

REVISED 10/25

Course Required for: License Qualification

Purpose: This course is one of the prerequisites an applicant must successfully complete

before being eligible to apply for a license as a **Hoisting Machine Operator**, or a **Limited Hoisting Machine Operator license** for an Articulating Boom Crane, Mini

Crane, or Telehandler.

Duration: 40 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 1 RCNY 104-09 (a)(6):

In addition to the qualification requirements set forth in the Administrative Code and in this subdivision (a), all **Hoisting Machine Operator license applicants must, during the one (1) year immediately prior to application, complete a training course that is at least forty (40)hours in length, approved by the Department, covering those provisions of local law and regulation that are unique to New York City for the operation of a hoisting machine and the unique hazards of operating a hoisting machine within New York City.**

NOTE: In addition to this training, applicants for a Hoisting Machine Operator's license must also hold valid national crane operator certification(s).

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.

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 courses that are SST only.

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Delivery Requirements: (cont'd)

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.
- Hold either a valid Hoisting Machine Operators license from the City of New York or hold a valid national certification for crane operation.
- 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 crane operator experience acceptable to the Department covering the Course Content Requirements in this document.
- Be an OSHA authorized trainer for the Construction Industry Outreach Program.



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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.



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Course Content Requirements

1. Introduction

2. Crane and Hoisting Machine Incidents

- Common causes of incidents with cranes and hoisting machines
- Historical crane and hoisting machine incidents in NYC and other major cities

3. OSHA 1926 Overview

OSHA Crane and Derrick Standards (Subpart CC)

4. NYC Licensing

- Hoisting machines that require a licensed operator
- Hoisting machines that are exempt from the requirements
- Steps to get or renew a license
- Discipline/suspension/revocation of license
- 5. NYC Code Review All applicable:
 - Codes
 - Rules
 - Related department policy statements
 - Regulatory notices
 - Bulletins and memos
 - Including: 2022 Building Code
 - o Chapter 33
 - 1 RCNY 3316-01(d)(8)
 - 1 RCNY 3319-01
 - 1 RCNY 3319-02
- 6. NYC Department of Buildings All applicable:
 - Administrative standard operating procedures
 - Permits/department notifications
 - Forms
 - Filing and site documents
 - Plans
 - Inspection checklists/logs
 - Wind and weather advisories
- NYC Department of Transportation (DOT) All applicable requirements by the NYC Department of Transportation to operate a crane/derrick:
 - Codes
 - Rules
 - Regulations
 - Operating procedures
 - Policy procedures
 - Permits/notifications
 - Forms
 - Filing and site documents
 - Plans, etc.
- 8. NYC Transit Authority (NYCTA) All applicable requirements by the NYC Transit Authority to operate a crane/derrick near TA infrastructure:
 - Codes
 - Rules
 - Regulations
 - Operating procedures
 - Policy procedures
 - Permits/notifications
 - Forms
 - Filing and site documents
 - Plans, etc.

Instruction Delivery Method

Classroom Lecture/Discussion

Classroom Lecture/Discussion w A/V



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Course Content Requirements

9. Inspection of Machinery and Ropes

Daily

Periodic

Annual

10. Maintenance and Repair of Machinery and Ropes

Maintenance and repair requirements

Safeguards before beginning maintenance or repairs

11. Reading Plans

12. Cranes and Hoisting Machine Setup

• Grounding conditions

· Deviation from plans not permitted

 Founding of crane/hoisting machine, outrigger, placement, and cribbing

Danger to underground infrastructure, excavations, foundations, etc.

13. Cranes and Hoisting Machinery Operations

Operating manuals

Starting up

Hazards of operating in a dense urban environment

High wind hazards

Operating near power lines

Prohibition against hoisting over pedestrians, traffic, and adjoining buildings

Prohibition against hoisting a suspended load from a fork

Requirements for shutting down and securing the crane

14. Reading Load Charts

NYC approved load charts

15. Operational Aids and Safety Devices

Types of aids and safety devices

 Functions and what steps to take if operational aid/safety devices are not working

Acceptable means to substitute for a malfunctioning aid/safety device

16. Lifting Loads

Weights and materials

Center of gravity

Rigging requirements

Critical picks

Securing suspended loads

17. Signaling and Communication

18. Important Additional Information

General construction hazards and fall protection

• Incident reporting protocols

19. Handouts

 NYC Buildings Unsafe Condition (311) Notification Procedure

 NYC/DOI Buildings Integrity Training Contact Information Sheet

20. Review all Training Topics

21. Written (Multiple Choice) Assessment

Instruction Delivery Method

Classroom Lecture/Discussion w A/V

Provide Copy to Trainee & Discuss

Discussion w/Questions & Answers

Classroom