

**Course Required for:** Licensee Continuing Education

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

**Duration:** 8 Hours of instructional time, excluding breaks and meals

A single session may not exceed 9 1/2 hours, including breaks and meals. If two or more sessions are delivered the same day to the same student roster, a break must be scheduled between the sessions.

**Class Size:** 1 – 40 Trainees

**NYC Requirement:** Per RCNY §104-06

**Lift Director.** During the one (1) year immediately prior to renewal, the licensee must have successfully completed a Department-approved course that is at least eight (8) hours in length covering the lift direction provisions of Chapter 33 of the New York City Building Code and related rules and regulations, as well as relevant safety precautions.

**Master Rigger.** During the one (1) year immediately prior to renewal, the licensee must have successfully completed both:

- A Department-approved rigging supervisor course that is at least sixteen (16) hours in length and meets the requirements of Section 3316.9.2 of the New York City Building Code; and
- **A Department-approved lift director course that is at least eight (8) hours in length covering the lift direction provisions of Chapter 33 of the New York City Building Code and related rules and regulations, as well as relevant safety precautions.**

**Delivery Requirements:** This course contains:

- **Demonstration(s):** shows how something is done while emphasizing its merits. The demonstration may be delivered either by a person or a video. Video Demonstrations may be delivered by a virtual live classroom; however, on-demand self-study modules are not permissible.
- **Classroom Lecture/Discussion w A/V (Audio-Visual):** oral presentation by an instructor to present information or teach students about a particular subject. The instruction may be delivered by a virtual live classroom; however, on-demand self-study modules are not permissible.
- **Handouts**
- **In-class Written Assessment**

**This course may be delivered:**

- **In-Person:** gathers participants in the same physical location at the same time. Provides face-to-face interaction with the opportunity for participants to share and discuss what they are learning. Allows Hands-On practical exercises.
- **Virtual Live:** a shared online space where learners and trainers work together simultaneously. Usually, these interactions take place through a videoconferencing platform (ex. Zoom, Microsoft Teams).
- **Hybrid:** a combination of In-Person and Virtual Live sessions. Although this course does not have a Hands-On component, the course provider may deliver the course as a combination of In-Person and Virtual Live sessions

**Delivery Requirements:  
(cont'd)**

**This course may NOT be delivered:**

- **On-Demand:** self-paced and can be taken anytime and anywhere from a device with internet access. No live instructor needed. On-Demand is only acceptable for SST courses.

**Virtual Live training must comply with the following:**

- The course must be approved by the Department.
- The provider must confirm the identification of the individual taking such training by adhering to the actively proctored online format requirements
  - The provider must confirm the identification of the individual prior to providing secure access to the online training.
  - The individual must attest that they are the individual who received the online access and will complete the training without assistance. The online program must have secure access and monitor participation during the course of training to ensure that the individual receiving the training is present for the entirety of the training.
- The provider must ensure that participants have their web-cameras activated and are on-camera for the duration of class.

**Facility Requirements:**

**Per 1 RCNY §105-03 (d) (4) Course Facilities:**

**The course facilities 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.) and
- 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:**

**Per 1 RCNY §105-03 (e) Course Instructors:**

**Course providers must require that course instructor(s):**

- Demonstrate that they are credentialed or trained in instructional methods and learning processes.
- Successfully demonstrate their ability to solve or resolve problems relating to the subject matter by possession of a recognized degree, certificate, licensure, or professional standing, or by extensive knowledge, training, and experience in the subject matter being taught.
- 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,
- Be in compliance with the Department's Industry Code of Conduct.

**In addition, course providers must require that course instructors:**

- 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.

**Course Requirements:**

Each section of the Course Content Requirements must be covered using its designated 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 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 and contain relevant and illustrative photos where available.

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

**Course Content Requirements**

**Instruction Delivery Method**

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| <p>1. Introduction</p>   | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>2. Crane and Hoisting Machine Incidents</p> <ul style="list-style-type: none"> <li>• Common causes of incidents with cranes and hoisting machines, especially             <ul style="list-style-type: none"> <li>○ Planning</li> <li>○ Setup</li> <li>○ Stowing</li> <li>○ Communication failures</li> </ul> </li> <li>• Historical crane and hoisting machine incidents in NYC and other major cities</li> <li>• Case study of at least two failure scenarios with emphasis on how they could have been prevented with better site leadership/communication</li> </ul> | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>3. CFR 29 OSHA 1926 Construction</p> <ul style="list-style-type: none"> <li>• Subpart CC – Cranes and Derricks and any other subparts pertaining to Cranes and Derricks             <ul style="list-style-type: none"> <li>○ 1926.1402 Ground conditions</li> <li>○ 1926.1423 Fall protection</li> <li>○ 1926.1424 Work area control</li> <li>○ 1926.1425 Keeping clear of the load</li> </ul> </li> </ul>  | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>4. NYC Code Review</p> <ul style="list-style-type: none"> <li>• BC 3316</li> <li>• BC 3319</li> <li>• Relevant licenses in AC 28-400</li> <li>• Relevant definitions in BC 2</li> <li>• 1 RCNY 3316-01 Rigging</li> <li>• 1 RCNY 3319-01 Cranes and Derricks</li> <li>• 1 RCNY 3319-02 Lift Directors</li> </ul>  | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>5. NYC Department of Buildings – All applicable:</p> <ul style="list-style-type: none"> <li>• Policy statements</li> <li>• Bulletins</li> <li>• Commissioner memos</li> <li>• Standard operating procedures</li> <li>• Policy and procedure or regulatory notices</li> <li>• Filing and site documents</li> <li>• Plans</li> <li>• Inspection checklists/logs</li> <li>• Wind and weather advisories</li> </ul>   | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>6. NYC Department of Transportation (DOT) – All applicable requirements by NYC DOT to operate a crane/derrick:</p> <ul style="list-style-type: none"> <li>• Codes</li> <li>• Rules &amp; Regulations</li> <li>• Operating procedures</li> <li>• Policies</li> <li>• Permits/notifications</li> <li>• Forms</li> <li>• Filing and site documents</li> <li>• Plans, etc. required traffic/pedestrian controls for crane/derrick operations (flag persons, signs, barricades, etc.)</li> </ul>   | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>7. NYC Transit Authority (NYCTA) – All applicable requirements by the NYC Transit Authority to operate a crane/derrick near TA infrastructure:</p> <ul style="list-style-type: none"> <li>• Codes</li> <li>• Rules &amp; Regulations</li> <li>• Operating procedures</li> <li>• Policy procedures</li> <li>• Permits/notifications</li> <li>• Forms</li> <li>• Filing and site documents</li> <li>• Plans, etc.</li> </ul>  | <p>Demonstration</p>                      |

