

Certified Construction Crane, Hoist & Rigging Specialist

Certified Course Duration: 40 Hours

Course Credential: CCHRS

Course Fees: \$1295.00

CEUs: 4.0

4.0 CEUs (note this will change based on the number of hours per course) are offered for this course. As an IACET Accredited Provider, IASHEP offers IACET CEUs for its learning events that comply with the ANSI/IACET Continuing Education and Training Standard. CEUs will be reflected on the certificate upon completion of the course and examination. Partial credit or adjusted CEUs will not be awarded for individuals who do not successfully meet the IACET requirements for issuing CEUs.

Course Overview:

The Certified Construction Crane, Hoist & Rigging Specialist (CCHRS) course is a comprehensive 40-hour training program designed to provide participants with a deep understanding of crane operations, rigging techniques, and applicable safety standards. The course covers OSHA regulations, ASME/ANSI standards, and best practices for crane and hoist operations in construction environments. Upon completion of the course, students must pass a 4-hour proctored examination with a score of 80% or higher to receive certification.

Course Schedule: 40 Hours Over 5 Days

Day 1: Introduction to Crane Safety Regulations and Standards (8 Hours)

Morning Session (4 Hours)

- Course Introduction and Objectives
- Overview of OSHA Regulations for Cranes and Rigging
 - OSHA 1910.178: Powered Industrial Trucks (related to lifting equipment)
 - OSHA 29 CFR 1926.1400-1419 Subpart CC: Cranes and Derricks in Construction

• Key ASME/ANSI Standards

• ASME B30 Series Overview

Afternoon Session (4 Hours)

- OSHA Requirements for Crane Operators and Riggers
 - Operator Certification Requirements
 - Site Assessment and Hazard Analysis
- ASME B30.1: Jacks, Industrial Rollers, Air Casters, and Hydraulic Gantries
 - Types of Equipment
 - Safe Operation and Maintenance

Day 2: Rigging Fundamentals and Crane Components (8 Hours)

Morning Session (4 Hours)

- Basic Rigging Principles
 - Types of Slings and Hitches
 - Load Calculations and Weight Estimation
 - Rigging Inspection and Maintenance

Afternoon Session (4 Hours)

- Crane Components and Terminology
 - Boom, Hoist, Jib, and Counterweight

- Wire Ropes and Sheaves
- ASME B30.2: Overhead and Gantry Cranes
 - Types of Overhead Cranes
 - Inspection and Safe Operation Procedures

Day 3: Specialized Cranes and Operational Procedures (8 Hours)

Morning Session (4 Hours)

- ASME B30.3: Tower Cranes
 - Erection, Dismantling, and Climbing
 - Stability and Load Chart Interpretation

Afternoon Session (4 Hours)

- ASME B30.4: Portal and Pedestal Cranes
 - Types and Applications
 - Inspection and Maintenance Requirements

Day 4: Mobile Cranes and Rigging Techniques (8 Hours)

Morning Session (4 Hours)

- ASME B30.5: Mobile and Locomotive Cranes
 - Load Charts and Radius Calculations
 - Outrigger Setup and Stability

Afternoon Session (4 Hours)

- Advanced Rigging Techniques
 - Multi-Crane Lifts
 - Use of Spreader Bars and Equalizer Beams
 - Signal Person Requirements

Day 5: Practical Applications, Review, and Final Examination (8 Hours)

Morning Session (4 Hours)

- Practical Crane and Rigging Scenarios
 - Case Studies
 - Hands-on Rigging Exercises
- Crane Signals and Communication
 - Standard Hand Signals (per OSHA/ANSI)
 - Radio Communication Best Practices

Afternoon Session (4 Hours)

- Course Review and Q&A
- 4-Hour Proctored Examination

Sample Test Questions and Answers:

Sample Test Questions:

- 1. Which OSHA standard covers crane operator certification requirements?
 - a) OSHA 1910.178
 - b) OSHA 1926.1400
 - c) OSHA 1926.1417
 - d) OSHA 1910.120

2. What is the primary purpose of outriggers on a mobile crane?

- a) To stabilize the load
- b) To increase lifting capacity
- c) To prevent tipping
- d) To secure the crane to the ground

3. Which ASME standard provides guidelines for the safe operation of tower cranes?

- a) ASME B30.1
- b) ASME B30.3
- c) ASME B30.5
- d) ASME B30.4
- 4. What is the correct hand signal for a crane operator to stop lifting?
 - a) Raise one arm straight up

- b) Extend both arms horizontally
- c) Move the hand horizontally across the neck
- d) Point downward with the index finger

Answer Key:

- 1. b) OSHA 1926.1400
- 2. c) To prevent tipping
- 3. b) ASME B30.3
- 4. c) Move the hand horizontally across the neck

Course Materials:

- OSHA Regulations (29 CFR 1910.178 and 29 CFR 1926.1400-1419)
- ASME B30 Standards (B30.1, B30.2, B30.3, B30.4, B30.5)
- Course Workbook
- Crane Signal Charts
- Practice Tests and Answer Sheets

Certification Requirements:

- Complete the 40-hour training program
- Pass the 4-hour proctored examination with a score of 80% or higher

Educational Requirements

- Three (3) years of demonstrated experience as a Construction Safety & Health professional or similar role, such as but not limited to a construction manager, supervisor, lead, union leader, or union safety representative where at least 25% of your work responsibilities are covered working in this field.
- Excellent knowledge of legislation and procedures

- Excellent knowledge of potentially hazardous materials or practices
- Three (3) years of experience in producing reports in constructionrelated safety & health issues
- Experience with writing policies or writing job specific Job Safety Analysis (JSA), or Job Task Analysis (JTA), or work procedures where employee safety and health were part of the procedures
- Familiarity with conducting data analysis and reporting statistics
- Documented GED / Apprentice Certificate Completion / On-The-Job / Skills Training / or AA / BSc / BA in safety management or similar field
- Certificate in occupational health and safety from OSHA or an Authorized OSHA Training Institute Education Center (OTIEC), NEBOSH, National Safety Institute or similar training organizations. Note: Training certificates from the National Association of Safety Professionals (NASP) or the International Association of Safety Professionals (IASP) will not be accepted.
- Pass a Two (2) hour One-Hundred (100) questions, proctored examination, and pass at an 80%. You are allowed three attempts to pass this examination. Should you not pass this examination after three attempts, you may retake this course for fifty (50) percent of the listed price and try again.

You must pass a written open book test with an 80%.

This Test:

- Online Examination (link provided by email)
- Number of questions: 100
- Format of questions: Multiple Choice / True & False
- Has a time limit of: 02:00:00

- Has a pass mark of 80%
- Is intended to be an open book

Recertification:

A refresher examination is required every three (3) years to maintain certification. The cost for recertification is \$195.00

