

Building & Construction Trades Industry Sector



A strong demand for workers continues in the Building & Construction Trades industry sector, and that demand increases as populations, businesses, and local economies expand. According to the U.S. Bureau of Labor Statistics, construction is among the top ten of the nation's industries, constituting almost 5 percent of the total national gross domestic product. In California the long-term (2004–14) occupational projection for the Building & Construction Trades Industry includes a need to fill 17,790 new jobs and provide 17,920 replacement workers as members of the current workforce retire or leave. In some trades in the state an increase of more than 30 percent in the number of available jobs is expected over the next ten years. Nationally, more than one million construction jobs will be created over the next decade, with job categories ranging from laborers to engineers to contractors.

In Building & Construction Trades industry sector classes, activities range from general or exploratory skills to job-specific skills that prepare students to select and pursue career paths through postsecondary training, work experience education, apprenticeships, and postsecondary education. The classes incorporate and apply academic core content to career-related education.

These interdisciplinary approaches provide students with strong foundation skills and advanced skills in the career field, allowing students to exit programs and enter occupations directly or pursue further specialty training.

Red Bluff High School currently offers one Pathway in this Industry Sector.

Building & Construction Trades Industry Sector Pathway:

- Residential & Commercial Construction



Residential & Commercial Construction

Sequence of courses in the Cabinetry, Millwork and Woodworking pathway:

CTE courses	Related Courses
Introductory <ul style="list-style-type: none"> Introduction to Building & Construction Trades 	<ul style="list-style-type: none"> Drafting CADD Orientation to Apprenticeship Algebra English Composition/Writing
Concentration <ul style="list-style-type: none"> Residential & Commercial Constructions 	
Capstone <ul style="list-style-type: none"> Construction Technology 	

Sample of pathway occupations: This sample of pathway occupations is organized by level of education and training required for workforce entry. Asterisked (*) occupations require certification or licensure.

Cabinetry, Millwork & Woodworking Pathway Occupations	
High school (diploma)	<ul style="list-style-type: none"> Cabinetmaking Apprentice* Machine Operator Carpenter Apprentice Construction Laborer
Postsecondary training (certification and/or AA degree)	<ul style="list-style-type: none"> Cabinetmaking Journeyman* CNC Technician Furniture Maker Production Manager Carpenter Journeyman
College or university (bachelor's degree or higher)	<ul style="list-style-type: none"> Engineer Designer Cabinetmaking Instructor* Construction Management

Topics and contexts

1. Basic hand tool safety
2. Basic hand tool use and operation
3. Measuring
4. Reading plans
5. Mathematics

Transportation Industry Sector



Transportation plays a crucial role in our society because moving people and goods is central to everything America does. As the Transportation industry sector continues to expand significantly, it will provide employment opportunities for years to come in a vast range of transportation-related occupations. It will also continue to adapt to changing technology and repair techniques as vehicle components and systems become increasingly sophisticated. Examples include developments in rocket technology, super-capacity jet airplanes, hybrid and hydrogen fuel-cell technology affecting automobiles, and diesel trucks that run on biodiesel or other alternative fuels.

This industry also plays an important part in education through financial and in-kind support for training and educating the current and future workforce. The Transportation industry sector features three career pathways that provide opportunities from entry-level jobs requiring high school diplomas to progressive careers requiring advanced degrees. These pathways emphasize real-world, occupationally relevant experiences of significant scope and depth in Aviation and Aerospace Transportation Services, which includes maintaining aircraft, operating airports, and designing and flying various types of aircraft; Collision Repair and Refinishing, which includes painting, repairing, and refinishing vehicles; and Vehicle Maintenance, Service, and Repair, which includes maintaining, servicing, and repairing light, medium, and heavy duty vehicles.

Red Bluff High School currently offers one Pathway in this Industry Sector.

Transportation Industry Sector Pathway:

- Systems Diagnostics, Service & Repair



Systems Diagnostics, Service & Repair

Sequence of courses in the Systems Diagnostics, Service & Repair pathway:

CTE courses	Related Courses
Introductory <ul style="list-style-type: none"> Auto Upkeep/Hybric Automotive Services I 	<ul style="list-style-type: none"> Electronics Precision Machining Welding Algebra English Composition/Writing
Concentration <ul style="list-style-type: none"> Automotive Services II 	
Capstone <ul style="list-style-type: none"> Automotive Services/Community Classroom 	

Sample of pathway occupations: This sample of pathway occupations is organized by level of education and training required for workforce entry. Asterisked (*) occupations require certification or licensure.

Systems Diagnostics, Service & Repair Pathway Occupations	
High school (diploma)	<ul style="list-style-type: none"> Porter/Lot Person Lube Technician Vehicle Maintenance Intern or Apprentice Parts and Service Counter Person
Postsecondary training (certification and/or AA degree)	<ul style="list-style-type: none"> Line Technician Service Writer Motor Carrier Smog Technician* Driver
College or university (bachelor's degree or higher)	<ul style="list-style-type: none"> Fleet Manager or Director Shop Foreman or Forewoman Parts and Service Manager Instructor* Manufacturer's Representative

Topics and contexts

- Basics of brake system operation
- Precision measurement tools, techniques, and skills
- Documentation (in writing) of all work performed
- Reading and interpretation of technical manuals and other technical information
- Proper and safe use of tools and equipment required for performing tasks