



CRANE OPERATOR

ANNUAL SALARY: \$61,000 - \$84,000* | NOC: 7371 | Red Seal & Compulsory Certified Trade¹

*Based on a 40-hour work week at current collective agreement rates for journeypersons (operating engineers). Does not include benefits.

WHAT WE DO

Crane operators work with cranes or draglines to manipulate and position machinery, equipment, and other large objects during construction projects. In the province of Nova Scotia, they'll hold a certificate of qualification/competency in order to operate a mobile crane, boom truck, overhead travelling crane, or tower crane, and license to work in the trade. These are obtained from the Nova Scotia Department of Labour and Advanced Education (LAE) Technical Safety Division, who classify regulated cranes by their function and lifting capability and issue separate certificates and endorsements to qualified operators for each. The specialized equipment is used for many different functions. Crane operators may use cranes to dredge waterways, drive pilings into the ground, and load, unload, lift, and move heavy objects. As part of their work, they will also perform routine maintenance like cleaning and lubricating the machinery. They: change and top-up coolant, assemble hydraulic hoses and fittings, determine crane hoisting capacities, rig loads, service air intake and electrical systems, and erect cranes to working positions.

Generally, persons working as crane operators should be **precise**, have **strong math skills**, **excellent eyesight**, **good physical stamina**, **strength**, **agility**, and **coordination**, **ability to work with machines**, **at heights**, and **in noisy conditions**, **attention to detail**, and be **able to follow instructions**. Experienced crane operators can advance to supervisory roles or start their own business.²

PREPARATORY WORK

- Research the labour market, job shadow or take a test drive in a trade
- Enrol in the Cooperative Education, Building Futures for Youth, Skilled Trades, or Options and Opportunities (O₂) Programs.³ Please note: students can receive academic credits and experience but are not eligible to receive apprenticeship hours from these programs, as there is no formal apprenticeship program in the province for crane operators. New entrants must be industry trained as on-the-job apprentices/trainees (described in the next section).
- Take youth health and safety courses where offered in the province of NS
- High School Diploma or Equivalency with Grade 10 math or its equivalent⁴

DIRECT ENTRY⁵

- Find an employer or contact the local union for indenturing (joining to receive member benefits)
- Register with the NS Apprenticeship Agency (NSAA) as an apprentice/trainee under the direct supervision of a crane operator and work to acquire the minimum on-the-job experience
- Submit a formal application for certification with verifiable practical experience (or successful completion of a practical test for approved courses) and written examinations. A list of fees is available on the NS Technical Safety Fees Regulations⁶. Apply to become a Crane Operator I, II or III (mobile cranes and boom trucks), or IV (boom trucks only), Tower Crane Operator, or Overhead Travelling Crane Operator. Crane Operators I, II and III can also apply for lattice boom, overhead travelling crane, and self-erecting tower crane endorsements to use additional machines with further experience ("seat time") or coursework and hours mobilizing/demobilizing this equipment.
- Training is available through the Operating Engineers Training Institute of Nova Scotia (OETINS) and the International Union of Operating Engineers, Local 721
- Apprentices/trainees here complete 5900 hours at various pay grades (see the example pathway on the reverse side of the paper)
- Completing other approved programs in the province can also provide you with time credited towards the practical experience requirement for certification
- Apply with your certificate for license to operate with optional endorsements (in the same class)
- Challenge the Red Seal exam with your certificate and license to become a certified crane operator with interprovincial mobility from the NSAA

¹ <http://nsapprenticeship.ca/trades>. You **must** be or be working towards becoming certified to work in this trade in NS.

² <http://www.red-seal.ca>, <http://www5.hrsdc.gc.ca>, <http://www.careersinconstruction.ca/en/career/crane-operator>, <http://novascotia.ca/lae/equipmentsafety/craneoperator.asp>, <http://www.novascotia.ca/just/regulations/regs/tscrane.htm> and <http://careers.novascotia.ca/occupation/324>

³ <http://www.ednet.ns.ca>, <http://www.workitns.ca> and <http://www.buildingfutures.ca>

⁴ <http://novascotia.ca/snsmr/paal/lae/paal426.asp>

⁵ <http://www.novascotia.ca/snsmr/paal/lae/paal159.asp>, <http://novascotia.ca/snsmr/paal/lae/paal426.asp>, <http://trainingforthefuture.ca>, <http://novascotia.ca/lae/publicsafety>, <http://novascotia.ca/lae/equipmentsafety/docs/ApprovedProgramsV1.pdf> and <http://novascotia.ca/just/regulations/regs/tsfees.htm>

CRANE OPERATORS' CAREER PATHWAY

Cooperative Education: Grades 10, 11 and 12 and at least 16 years of age to be eligible.

Skilled Trades: High school courses satisfying academic requirements. The Grade 12 course offers a co-op placement.

O₂ Program: In-school learning and on-the-job training through co-op placements. Available in select high schools. The *Building Futures for Youth Program* is offered primarily for students already enrolled in O₂ or cooperative education and provides upwards to 3 co-op credits.

Grade Twelve Diploma or Equivalent

Direct Entry:

Obtain employment on own or apply to union with resume for indenturing. Register as an apprentice/trainee with the NSAA.

OETINS = Operating Engineers Training Institute of Nova Scotia

(OETINS) 1st 1300 hours at 55% of Operator rate*

\$17.04 - \$21.79 / hr**

(OETINS) 2nd 1300 hours at 65% of Operator rate

\$20.14 - \$25.75 / hr

(OETINS) 3rd 1300 hours at 75% of Operator rate

\$23.24 - \$29.71 / hr

(OETINS) 1000 hours at 85% of Operator rate

\$26.33 - \$33.67 / hr

(OETINS) 1000 hours at 95% of Operator rate

\$29.43 - \$37.63 / hr

Technical Training from Union or Employer

Safety training, equipment training, or other certifications.

OETINS offers a full course for crane operators (see footnote).

Obtain Certificate and License:

Obtain certification as a Crane Operator I, II, III (with optional endorsements) or IV, Tower Crane Operator, or Overhead Travelling Crane Operator. Apply for license. Apply for Red Seal designation as a Tower Crane Operator, Mobile Crane Operator, or Mobile Crane Operator (Hydraulic) for interprovincial mobility.

Crane Operator I: 4000 hrs. under direct supervision (1000 if holding 6 mons. Class II certificate)

Crane Operator II: 3000 hrs. under direct supervision (1000 if holding 6 mons. Class III certificate)

Crane Operator III: 2000 hrs. under direct supervision

Crane Operator IV: 500 hrs. under direct supervision

Tower Crane Operator: 2000 hrs. under direct supervision

Overhead Travelling Crane Operator: 1000 hrs. under direct supervision

* From the collective agreements for Local 721. Apprentices complete the required amount of hours on the job and progress through pay grades at each level. Completing the crane operator training course means that an apprentice is credited as entering the trade at the second 1300-hour level. Only union members who have passed programs at the training institute are eligible to become apprentices.

** Average hourly pay for apprentices in training under summer 2016 rates for general, Commercial, and major and non-major Industrial projects on mainland NS and Cape Breton Island.