

# APPRENTICESHIP: FIELD IRONWORKERS STRUCTURAL (CERT)

## CERTIFICATE OF ACHIEVEMENT

Field Ironworkers will prepare the student to become a journeymen in the field ironworks field with the required work skills and tasks of the Ironworker including steel and cable reinforcing in concrete construction (rebar work), erections of steel skeleton of buildings, window wall and curtain wall exteriors, rigging of heavy machinery and welding in conjunction with all aspects of these job descriptions. In today's workforce having an industry certificate and journeyman license is required for employment in these positions. In addition, these workforce skills are necessary to maintain well-paying and sustainable jobs. Students must be a state indentured apprentice in order to qualify for the program.

## Program Student Learning Outcomes

- Demonstrate knowledge of safety guidelines for ironworkers and apprenticeship journeymen in the construction industry.
- Conduct basic and supervisory tasks functions within the construction trades.
- Explain job function differences between structural and reinforcing.
- Recognized resources offered by Cerritos Community College to ironworker's apprentice program.
- Identify industry leaders, government groups, and apprenticeship originations to analyze career goals.
- Demonstrate knowledge of welding, cranes, detailing, reinforcing, structural steel, and rigging in order to perform and supervise ironworker's job functions.

## Program Requirements

Code Number	Course Title	Units
<b>Required Courses</b>		
Semester 1 (1st Period)		
IWAP 40.07	FIW-Orientation	4.0
IWAP 40.50	IW-Mixed Base-Reinforcing	2.0
Semester 2 (2nd Period)		
IWAP 40.21	Structural Steel I	2.5
IWAP 41.06	IW-Structural Steel II	2.0
Semester 3 (3rd Period)		
IWAP 40.09	IW-Gen Rigging	2.0
IWAP 40.22	IW-Cranes	2.0
Semester 4 (4th Period)		
IWAP 40.10	Welding I-Reinforcing	2.5
IWAP 40.63	IW-Structural Lead Hazard	2.0
IWAP 40.11	Welding II-Reinforcing	2.5
IWAP 40.05	IW-Welding III	2.5
Semester 6 (6th Period)		
IWAP 40.60	Structural Arch Orn I	2.5
IWAP 41.05	IW-Architectural II	2.5
Semester 7 (7th Period)		

IWAP 40.56	IW-Ironworker History Reinforcing	2.0
IWAP 40.61	IW-Structural Precast Concrete	2.0
Semester 8 (8th Period)		
IWAP 41.04	IW-Architectural III	2.5
IWAP 40.26	Metal Building Erection I/Foreman Training	2.5
<b>Total Units</b>		<b>38</b>