



## Apprenticeship - Field Ironworkers 2014-2015

Ironworking has many sectors, each involving challenging and difficult work, often on tall structures at high elevations. Ironworkers must be willing to work as a team. They must be able to meet rigid standards and deadlines. They must have a good sense of balance and be alert to potential danger to themselves and others. The apprenticeship program includes comprehensive safety training. Ironworkers are employed in the following related sectors: structural ironworking, reinforcing ironworking, ornamental ironworking, rigging, machinery and welding. The Field Ironworking apprenticeship is an earn-while-you-learn program involving paid "full time" work and related classes.

### Program Learning Outcomes:

Students gain expertise and hands-on experience as they work on unloading materials, erecting buildings, and connecting fabricated iron beams to form project skeletons. Individuals work primarily on industrial, commercial and large residential buildings. Students learn to build towers, bridges, stadiums, and pre-fabricated metal buildings including erecting pre-cast beams, columns and panels. These specialized skills are acquired through on-the-job training and classroom instruction and lead to employment in the construction industry. After 4 years of classroom and work experience, students can become a journeyman in the Ironworking industry.

### Career Opportunities:

Students completing 900 course hours of related classroom instruction and 4800 hours of related work experience will be recognized as Journeyman Field Ironworkers. Depending upon the student's career interest and courses taken, graduates may find employment as: structural ironworkers, reinforcing ironworkers, ornamental ironworkers, rigging and machinery ironworkers, welder, inspector, general foreman and superintendant.

### Units required for Certificate: 36.5

### Program Type:

CA = Certificate of Achievement.

### Additional Information:

Prerequisites: Per California Code of Regulations, this course is limited to students admitted to the Ironworkers Apprenticeship Program.

### Certificates:

#### Certificate of Achievement in Field Ironworking

##### 36.5 Unit(s)

APIW 100 Introduction to Ironworking (3 units)  
APIW 101 Mixed Base (2 units)  
APIW 102 Reinforcing Iron I (2 units)  
APIW 103 Rigging I (2 units)  
APIW 104 Ironworker History & Trade Science (2 units)  
APIW 105 Welding I (2 units)

APIW 106 Structural I (2 units)  
APIW 107 Welding II (2 units)  
APIW 108 Structural II (2 units)  
APIW 109 Post-Tensioning I (2 units)  
APIW 110 Architectural I (2 units)  
APIW 111 Architectural II (2 units)  
APIW 112 Lead Hazard Training (2 units)  
APIW 113 Small Structure Erection (2 units)  
APIW 114 Welding III (2 units)  
APIW 115 Cranes (2 units)  
APIW 116 Foreman Training (2 units)  
APIW 117 General Safety/OSHA 30/COMET (2 units)