Department-Approved Course Requirements: 32-Hour Lift Director

REVISED 7/24

Course Required for: ☒ License Qualification

Purpose: This course is a prerequisite for registration as a Lift Director and licensure as a Master Rigger.

Duration: 32 Hours of instructional time, excluding breaks and meals

Class Size: 1 – 40 Trainees

NYC Requirement: To register as a Lift Director, the applicant must successfully complete a lift director training course of at least 32 hours in length as mandated by Section 28-424.3 of the New York City Administrative Code. As of November 7, 2022, to apply for licensure as a Master Rigger, the applicant must successfully complete a lift director training course that is at least 32 hours in length as mandated by 28-404.3.1 Section of the New York City Administrative Code.

Delivery Requirements: Where the Instruction Delivery Method indicates:

- Demonstration: the demonstration may be delivered either by a person or a video. Video Demonstrations may be delivered by virtual live classroom however, self-study modules are not permissible.
- Classroom Lecture/Discussion w A/V (Audio-Visual): the instruction may be delivered by virtual live classroom; however, self-study modules are not permissible.

Facility Requirements: The Training Facility used by the Course Provider must:

- Have sufficient room to accommodate all expected attendees and the equipment needed to perform hands-on exercises where required as part of the course.
- Make provisions for the presentation of training material in all media types (computer, projector, video/DVD player, etc.).
- Comply with all applicable laws, rules and regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification and evacuation procedures.

Training may be held at construction sites, provided the above requirements are met.

Instructor Requirements: To deliver this course the instructor(s) must:

- Be a Qualified Person with documented lift directing, rigging, or crane operator experience acceptable to the Department relevant to the Course Content Requirements in this document.
- Be authorized by the Occupational Safety and Health Administration (OSHA) as a trainer(s) for its Construction and Outreach Program.
- To the extent that the course instructor(s) holds, or has held, a trade license issued by the Department, it must be in good standing and not be surrendered to, suspended by, or revoked by the Department.
- Comply with all applicable Federal, State, and local laws, rules and regulations, and the Department's Industry Code of Conduct.

Course Requirements: All topics listed under Course Content Requirements must be covered using the listed Instructional Delivery Method. The time dedicated to each outline topic should be appropriate for the course content and can vary depending on the trade or job performed by the licensee. The Instructional Delivery Materials used in this course must contain all current applicable NYC Construction Code references, current rules, policies and bulletins.

All statistics referenced should reflect the latest publicly available statistics. The selection of Case Studies should prioritize incidents in NYC since the prior renewal period.

Refresher or Renewal Courses should focus on the updates since the prior renewal period.

A comprehensive review will be performed by Buildings University to determine that the material is in full accord with applicable NYC and NYS codes, rules, regulations and laws, all National Standards (such as ANSI, ASME or OSHA) and industry acknowledged best practices.

Course Content Requirements	Instruction Delivery Method
1. Introduction	Classroom Lecture/Discussion w A/V

2. Crane and Hoisting Machine Incidents
• Common causes of Incidents with cranes and hoisting machines esp.
  ○ Planning
  ○ Setup
  ○ Stowing
  ○ Communication failures
• Historical crane and hoisting machine incidents in NYC and other major cities
• Case study of at least two failure scenarios with emphasis on how could have been prevented with better site leadership/communication
	Classroom Lecture/Discussion w A/V

3. CFR 29 OSHA 1926 Construction
• Subpart CC – Cranes and Derricks and any other subparts pertaining to Cranes and Derricks
  ○ 1926.1402 Ground conditions
  ○ 1926.1423 Fall protection
  ○ 1926.1424 Work area control
  ○ 1926.1425 Keeping clear of the load
	Classroom Lecture/Discussion w A/V

