



# Heavy Equipment Operator & Operating Engineer

Youth Apprenticeship

## HEAVY EQUIPMENT OPERATOR & OPERATING ENGINEER

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Heavy Equipment Operators and Operating Engineer youth apprentices learn fundamental construction skills for commercial and residential developments, dams, roadways, etc. They learn blueprint reading, site layout, working safely, and the operation of tools and equipment.

**Length of Apprenticeship:** One year

**Youth Apprentices must also complete the following safety training:**

- First Aid Certification
- Occupational Safety and Health Administration (OSHA) 10 or 30 Certification

## OCCUPATIONAL COMPETENCIES

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Youth apprentices work with a job site mentor to demonstrate the following competencies.

Youth apprentices must complete a total of **14** competencies. **Thirteen** must be from the list below. If necessary, employers can substitute **1** competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment.

**Note the following pieces of equipment are prohibited for use by Youth Apprentices under the age of 18: aerial lift, skid steer, compactor, and forklift.**

| Competencies  |
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| 1. Read blueprints, site plans and specifications   |
| 2. Define site specific layout needs  |
| 3. Identify equipment related safety hazards  |
| 4. Describe uses for each piece of heavy equipment  |
| 5. Operate generators and compressors   |
| 6. Perform daily maintenance on equipment (Note: YAs cannot turn on prohibited equipment during daily maintenance)  |
| 7. Apply math skills to heavy equipment operation   |
| 8. Follow worksite health and safety practices  |
| 9. Maintain an organized and safe work area   |
| 10. Use hand and voice signals (Note: YAs cannot use hoisting equipment)  |
| 11. Assist with repair and maintenance of equipment (Note: YAs cannot turn on prohibited equipment during repair and maintenance)                           |
| 12. Assist with establishing grade  |
| 13. Assist with clearing and manual excavation of site (Note: For trenches, piers, foundations, and holes excavation is limited to 4 feet in depth or less) |
| 14. Operate tools and equipment safely (i.e., drill, torch welder)  |

## Registered Apprenticeship Bridging Opportunities

The following Registered Apprenticeship is available in this area:

- Heavy Equipment Operator and Operating Engineer

## **POST-SECONDARY PATHWAY OPPORTUNITIES**

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There are several post-secondary pathway opportunities in this area. The following is a partial list.

- Construction Management Technology
- Construction Safety Technology