

IRON WORKERS OF AMERICA (IWA)

IWA 110 Introduction to International Ironworker (6 Credits)

104 lecture, 20 lab, 6 total contact hours

This course is an introduction to ironworking for new apprentices. Course topics include blueprints and mathematics for ironworkers along with the history of organized labor and foreman training. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 111 Cranes, Scaffolding and Rigging for International Ironworkers (3 Credits)

65 lecture, 56 lab, 3 total contact hours

This course introduces rigging, cranes and scaffolding. Course topics include working with cranes, scaffolding and rigging in the classroom and the field. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 112 Safety for International Workers (3 Credits)

47 lecture, 6 lab, 3 total contact hours

This course provides an overview to metal building erection and finishing for new apprentices. Topics include primary and secondary framing and wall sheeting. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 113 Structural Steel for International Ironworkers (4 Credits)

52 lecture, 28 lab, 4 total contact hours

This course is an overview of structural steel for new apprentices. Topics include erecting steel structures, metal building systems and structural bolt certification. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 114 Welding for International Workers (2 Credits)

28 lecture, 92 lab, 2 total contact hours

This course focuses on layout and welding. Students will develop skills in layout, shielded metal arc-welding and flux cored arc-welding. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 115 Architectural and Ornamental for International Workers (3 Credits)

45 lecture, 25 lab, 3 total contact hours

This course focuses on the windows, wall system and glass railings. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 116 Reinforcing Concrete (1 Credit)

14 lecture, 58 lab, 1 total contact hours

In this course, students focus on placing reinforcing steel in concrete and using precast concrete in the building process. Students will also focus on a minimum of 40 contact hours on various skills in architectural and ornamental, reinforcing or other technical subjects. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 120 Introduction to Ironwork (3 Credits)

45 lecture, 3 total contact hours

This course is an introduction to ironworking for new apprentices. Course topics include job safety and health, blueprints and mathematics for ironworkers. Students will be introduced to oxy-acetylene cutting and safety in the classroom before completing hands-on assignments. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 122 Ironworker - General Rigging (2 Credits)

30 lecture, 2 total contact hours

This course introduces scaffold erecting, scaffold dismantling, and basic rigging along with cranes and other rigging power equipment. Topics include safety, signals, calculations, fiber and wire ropes, hardware, slings and reeving. Students will use differing tools and devices for rigging including cranes, fork trucks, tuggers, gantries and truck loading. Load security and student safety is emphasized. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 131 Introduction to Metal Building (2 Credits)

30 lecture, 2 total contact hours

This course provides an overview to metal building erection and finishing for new apprentices. Topics include primary and secondary framing and wall sheeting. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 141 Introduction to Reinforcing Ironwork (3 Credits)

45 lecture, 3 total contact hours

This course is an overview of reinforcing ironwork for new apprentices. Topics include material property and related CRSI and ACI codes and specifications. Students will develop additional blueprint reading skills specific to reinforcing steel. Various types of structures will be reviewed and students will be introduced to splicing and coupling. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 151 Rigging/Machinery Mover I (3 Credits)

45 lecture, 3 total contact hours

This course focuses on advanced rigging skills including machinery moving, disconnecting power and hydraulic lines and the basics of reinforced steel. Students will practice loading, hauling, unloading, setting, aligning, laser leveling and grouting. Emphasis will be placed on reading and interpreting blueprints for proper positioning and application to different types of reinforced steel structures. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 155 Rigging/Machinery Mover II (3 Credits)

45 lecture, 3 total contact hours

This course introduces conveyor systems, their uses, and maintenance requirements. Terminology, systems components, basic installation, devices and mechanisms will be covered. Rigging as it applies to different types of structural details will be emphasized. This course prepares students to take the Crosby Master Rigging and CDL Certification tests. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 161 Introduction to Architectural and Ornamental Ironwork (2 Credits)

30 lecture, 2 total contact hours

This course covers architectural wall systems. Students will learn about curtain wall systems, window wall systems, sloped walls, cable walls, skylights and testing. Students will gain experience erecting storefronts, entranceways and glass rails. Students will be introduced to sealants and glazing systems. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 172 Introduction to Structural Features (4 Credits)

60 lecture, 4 total contact hours

This course provides an overview of the structural features of a building. Students will also be introduced to instruments, tools and fasteners with a focus on leveling and anchors. Topics include erecting columns, band beams, joists and trusses, plumbing and aligning, decking and various types of bolts. Classroom training will be supplemented with hands-on experience. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 191 Reinforced Iron and Structures for Rigging (4 Credits)

60 lecture, 4 total contact hours

This course is an overview of reinforcing ironwork for new apprentices. Reinforcing iron topics include material property and related CRSI and ACI codes and specifications. Structural topics include erecting columns and beams, joists and trusses, plumbing and aligning, decking and various types of bolts. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 201 Introduction to Welding (3 Credits)

45 lecture, 3 total contact hours

This course continues the theory and practice of welding. Students learn Oxy-Acetylene cutting and welding in addition to shielded arc welding. Students receive instruction in welding symbols, details, procedures, codes, qualifications, inspections and FEMA requirements. Related safety is covered. Students are encouraged to take and pass the SMAW certification test. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 224 Labor and Trade History (1 Credit)

15 lecture, 1 total contact hours

The history and future of labor and trade unions with particular emphasis on Ironworkers will be discussed. Students will be introduced to skills and practices needed to be a foreman for ironworkers. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 235 Advanced Metal Building (2 Credits)

30 lecture, 2 total contact hours

This course provides hands-on experience in metal building erection and finishing. Students will install insulation, siding, metal roofing, flashing and trim. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 241 Advanced Reinforcing Ironwork (7 Credits)

105 lecture, 7 total contact hours

This course continues training for reinforcing ironwork with emphasis on ACI codes 318 and 117 and the CRSI Manual of Standard Practices. Students will focus on unbonded mono-strand and bonded post tensioning installations, stressing, blueprints and troubleshooting. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 265 Advanced Architectural and Ornamental Ironwork (6 Credits)

90 lecture, 6 total contact hours

This course continues training for architectural and ornamental ironworkers. Students will install several different mock-up systems focusing on correct installation of metal and composite wall panel systems, associated trim and openings. The selection of wall systems based on structural and metal building types will be discussed. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6

IWA 272 Advanced Structural Features (3 Credits)

45 lecture, 3 total contact hours

This course covers topics such as bridges, towers, wind turbines, stair stringers and other unique layouts. This course is only available for Ironworker apprentices through the Local 25 training center. Level I Prerequisite: Academic Reading and Writing Levels of 6