



# Building Trades and Construction Industry Sector

A strong demand for workers continues in the Building Trades and Construction 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 Trades and Construction 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 10 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 Trades and Construction 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 of their choice, allowing students to exit programs and enter occupations directly or pursue further specialty training.

## Building Trades and Construction Industry Sector Pathways:

- *Cabinetmaking and Wood Products*
- *Engineering and Heavy Construction*
- *Mechanical Construction*
- *Residential and Commercial Construction*

### Entry Level Careers

*(with high school diploma)*

Carpenter Apprentice  
Cabinetmaking Apprentice  
Machine Operator  
Draftsman  
Electrical Repair Person  
Electronic Equipment Installer  
Maintenance Technician  
Laborer

### Technical Level Careers

*(with AA or AS degree or certificate)*

Electronic Technician  
Maintenance Supervisor  
Heating/Ventilation/AC (HVAC) Technician  
Environmental Materials Technician  
Electrician  
Construction Supervisor  
Computerized Numerical Control Tech  
CAD Technician  
Building Constructor  
Cabinetmaking Journeyman  
Automated Control System Technician  
Furniture Maker  
Production Manager  
Iron Worker  
Heavy Construction Journeyman  
Plumber  
Contractor

### Professional Level Careers

*(with BS or BA degree)*

Quality Control Manager  
Environmental and Safety Manager  
Product Designer  
Manufacturing Engineer  
Construction Manager  
Building Instructor  
Architect  
Engineer  
Designer  
Building Trades Instructor  
Construction Manager  
Business Owner

College: \_\_\_\_\_  
 High School(s): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Sector: \_\_\_\_\_  
 Pathway: \_\_\_\_\_  
 Program: \_\_\_\_\_  
 \_\_\_\_\_

|               | Grade                    | English | Math | Science | Social Studies | Required Courses             |                        |             | Grade 9-12 Dual Enrollment Options |
|---------------|--------------------------|---------|------|---------|----------------|------------------------------|------------------------|-------------|------------------------------------|
|               |                          |         |      |         |                | Recommended Elective Courses | Other Elective Courses | CTE Courses |                                    |
| Secondary     | 9                        |         |      |         |                |                              |                        |             |                                    |
|               |                          |         |      |         |                |                              |                        |             |                                    |
|               | 10                       |         |      |         |                |                              |                        |             |                                    |
|               | 11                       |         |      |         |                |                              |                        |             |                                    |
|               |                          |         |      |         |                |                              |                        |             |                                    |
|               | 12                       |         |      |         |                |                              |                        |             |                                    |
|               |                          |         |      |         |                |                              |                        |             |                                    |
| Postsecondary | Year _____<br>Term _____ |         |      |         |                |                              |                        |             |                                    |
|               | Year _____<br>Term _____ |         |      |         |                |                              |                        |             |                                    |
|               | Year _____<br>Term _____ |         |      |         |                |                              |                        |             |                                    |
|               | Year _____<br>Term _____ |         |      |         |                |                              |                        |             |                                    |
|               | Year _____<br>Term _____ |         |      |         |                |                              |                        |             |                                    |
|               | Year _____<br>Term _____ |         |      |         |                |                              |                        |             |                                    |

Required Courses:  
 Recommended Required Courses:  
 Career Education Courses:  
 Credit-Based Transition Programs (e.g., Dual Enrollment, Articulated Courses, 2+2+2)  
 Assessments, Advising, or Additional Preparation During Summer Breaks