



Department-Approved Course Requirements

Course Title:	30-Hour Master Rigger
Course Required for:	<input checked="" type="checkbox"/> License Qualification
Purpose:	This course is a Licensing requirement for all applicants for a Master Rigger license.
Duration:	30 Hours of instructional time, excluding breaks & meals
Class Size:	1 – 30 trainees
NYC Requirement:	To apply for a New York Master Rigger license, all applicants must successfully complete 30 hours of training.
Facility Requirements:	<p>The Training Facility used by the Course Provider must:</p> <ul style="list-style-type: none">• 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 & regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification & evacuation procedures. <p>Training may be held at construction sites, provided the above requirements are met.</p>
Instructor Requirement:	To deliver this course the instructor(s) must demonstrate that he or she is credentialed or trained in instructional methods and learning processes. The instructor(s) must also successfully demonstrate his or her 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.
Curriculum Requirement:	All topics listed under Course Content Outline 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 trainee. The Instructional Delivery Materials used in this course must contain all current applicable NYC Construction Code references, current rules, policies & bulletins.



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NYC-approved load charts

Course Content Outline

Instruction Delivery Method

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| <p>15. Lifting & Lowering Loads
Weights & materials; Center of gravity; Rigging requirements; Critical Picks
Logs & record keeping, including maintenance records for equipment, pre-task & safety meetings. Hoisting & hoisting equipment (manual, electric, etc.), pulley, block/tackle, sheaves, drums, slings (all types), chains, electric hoist motors, capacity, rigging of motors, mechanical/electrical safety devices and their operation, critical picks. Construction & use of suspended working platforms, manufacturer's specifications, limitations, max spans, guardrails, planking, debris netting, stirrups, maneuvering, drifting, securing of platform during & end of shift. Suspension methods, slings, c-hooks, outrigger beams, clamps, counterweights, shoring scaffolds (outrigger supports), masonry and concrete anchors (expansion, adhesive, screw), pull testing of anchorage devices. Off-the-shelf hardware, as well as site-built hardware systems must be included.</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>16. Operational Aids and Safety Devices
Types of aids, safety devices, functions, how to use, steps to take if operational aid/safety device not working. Acceptable means to substitute for a malfunctioning aid/safety device
Personal fall-arrest systems, use, storage, maintenance, installation & anchorage.
Other types of personal protection (hard hats, respirators, gloves, shoes, eye protection, clothing).</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>17. Crane & Derrick Safety Protocols & Emergency Procedures
Electrical safety during rigging installation & use, including work performed from suspended working decks (welding, use of electrical equipment, etc.).
Overhead protection/safety exclusion zones during rigging, hoisting & use of scaffolding: sidewalk sheds; barriers; flag persons; hazard signage.</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>18. Crane Assembly, Jumping & Disassembly</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>19. Rigging Requirements
The definition of Rigging such as the traditional uses for rigging in the construction & industrial environment, including industrial rope access (IRA). The mathematics of Rigging, measurement, symbols, geometry, calculations, leverage, friction, fulcrum, center of gravity, uniform and concentrated loading. Also the wind effects on netting & other components. Calculation of weight, loads, sling loads, drifting loads, balance & tipping points of objects, center of gravity, non-symmetrical center of gravity & buoyancy (lifting in water).</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>20. General Construction Site Hazards</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>21. NYC Buildings Unsafe Condition (311) Notification Procedure</p> | <p>Provide Copy to Trainee & Discuss</p> |
| <p>22. NYC/DOI Buildings Integrity Training Contact Information Sheet</p> | <p>Provide Copy to Trainee & Discuss</p> |
| <p>23. Review all Training Topics</p> | <p>Discussion with Questions & Answers</p> |
| <p>24. Written (Multiple Choice) Assessment</p> | <p>Classroom</p> |