**LBHC Certificate in Highway Construction**

Program Learning Outcomes Curriculum Map and Plan[[1]](#footnote-0)

Updated 06.27.2024

| Program learning outcomes: *Graduates should be able to…* | CA 085  or 101  (writing) | MA 111 (math) | CA 112 (public speak) | HEO 101 (heavy equip) | HEO 102 (equip operations lab) | CDL 101 (truck driving) | CDL 102 (vehicle operations lab) | TRD 100 (OSHA 10) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Maintain, inspect, and safely operate several types of construction equipment (e.g., a backhoe, wheel loader, and mini excavator). |  |  |  | I | A[[2]](#footnote-1) (2023-24) |  |  | R |
| 1. Perform pre-trip inspection of commercial vehicles (e.g., semi-trucks). |  |  |  |  |  | I | R/A[[3]](#footnote-2) (2024-25) |  |
| 1. Operate commercial vehicles (e.g., semi-trucks) on public highways while pulling a trailer. |  |  |  |  |  | I | R/A[[4]](#footnote-3) (2025-26) |  |
| 1. Communicate with others using industry-appropriate terminology. | I |  | R | R |  | A[[5]](#footnote-4) (2026-27) |  | R |
| 1. Apply construction math to complete highway construction projects. |  | I | R | A[[6]](#footnote-5) (2027-28) |  | R |  |  |

1. Only courses that are a part of the main program of study requirements should be listed on the first row. Courses that are not required for only this program are excluded from the list of courses (e.g., exclude general education core requirements). I, R, and A indicate the main program of study requirements – courses in which each program learning outcome is introduced (I), reinforced (R), and formally assessed (A). There should only be one formal assessment (A) in each row and the year of assessment should be noted. Not every cell in every row needs to be filled in; however, each listed course should have at least one letter – either an I, R, or A in its column. This document was created and reviewed by Tucker and Berthina. [↑](#footnote-ref-0)
2. Program learning outcome 1 is assessed in HEO 102 (equipment operations lab) in equipment chapter tests, lab tests, and lab final. [↑](#footnote-ref-1)
3. Program learning outcome 2 is assessed in CDL 102 (vehicle operations lab) in unit quizzes, lab, and final exam. [↑](#footnote-ref-2)
4. Program learning outcome 3 is assessed in CDL 102 (vehicle operations lab) in lab participation and the final exam. [↑](#footnote-ref-3)
5. Program learning outcome 4 is assessed in CDL 101 (truck driving) in lab participation and the final exam. [↑](#footnote-ref-4)
6. Program learning outcome 5 is assessed in HEO 101 (heavy equipment) in chapter quizzes and the final exam. [↑](#footnote-ref-5)