4. NYC Code Review • BC 3316 • BC 3319 • Relevant licenses in AC 28-400 • Relevant definitions in BC 2 • 1 RCNY 3316-01 Rigging • 1 RCNY 3319-01 Cranes and Derricks • 1 RCNY 3319-02 Lift Directors	Classroom Lecture/Discussion w A/V
5. NYC Department of Buildings – All applicable: • Policy Statements • Bulletins • Commissioner memos • Standard operating procedures • Policy and procedure or regulatory notices • Filing and site documents • Plans • Inspection checklists/logs • Form requirements • Wind and weather advisories	Classroom Lecture/Discussion w A/V
6. NYC Department of Transportation (DOT) All applicable required by NYC DOT to operate a crane/derrick: • Codes • Rules • Regulations • Operating procedures • Policies • Permits/notifications • Forms • Filling and site documents • Plans, etc. required traffic/pedestrian controls for crane/derrick operations (flag persons, signs, barricades, etc.)	Classroom Lecture/Discussion w A/V

Course Content Requirements	Instruction Delivery Method
7. NYC Transit Authority (NYCTA) All applicable required by NYC Transit Authority to operate a crane/derrick near TA infrastructure: • Codes • Rules • Regulations • Operating Procedures • Policies • Permits/notifications • Forms • Filling and site documents • Plans, etc.	Demonstration
8. Roles and Responsibilities of Site Personnel with overview of licensing/training/certifications required for each party • Lift Director, Rigger, HMO, Signalpersons, Flag persons, Site Safety Manager/Coordinator, Construction Superintendent, Permit holder, and other relevant parties	Demonstration
9. Authority of Lift Director • Ordering corrective action • Authority to stop operations	Demonstration
10. Crew Resource Management • Overview • Effective communication (speaking and listening) • Leadership/decision-making • At least two case studies (from industry other than construction) of crew resource management (one failure scenario, one successful employment of CRM)	Classroom Lecture/Discussion w A/V
11. On-site Meetings • Pre-shift meeting requirements • Effective strategies for conducting on-site meetings	Classroom Lecture/Discussion w A/V
12. Required Crane/Derrick/Rigging Inspections By: • HMO, Rigger, PE, DOB, and other personnel	Classroom Lecture/Discussion w A/V
13. Log and Reporting Requirements • Cranes or Derrick Log • Notification to Department	Classroom Lecture/Discussion w A/V
14. Reading Plans • CN plans • Wind action plans • Assembly/disassembly plans	Classroom Lecture/Discussion w A/V
15. Crane and Derrick Setup and Configuration • Verifying crane/derrick location, setup, and configuration match plans • Verifying site conditions match plans	Classroom Lecture/Discussion w A/V

16. Securing/Stowing the Crane/Derrick
• Procedures to secure/stow crane/derrick:
  ○ At the end of the shift
  ○ In advance of inclement weather
  ○ For extended period of time
• Verifying crane/derrick secured/stowed to plans
• Documentation (log) requirements for securing/stowing crane/derrick
	Classroom Lecture/Discussion w A/V

Course Content Requirements	Instruction Delivery Method

17. Basic Meteorology
• Types of storms
  ○ Thunderstorms, squalls, gustnado, downbursts, tropical systems, etc.
• Hazardous weather
• Wind
  ○ Gusts vs sustained
  ○ Beaufort Scale
  ○ Coastal vs inland wind effects
  ○ NYC canyon effect
  ○ Wind changes at elevation
• Understanding forecasts and weather observations
• Understanding NOAA watches/warnings/advisories and other alerts
	Classroom Lecture/Discussion w A/V

18. Wind and Weather Restrictions for Cranes and Derricks • Max. wind speeds for cranes/derricks • Wind Action Plan requirements	Classroom Lecture/Discussion w A/V
19. Critical Picks • Identifying critical picks • Requirements for critical picks	Classroom Lecture/Discussion w A/V
20. Requirements for Hoisting Personnel	Classroom Lecture/Discussion w A/V
21. Requirements for Operating Over Occupied Buildings	Classroom Lecture/Discussion w A/V
22. Powerline Safety • Understanding electrocution risks, voltage, safe distances • Precautions for working near powerlines	Classroom Lecture/Discussion w A/V
23. Fall Protection	Classroom Lecture/Discussion w A/V
24. Crane and Derrick Safety Protocols and Emergency Procedures	Classroom Lecture/Discussion w A/V
25. Handouts • NYC Buildings Unsafe Condition (311) Notification Procedure • NYC/DOI Buildings Integrity Training Contact Information Sheet	Provide Copy to Trainee & Discuss
26. Review	Discussion with Q&A
27. Written (Multiple Choice) Test	Classroom