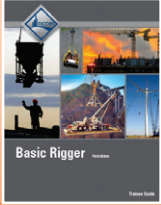


# Rigger/Signal Person

## BASIC RIGGER



### Curriculum Notes

- 140 Hours (includes Core)
- Updated in 2018.
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at [www.nccer.org/irc](http://www.nccer.org/irc).
- A Spanish translation of Rigging Fundamentals is available. Please see NCCER's online catalog for more information.

### PAPERBACK

Trainee Guide: \$49.99

### ISBN

978-0-13-518508-7

## MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

### Rigging Practices (15 Hours)

ISBN 978-0-13-498801-6

(Module ID 38102) Describes basic rigging and safety practices related to rigging activities. Describes the use and inspection of equipment and hardware used in rigging. Explains how to apply common hitches. Covers jacks and hoisting equipment.

### Crane Safety and Emergency Procedures

(25 Hours)

ISBN 978-0-13-498819-1

(Module ID 21106; from *Mobile Crane Operations Level One*) Covers safety standards and best safety practices relevant to the operation of cranes. Describes safety considerations related to power lines, weather conditions, and specific crane functions.

### Basic Principles of Cranes (15 Hours)

ISBN 978-0-13-498816-0

(Module ID 21102; from *Mobile Crane Operations Level One*) Introduces mobile crane equipment with an in-depth discussion of terminology and nomenclature. Explains the basic scientific principles associated with mobile crane operation.

### Crane Communications (10 Hours)

ISBN 978-0-13-498800-9

(Module ID 53101) Describes the communication process between the signal person and the crane operator. Covers electronic communications as well as the standard hand signals in 29 CFR 1926.

## INTERMEDIATE RIGGER

### Curriculum Notes

- 105 Hours
- Updated in 2018.
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at [www.nccer.org/irc](http://www.nccer.org/irc).

### PAPERBACK

Trainee Guide: \$49.99

### ISBN

978-0-13-518320-5

### Intermediate Rigging (17.5 Hours)

ISBN 978-0-13-498820-7

(Module ID 38201) Describes basic procedures for using various slings in hitches and calculating sling stress. Introduces tools and equipment used for the lateral movement of loads without a crane. Trainees learn how to reeve block and tackle, invert loads with hoists, and drift a load between two hoists.

### Load Dynamics (17.5 Hours)

ISBN 978-0-13-498789-7

(Module ID 21206; from *Mobile Crane Operations Level Two*) Covers leverage, forward and backward stability, operational quadrants, submerged lifts, non-centered lifts, and other forces that affect stability.

### Wire Rope (25 Hours)

ISBN 978-0-13-498794-1

(Module ID 21204; from *Mobile Crane Operations Level Two*) Covers the components of wire rope and inspection requirements and procedures for wire rope, load blocks, and sheaves. Explains proper installation of wire rope, maintenance guidelines, and end terminations and preparations.

### Telescopic Boom Attachment Setup and Assembly

(20 Hours)

ISBN 978-0-13-518668-8

(Module ID 21302; from *Mobile Crane Operations Level Three*) Covers the setup and stowing of swing-away extensions and various jibs, as well as the assembly of intermediate boom sections, on telescopic cranes. Includes the description and operating characteristics of manual and power luffing jibs.

### Lattice Boom Assembly and Disassembly

(25 Hours)

ISBN 978-0-13-518670-1

(Module ID 21306; from *Mobile Crane Operations Level Three*) Identifies lattice-boom components and provides pre-/post-assembly considerations. Provides step-by-step guidance in the assembly and disassembly of lattice booms.

## MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Continued on following page

## ADVANCED RIGGER

### Curriculum Notes

- 95 Hours
- Updated in 2018.
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at [www.nccer.org/irc](http://www.nccer.org/irc).

### PAPERBACK

Trainee Guide: \$49.99

### ISBN

978-0-13-518321-2

### MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

### Advanced Rigging (20 Hours)

ISBN 978-0-13-518807-1

(Module ID 38301) Explains how load weight and center of gravity affect lifting and crane stability. Load calculations for multi-crane lifts are presented, along with the application of equalizer beams. The movement of loads up an inclined plane and the line pull required are examined in detail. The module concludes with guidance in the rigging and handling of rebar bundles.

### Load Charts (35 Hours)

ISBN 978-0-13-518590-2

(Module ID 21301; from *Mobile Crane Operations Level Three*) Discusses the importance of load charts and charts that apply to different configurations. Includes on-rubber, on-outrigger, jib, and deduction charts, as well as range diagrams and operational notes. Covers parts of line and capacity calculations.

### Lift Planning (20 Hours)

ISBN 978-0-13-518591-9

(Module ID 21304; from *Mobile Crane Operations Level 3*) Discusses lift plan implementation, including reference information, calculations, single- and multiple-crane lifting, critical lifts, and engineering considerations.

### Hoisting Personnel (20 Hours)

ISBN 978-0-13-518673-2

(Module ID 21305; from *Mobile Crane Operations Level Three*) Examines ASME B30.23 and 29 CFR 1926.550(g) requirements while presenting advanced operation techniques for hoisting personnel.

## SIGNAL PERSON



### Curriculum Notes

- 50 Hours
- Updated in 2018.
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at [www.nccer.org/irc](http://www.nccer.org/irc).

### PAPERBACK

Trainee Guide: \$49.99

### ISBN

978-0-13-518800-2

### MODULES

The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

### Crane Communications (10 Hours)

ISBN 978-0-13-498800-9

(Module ID 53101) Describes the communication process between the signal person and the crane operator. Covers electronic communications as well as the standard hand signals in 29 CFR 1926.

### Basic Principles of Cranes (15 Hours)

ISBN 978-0-13-498816-0

(Module ID 21102; from *Mobile Crane Operations Level One*) Introduces mobile crane equipment with an in-depth discussion of terminology and nomenclature. Explains the basic scientific principles associated with mobile crane operation.

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(25 Hours)

ISBN 978-0-13-498819-1

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