

Industrial and Engineering Technology *Architecture & Construction*



bridges, or machinery.

The Architecture and Construction career cluster prepares students for careers in designing, planning, and management, building and maintaining structures such as buildings, homes,

EXPLORATORY CLASSES

Architectural Drawing/Design/CAD: #8437

Construction Technology: #8432

ALL UNDERLINED TEXT ARE LINKS

PREPARATORY CLASSES

Air Conditioning, Refrigeration, & Plumbing I & II: #8503, #8504 (ACE)

CAD- Computer-Aided Drafting/3D

Animation I & II: #8530, #8531 (ACE)

Carpentry I & II: #8601, #8602 (ACE)

Electricity & Cabling I & II: #8533, #8534 (ACE)

Masonry I & II: #8512, 8513 (ACE)

Welding I: #8572 (ACE)

ALL UNDERLINED TEXT ARE LINKS

IN DEMAND CAREERS

Education Needed	Occupation	Median Salary	Job Growth Over next 10 years	Job Openings Projected over next 10 years
High School Diploma + Certification	Electricians	\$56,180 per year	8% (Much faster than average)	62,200
	Plumbers, Pipefitters, and Steamfitters	\$55,160 per year	4% (As fast as average)	20,900
	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$48,730 per year	4% (As fast as average)	15,100
Bachelor's Degree or more	Construction Managers	\$95,260 per year	8% (Much faster than average)	40,400
	Electrical and Electronics Engineers	\$101,250 per year	3% (As fast as average)	10,800
	Environmental Engineers	\$88,860 per year	3% (As fast as average)	1,700

SAMPLE CAREERS

- Architectural and civil drafter or engineer
- Environmental designer
- Residential or commercial carpenter
- Construction worker
- Systems configuration manager
- Electrical design engineer
- Electrician
- HVAC/HVACR technician
- Building services technician
- Painter
- Sheet metal technician

Are you interested in the many careers in Architecture & Construction? Talk to your counselor or visit HenricoCTE.com for more information.



#HenricoCTE



WORK-BASED LEARNING AND LEADERSHIP OPPORTUNITIES

WORK-BASED LEARNING

Work-Based Learning (WBL) is comprised of experiences related to students' career interests, based on instructional preparation, and undertaken in partnership with local businesses or organizations. WBL enables students to apply classroom instruction in a real-world work environment. Work-Based Learning promotes career awareness, career exploration, and career preparation.

CAREER AMBASSADORS

The Career Ambassador Program offers high school seniors an opportunity to represent and share their experiences with career exploration and our CTE programs to prospective students and community supporters through elementary + middle school visits, career fairs, and district-wide events.

STUDENT LEADERSHIP ORGANIZATIONS

SkillsUSA empowers its members to become world-class workers, leaders and responsible American citizens. We improve the quality of our nation's future skilled workforce through the development of SkillsUSA Framework skills that include personal, workplace and technical skills grounded in academics.



CREDENTIALS

HIGHER EDUCATION

High School/ Industry Certification	Certificate/ License	Associates Degree	Bachelors Degree	Masters/ Doctoral Professional
EPA Technician Examination (Core)	NCCER Core Construction-C	Apprenticeship-AAS	Sustainable Building Science-BS	Masters of Science in Construction, Energy and Sustainable Infrastructure
Computer Aided Drafting	NCCER Electrical Level 1-C	Carpentry-AAS	Construction Management-BS	Masters of Construction Management Ph.D. in Construction Management
(OSHA) 10 card	NCCER HVAC Level 1-C			
NCCER Introductory Craft Skill Entry Level Assessment I/Core: Carpentry, Electricity, Masonry	NCCER Heavy Equipment Operator-C	Construction Management-AAS		
		Architectural and Engineering Technology-AAS		

All ACE Center classes offer the Workplace Readiness Skills Test



Department of Workforce & Career Development
Henrico County Public Schools
3751-C Nine Mile Rd
Henrico, VA 23223
HenricoCTE.com