**Course Content Requirements**

**Instruction Delivery Method**

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|--|---|
| <p>8. Roles and Responsibilities of Site Personnel with an overview of licensing/training/certifications required for each party</p> <ul style="list-style-type: none"> <li>• Lift Director, Rigger, HMO, Signalpersons, Flag persons, Site Safety Manager/Coordinator, Construction Superintendent, Permit holder, and other relevant parties</li> </ul>  | <p>Demonstration</p>                      |
| <p>9. Authority of Lift Director</p> <ul style="list-style-type: none"> <li>• Ordering corrective action</li> <li>• Authority to stop operations</li> </ul>  | <p>Demonstration</p>                      |
| <p>10. Crew Resource Management</p> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Effective communication (speaking and listening)</li> <li>• Leadership/decision-making</li> <li>• At least two case studies (from an industry other than construction) of crew resource management (one failure scenario, one successful employment of CRM)</li> </ul>  | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>11. On-site Meetings</p> <ul style="list-style-type: none"> <li>• Pre-shift meeting requirements</li> <li>• Effective strategies for conducting on-site meetings</li> </ul>   | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>12. Required Crane/Derrick/Rigging Inspections By:</p> <ul style="list-style-type: none"> <li>• HMO, Rigger, PE, DOB, and other personnel</li> </ul>  | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>13. Log and Reporting Requirements</p> <ul style="list-style-type: none"> <li>• Cranes or Derrick Log</li> <li>• Notification to Department</li> </ul>  | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>14. Reading Plans</p> <ul style="list-style-type: none"> <li>• CN plans</li> <li>• Wind action plans</li> <li>• Assembly/disassembly plans</li> </ul>   | <p>Demonstration</p>                      |
| <p>15. Crane and Derrick Setup and Configuration</p> <ul style="list-style-type: none"> <li>• Verifying crane/derrick location, setup, and configuration match plans</li> <li>• Verifying site conditions match plans</li> </ul>   | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>16. Securing/Stowing the Crane/Derrick</p> <ul style="list-style-type: none"> <li>• Procedures to secure/stow crane/derrick: <ul style="list-style-type: none"> <li>○ At the end of the shift</li> <li>○ In advance of inclement weather</li> <li>○ For an extended period of time</li> </ul> </li> <li>• Verifying crane/derrick secured/stowed to plans</li> <li>• Documentation (log) requirements for securing/stowing crane/derrick</li> </ul>   | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>17. Basic Meteorology</p> <ul style="list-style-type: none"> <li>• Types of storms <ul style="list-style-type: none"> <li>○ Thunderstorms, squalls, gustnado, downbursts, tropical systems, etc.</li> </ul> </li> <li>• Hazardous weather</li> <li>• Wind <ul style="list-style-type: none"> <li>○ Gusts vs sustained</li> <li>○ Beaufort Scale</li> <li>○ Coastal vs inland wind effects</li> <li>○ NYC canyon effect</li> <li>○ Wind changes at elevation</li> </ul> </li> <li>• Understanding forecasts and weather observations</li> <li>• Understanding NOAA watches/warnings/advisories and other alerts</li> </ul> | <p>Classroom Lecture/Discussion w A/V</p> |
| <p>18. Wind and Weather Restrictions for Cranes and Derricks</p> <ul style="list-style-type: none"> <li>• Max. wind speeds for cranes/derricks</li> <li>• Wind action plan requirements</li> </ul>   | <p>Classroom Lecture/Discussion w A/V</p> |

**Course Content Requirements**

19. Critical Picks
  - Identifying critical picks
  - Requirements for critical picks
20. Requirements for Hoisting Personnel
21. Requirements for Operating Over Occupied Buildings
22. Powerline Safety
  - Understanding electrocution risks, voltage, and safe distances
  - Precautions for working near powerlines
23. Fall Protection
24. Crane and Derrick Safety Protocols and Emergency Procedures
25. Handouts
  - [NYC Buildings Unsafe Condition \(311\) Notification Procedure](#)
  - [NYC/DOI Buildings Integrity Training Contact Information Sheet](#)
26. Review
27. Written (Multiple Choice) Assessment

**Instruction Delivery Method**

- Classroom Lecture/Discussion w A/V
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- Classroom Lecture/Discussion w A/V
- Classroom Lecture/Discussion w A/V
- Provide Copy to Trainee & Discuss
- Discussion with Q&A
- Classroom