

## L1 REINFORCING IRONWORK

LEVEL 1



### Curriculum Notes

- 117.5 Hours
- Published: 2005
- A Spanish translation is available. Please see NCCER's online catalog for more information.
- Instructor's Guide includes access code to download TestGen software, module exams, and performance profiles from [www.nccerirc.com](http://www.nccerirc.com).

### PAPERBACK

ISBN

Trainee Guide: \$65

978-0-13-228220-8

Instructor's Guide: \$65

978-0-13-228221-5

## MODULES

All of the modules listed below are included in the Trainee and Instructor Guide(s) listed above. The following ISBN and pricing information is for ordering individual modules only.

### Concrete Reinforcement (40 Hours)

Trainee \$19

ISBN 978-0-13-228987-0

Instructor \$19

ISBN 978-0-13-228993-1

(Module ID 39101-05) Describes the selection and use of rebar, bar supports, and welded-wire fabric. Presents general procedures for cutting, bending, splicing, and tying rebar, and placement of steel in various types of footings, columns, walls, and slabs.

### Concrete Reinforcement Safety (15 Hours)

Trainee \$19

ISBN 978-0-13-228988-7

Instructor \$19

ISBN 978-0-13-228994-8

(Module ID 39102-05) Focuses on safety topics of particular concern to the reinforcing ironworker, including rebar-related hazards, fall protection, use of positioning devices, PPE, excavations, and lifting/carrying techniques.

### Rigging Equipment (10 Hours)

Trainee \$19

ISBN 978-0-13-228989-4

Instructor \$19

ISBN 978-0-13-228995-5

(Module ID 39103-05) Describes the use and inspection of basic equipment and hardware used in rigging, including slings, wire rope, chains, and attaching hardware such as shackles, eyebolts, and hooks, as well as rigging knots.

### Rigging Practices (15 Hours)

Trainee \$19

ISBN 978-0-13-228991-7

Instructor \$19

ISBN 978-0-13-228996-2

(Module ID 39104-05) Describes basic rigging and crane hazards and related safety procedures. Provides an overview of personnel lifting and lift planning, and introduces crane load charts and load balancing. Includes instructions for rigging and lifting pipe.

### Commercial Blueprints (20 Hours)

Trainee \$19

ISBN 978-0-13-228992-4

Instructor \$19

ISBN 978-0-13-228997-9

(Module ID 39105-05) Explains the format and content of drawings typically found in a commercial drawings package.

### Oxyfuel Cutting (17.5 Hours)

Trainee \$19

ISBN 978-0-13-229379-2

Instructor \$19

ISBN 978-0-13-229380-8

(Module ID 39106-05) Explains the safety requirements for oxyfuel cutting. Identifies equipment and setup requirements and explains how to light, adjust, and shut down oxyfuel equipment. Explains how to perform cutting techniques that include straight line, piercing, bevels, washing, and gouging.

## L2 REINFORCING IRONWORK

LEVEL 2

### Curriculum Notes

- 100 Hours
- Published: 2005
- Instructor's Guide includes access code to download TestGen software, module exams, and performance profiles from [www.nccerirc.com](http://www.nccerirc.com).

### PAPERBACK

ISBN

Trainee Guide: \$94

978-0-13-227294-0

Instructor's Guide: \$94

978-0-13-227295-7

### Product Supplements

PowerPoint® Presentation Slides (in color)

ISBN 978-0-13-611194-8

\$40

## MODULES

*Reinforcing Ironwork Level Two* is comprised of modules from NCCER's *Carpentry and Ironworking Curriculum*. All of the modules listed below are included in the Trainee and Instructor Guide(s) listed above. The following ISBN and pricing information is for ordering individual modules only.

### Foundations and Flatwork (15 Hours)

Trainee \$19

ISBN 978-0-13-015017-2

Instructor \$19

ISBN 978-0-13-015027-1

(Module ID 27204-01) Covers the construction of forms for continuous, stepped continuous, pier and grade beam concrete footings. Describes the edge forms used for on-grade concrete slabs and similar structures. Forming terms, parts of forms and procedures for constructing basic footing and edge forms are included.

### Concrete Forms (32.5 Hours)

Trainee \$19

ISBN 978-0-13-015018-9

Instructor \$19

ISBN 978-0-13-015028-8

(Module ID 27205-01) Covers the applications and construction methods for various types of job-built forms, including wall, column, slab-and-beam, and stair forms. Instructor's Guide includes instruction sheets for construction of various forms.

### Handling and Placing Concrete (22.5 Hours)

Trainee \$19

ISBN 978-0-13-015010-3

Instructor \$19

ISBN 978-0-13-015020-2

(Module ID 27207-01) Covers the tools, equipment and procedures required for handling, placing, and finishing concrete at the job site. Describes joints made in concrete structures, the use of joint sealants, and form removal procedures. Safety procedures for handling, placing, and finishing concrete are emphasized.

### Manufactured Forms (22.5 Hours)

Trainee \$19

ISBN 978-0-13-015021-9

Instructor \$19

ISBN 978-0-13-015031-8

(Module ID 27208-01) Covers the types of manufactured forms and form hardware systems used in the construction of walls, columns, deck and roof slabs, beams and girders, culverts, and highways. Includes information on flying forms, slipforms, shoring, and architectural finishes.

### Metal Decking (10 Hours)

Trainee \$19

ISBN 978-0-13-015428-6

Instructor \$19

ISBN 978-0-13-015446-0

(Module ID 30116) Identifies decking types and profiles and how decking is packaged, shipped, and stored. Describes erecting decking and placing concrete safely. Explains the effects of deck penetrations and damage.

### Introductory Skills for the Crew Leader

(16 Hours)

Trainee \$40

ISBN 978-0-13-103593-5

Instructor \$40

ISBN 978-0-13-103594-2

(Module ID MT101) Teaches leadership skills required to supervise personnel. Discusses principles of project planning, scheduling, estimating, and management. Presents several case studies for student participation.