

Adams Central • Bluffton • Huntington North • Belmont • Blackford  
• **Southern Wells** • Norwell • Jay County • South Adams

# C onstruction Trades

## ARCHITECTURE & CONSTRUCTION: Construction Technology

### POSSIBLE CAREERS:

- BRICK & STONE MASONS
- CARPENTERS
- CARPET INSTALLERS
- CEMENT MASONS
- FINISH CARPENTER
- BUILDING INSPECTORS
- EQUIPMENT OPERATORS
- ELECTRICIANS
- PLUMBERS
- BUILDING MATERIAL SUPPLIER



**Most employers require construction and building inspectors to have at least a high school diploma and considerable knowledge of construction trades. • Most construction laborers work full time and do physically demanding work. Some work at great heights or outdoors in all weather conditions.**

**COURSES:**  
INTRODUCTION TO CONSTRUCTION  
CONSTRUCTION TECHNOLOGY I  
CONSTRUCTION TECHNOLOGY II

**DUAL COLLEGE CREDITS**  
Ivy Tech Community College

**ADVISORY BOARDS**  
Area Business and Offices

**TECHNICAL HONORS DIPLOMA**



### JOB OUTLOOK

Employment of construction laborers and helpers is expected to grow 25 percent from 2010 to 2020, faster than the average for all occupations. Those with the most skills should have the best job opportunities.

*Source: Bureau of Labor Statistics*



**CTE Cooperative Serving Adams • Blackford • Huntington • Jay • Wells Counties**

For more information:  
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**See your school guidance counselor for assistance if your school currently does not offer the classes in which you are interested. There are shared programs among the nine high schools in the Area 18 Career and Technical Education network.**

<b>Indiana College and Career Pathway Plan – State Model</b>	
<b>Cluster: Architecture &amp; Construction</b>	<b>Pathway: Construction Trades</b>
<b>Core 40 with Honors High School Graduation Plan*</b>	
*This is a SAMPLE plan for schools to use in planning. Course sequences and grade level in which courses are offered may vary according to local policies, practices and resources.	

Students should enroll in Indiana Career Explorer, complete interest inventories, and investigate careers in clusters & pathways prior to or during the time they create their individual Pathway Plans.

Grade	English/ Language Arts	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway	
9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers;		Digital Citizenship; Personal Financial Responsibility	World Language
10	English 10	Geometry	Chemistry	Geography/History of the World or World History/Civilization	Introduction to Construction	Southern Wells Bellmont, Bluffton Norwell, Blackford		World Language
11	English 11	Algebra II	3 <sup>rd</sup> Core 40 Science	US History	**Construction Technology I		Southern Wells	World Language
12	English 12	Math or Quantitative Reasoning		Government Economics	**Construction Technology II		Southern Wells	Fine Arts

**State Specified Pathway Assessment:** Dual credit assessment from Ivy Tech or Vincennes University or Home Builders Institute(HBI) Principles of Construction or Carpentry Basic assessments

**Industry Recognized Certification:** Home Builders Institute Principles of Construction or Carpentry Basic

<b>Postsecondary Courses Aligned for Potential Dual Credit**</b>	
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives	
<b>Ivy Tech Community College</b>	<b>Vincennes University</b>
<ul style="list-style-type: none"> <li>CONT 101 Introduction to Construction</li> <li>CONT 106 Construction Blueprint Reading</li> <li>BCOT 104 Floor and Wall Layout</li> <li>BCOT 113 Interior Trim</li> <li>BCOT 114 Exterior Trim</li> <li>BCOT 105 Roof Construction</li> </ul>	<ul style="list-style-type: none"> <li>CNST 120 Construction Safety</li> <li>CNST 261 Indiana Residential Code for One and Two-Family Dwellings</li> <li>ARCH102 Architectural Drafting/Print Reading</li> <li>CNST 100 Construction Seminar</li> </ul>

### Construction Technology I

Includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of building construction emphasizing future trends and construction as a career. Provides instruction and practice in the use of working drawings and applications from the print to

the work. Includes relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Examines the design and

construction of floor and wall systems and student develops the skill needed for layout and construction of floor and wall systems from blueprints and professional planning documents. Instruction will be given in administrative requirements, definitions, building planning, foundations, wall coverings, roof and ceiling construction, and roof assemblies. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings.

### Construction Technology II

Construction Technology II includes classroom and laboratory experiences concerned with the formation, installation, maintenance, and repair of buildings, homes, and other structures including recent trends in residential construction industry. Information is presented concerning materials, occupations, and

professional organizations within the industry. Develops basic knowledge, skills, and awareness of interior trim. Provides training in installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Develop skills in the finishing of the exterior of a building. The student obtains skills in the installation of the cornice, windows, doors and various types of sidings used in today's market place. Studies include the design and

construction of roof systems. Use of the framing square for traditional rafter and truss roofing.

### Southern Wells

- DOE Code: 5580
- Grade Level: Grade 11-12
- Recommended Prerequisite:  
Introduction to Construction
- This course is aligned with Dual Credit at Ivy Tech:
  - CONT 101 – Intro to Construction
  - CONT 102 – Construction Materials

- DOE Code: 5578
- Grade Level: Grade 12
- Recommended Prerequisites:  
Construction Technology I
- This course is aligned with Dual Credit at Ivy Tech:
  - BCOT 104 – Floor & Wall Layout
  - BCOT 105 – Roof Construction
  - BCOT 113 – Interior Trim
  - BCOT 114 – Exterior Trim



Construction Technology I  
Construction Technology II