# Small Engines & Powertrains I Course No. 40212 Credit: 0.5

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| **Student name:** |  | **Graduation Date:** |  |

Pathways and CIP Codes:Mobile Equipment Maintenance (47.9999) - Technology Strand I & II

Course Description: A comprehensive, **technical level** course to instruct students in the knowledge and skills common to all small engine operations and repair.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Click or tap here to enter text.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Demonstrate and apply safe working practices with tools and machines. |  |
| 1.2 | Identify and follow safety procedures as outlined in OSHA guidelines. |  |
| 1.3 | Identify, service needs, and maintain the working parts of 2- and 4-stroke cycle engines. |  |
| 1.4 | Explain and demonstrate a working knowledge of engine systems on 2- and 4-stroke cycle engines. |  |
| 1.5 | Utilize precision measuring equipment. |  |
| 1.6 | Use and interpret service literature. |  |
| 1.7 | Demonstrate an understanding of primary drive mechanisms. |  |
| 1.8 | Demonstrate the ability to perform a leak inspection. |  |
| 1.9 | Demonstrate the ability to disassemble and reassemble an engine. |  |
| 1.10 | Remove and install an engine. |  |
| 1.11 | Compare and contrast various types of transmissions and drive systems. |  |
| 1.12 | Explain the principles of electricity as they pertain to small engines and powertrains. |  |
| 1.13 | Interpret and follow reference manuals, schematics, diagrams, flow charts, symbols, and technical procedures. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

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[pathwayshelpdesk@ksde.org](mailto:pathwayshelpdesk@ksde.org)



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