# Small Engines & Powertrains II Course No. 40214 Credit: 0.5

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

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

Course Description: A comprehensive, **application level** course designed to provide students with advanced knowledge and skills common to all small engine operations and repair. (Prerequisite: Small Engines and Powertrains I.)

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 | Perform preventive maintenance on tools and equipment. |  |
| 1.2 | Follow safety procedures as outlined in OSHA guidelines. |  |
| 1.3 | Perform electrical system service, diagnostics, and testing. |  |
| 1.4 | Perform fuel system service and diagnosis. |  |
| 1.5 | Perform ignition system service and diagnosis. |  |
| 1.6 | Describe and explain the principles of multiple cylinder engines. |  |
| 1.7 | Perform starting and charging system service and diagnosis. |  |
| 1.8 | Demonstrate advanced troubleshooting techniques. |  |
| 1.9 | Research and discuss the advantages and disadvantages of alternative power systems. |  |
| 1.10 | Prepare a repair order and estimate required time and materials to accomplish service procedure. |  |
| 1.11 | Discuss/Explain the principles of hydraulics. |  |
| 1.12 | Perform troubleshooting techniques. |  |

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

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

(785) 296-4908

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



900 S.W. Jackson Street, Suite 102

Topeka, Kansas 66612-1212

[https://www.ksde.org](https://www.ksde.org/)

The Kansas State Department of Education does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities and provides equal access to any group officially affiliated with the Boy Scouts of America and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: KSDE General Counsel, Office of General Counsel, KSDE, Landon State Office Building, 900 S.W. Jackson, Suite 102, Topeka, KS 66612, (785) 296-3201.