



**FUTURE READY  
INSTITUTES**  
of Hamilton County

# Institute of Building Construction

Students in the Institute of Building Construction will study the fundamentals of the construction industry. This encompasses safety education, basic use of tools, and materials used in the industry. Students will focus on one of three disciplines in the construction industry. Plumbing, electrical and structural systems each provides opportunities for students to specialize in by their Senior year. Upon graduation from our Institute, students will have opportunities to earn dual-credit, dual enrollment, and industry certifications. The goal of this institute is to prepare students to enter into post-secondary training through local apprenticeship programs or to be prepared to go directly to work as a member of the skilled work force which services the construction industry. The Institute of Building Construction is building futures today.

*"As a student in the Future Ready Institute, I have learned so much about the real world! I have learned that it's ok to think outside of the box and suggestions are always needed on how to accomplish a goal. This program sets up a path to accomplish my future goals and take the right steps to be successful in my career path. And not to mention, the hands on projects and activities the classes provide makes for a fun learning experience." - Ally*

# East Ridge High School

## Career Technical Education Pathways:

**Structural Systems-** After completion of the Fundamentals of Construction, Structural Systems I, and Structural Systems II, students will be able to perform work in the carpentry field safely using the proper tools. They also will have the knowledge to lay out and construct buildings with a knowledge to use the proper materials to carry loads.

**Mechanical, Electrical, & Plumbing Systems-** Upon completion of the MEP pathway, students will be prepared to enter into industry or additional post-secondary trade related training. While enrolled in this program, students will obtain a basic knowledge of safety procedures and a understanding of the mechanical, electrical and plumbing industries.

Student schedules will consist of both Future Ready Institute classes as well as the opportunity to take a variety of classes offered by the particular high school in order to fulfill all graduation requirements. This is the 4 year plan for the student's institute classes only. \*DE= Dual Enrollment \*IC= Industry Certification

FRI Pathway(s)	Year 1	Year 2	Year 3	Year 4
<b>CTE</b>	Fundamentals of Construction  <i>IC: NCCER Core Curriculum -and/or- OSHA 10</i>	Structural Systems I  <i>IC: NCCER Carpentry Level One -and/or- Precision Measurement Instruments Certification (includes all subtests)</i>	<b>DE: Structural Systems</b>  <i>IC: NCCER Carpentry Level Two -and/or- OSHA 30 Construction</i>	Construction Practicum
		MEP Systems  <i>IC: Precision Measurements Instruments Certification</i>	<b>DE: Mechanical, Electrical, &amp; Plumbing Systems</b>  <i>HVAC Excellence, Heating, Electrical, Air Conditioning Technology (H.E.A.T) -and/or- HVAC Excellence Employment Ready Certifications -and/or- Universal R-410A EPA Section 608 Universal -and/or- NCCER Electrical Level One -and/or- NCCER Plumbing Level One</i>	
<b>Core Classes</b>	English 9  Physical Science	English 10  Geometry	English 11  Algebra 2	English 12  Senior Level Math

### East Ridge High School

4320 Bennett Road  
Chattanooga, TN 37421  
(423)867-6200

**Principal-** Mrs. Tammy Helton  
**FRI Lead Administrator-**  
Mr. Tyler Rich

**FRI Lead Teacher-** Tim James  
james\_tim@hcde.org



### FRI Opportunities:

- Problem Based Learning
- Participation in Community Enrichment Projects
- Industry Certifications (NCCER and OSHA 10 Certifications)
- Cross Curricular Instruction
- Dual Enrollment Classes (Earn College Credits While in High School)
- Dual Credit Classes
- Job Shadowing
- Work based learning opportunities
- Partnerships Chattanooga Area Carpentry Apprenticeship Program

## Partners

