, College Measures

CONSTRUCTION TRADES

(2-year pathway)

A hands-on program that prepares students for further education and careers in the construction industry. Choose a specific focus in one of five areas – Carpentry, Electrical, HVAC, Masonry, or Plumbing. You will use those skills to help build a house and will be eligible for paid apprenticeship opportunities and/or articulated college credit.

• Carpentry*

The focus is on building and maintaining homes through wood-working skills. You will learn wall and partition framing, roof and floor framing and covering; and applying interior and exterior trim.

GRADE 11

- Construction Core
- Carpentry 1

GRADE 12

- Carpentry 2

• Electrical*

The focus is on principles of electricity, electrical devices and controls; the national electric code requirements and standards; and materials, tools, and procedures for installing and repairing residential and commercial electrical service.

GRADE 11

- Construction Core
- Electrical 1

GRADE 12

- Electrical 2

• Heating, Ventilation, and Air Conditioning (HVAC)*

The focus is on installing, servicing, and repairing heating, air conditioning, and refrigeration systems; calculating heating and cooling load requirements; determining size and airflow for air ducts; and using computer applications for system design and diagnosis.

GRADE 11

- Construction Core
- HVAC 1

GRADE 12

- HVAC 2

• Plumbing*

The focus is on constructing brick, block, and stone structures; placing and finishing concrete; and erecting and staging scaffolds.

GRADE 11

- Construction Core
- Masonry 1

GRADE 12

- Masonry 2

• Plumbing*

The focus is on plumbing codes and standards; and installing and repairing hot and cold water supply systems, drain systems, water heating systems, fire sprinkler systems, and fixtures and appliances.

GRADE 11

- Construction Core
- Plumbing 1

GRADE 12

- Plumbing 2



Possible College Majors

- Architecture
- Engineering
- Construction Management
- Urban Planning



Possible Careers

- Architect
- Engineer
- Project Manager
- Electrician
- Plumber
- Mason
- Carpenter
- HVAC Technician

CONSTRUCTION DESIGN MANAGEMENT (CDM)**

(3-year pathway)

The focus is building design and applying skills to a variety of hands-on projects. Use 3D modeling software, including AutoCAD and Revit Architecture, to create various plans for construction and architectural models, and gain experience in the design-build-maintain process by completing a development project that includes construction standards; coordination of the construction process; estimating, planning and scheduling; and site management.

* Certification is recognized through National Center for Construction and Research (NCCER).
 ** Certification is recognized through Autodesk (AutoCAD).

GRADE 10

- Introduction to Construction Design and Management

GRADE 11

- Principles of Construction Design

GRADE 12

- Advanced Design & 3-D Modeling
- Advanced Construction Management

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