

CONSTRUCTION TRADES II

Construction Technology II builds on the formation, installation, maintenance, and repair skills learned in Construction Technology I. Information on materials, occupations, and professional organizations within the industry will be covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will also develop exterior finishing competencies. The course includes instruction on the installation of cornices, windows, doors and various types of sidings currently used in industry. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing.

- DOE Code: 5578
- Recommended Grade Level: Grade 12
- Recommended Prerequisites: Construction Technology I
- Credits: 2-3 credits per semesters, maximum of 6 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with postsecondary courses for Dual Credit:
 - Ivy Tech
 - BCOT 105 – Roof Construction
 - BCOT 113 – Interior Trim
 - BCOT 114 – Exterior Trim
 - Vincennes University
 - CNST 100 – Construction Seminar

Dual Credit

This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Application of Content and Multiple Hour Offerings

Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences. When a course is offered for multiple hours per semester, the amount of laboratory application or work-based learning needs to be increased proportionally.

Career and Technical Student Organizations (CTSOs)

Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in SkillsUSA the CTSO for this area.

Content Standards

Domain – Interior Finishes

Core Standard 1 Students select the appropriate materials, processes, and technologies to accurately

estimate interior trim and finish projects.

Standards

- CTII-1.1 Distinguish between common drywall, moisture resistant wallboard, and cement backer board
- CTII-1.2 Estimate material costs for construction projects
- CTII-1.3 Select proper tools and materials for interior finish systems
- CTII-1.4 Select appropriate door types and styles, installation procedures, and finishing techniques
- CTII-1.5 Apply appropriate cabinet selection and installation techniques
- CTII-1.6 Demonstrate installation procedures and materials for wood and non-wood products
- CTII-1.7 Interpret health, safety, and welfare standards as dictated by local, state, or federal agencies, in relation to shop/work site safety

Domain – Exterior Finish Systems

Core Standard 2 Students select the appropriate tools, procedures, and material estimation techniques to perform exterior finish projects to code and specification.

Standards

- CTII-2.1 Demonstrate knowledge of building structure, materials, detail structural members, and methods of construction
- CTII-2.2 Adapt concepts and procedures for installing different types of trim used in exterior finish systems
- CTII-2.3 Apply concepts for the installation of exterior doors, windows, and siding
- CTII-2.4 Demonstrate processes for roofing, venting, and flashing materials, and installations
- CTII-2.5 Apply and adapt system concepts and knowledge to residential home construction technologies
- CTII-2.6 Interpret health, safety, and welfare standards as dictated by local, state, or federal agencies, in relation to shop/work site safety

Domain – Roof Framing Construction

Core Standard 3 Students apply concepts of roofing layout, slopes, pitches, and materials estimation to construct residential facilities.

Standards

- CTII-3.1 Demonstrate the proper use of framing squares, quick squares, and rafter tables
- CTII-3.2 Employ correct procedures for installation of roof sheathing systems
- CTII-3.3 Explore the concepts of engineered roofing