# Steering & Suspension II Course No. 40226 Credit: 0.5

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

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

Course Description: A comprehensive, **application level** course designed to provide students with the advanced skills needed to inspect, service, and repair steering and suspension systems. (Prerequisite: Steering & Suspension 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: Steering System Service and Repair

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Diagnose steering systems and determine necessary action. |  |
| 1.2 | Clean, inspect, adjust, and install electric hydraulic and manual steering gear boxes and rack and pinion steering gears. |  |
| 1.3 | Inspect and repair steering column and steering linkage components. |  |
| 1.4 | Inspect, repair, and replace power steering pumps and hydraulic lines. |  |
| 1.5 | Disable and enable SRS systems following manufacturer’s procedures. |  |
| 1.6 | Test and diagnose electronically controlled steering systems; determine necessary action. |  |

## Benchmark 2: Diagnose and Repair Front and Rear Suspension Systems

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Test and diagnose conventional suspension systems; determine necessary action. |  |
| 2.2 | Inspect and repair control arm and spring assemblies on conventional systems. |  |
| 2.3 | Inspect and repair wheel hubs, spindles, and bearings. |  |
| 2.4 | Inspect and replace shock absorbers and stabilizer bars. |  |
| 2.5 | Diagnose, disassemble, inspect, and assemble McPherson strut assemblies; determine necessary action. |  |
| 2.6 | Test and diagnose components of electronically controlled suspension systems; determine necessary action. |  |

## Benchmark 3: Tire and Wheel Alignment Service

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Diagnose steering and tire wear problems; determine necessary action. |  |
| 3.2 | Set correct alignment angles on front and rear wheels. |  |
| 3.3 | Dismount, inspect, repair, and remount tire on wheel. |  |
| 3.4 | Diagnose vibration, measure tire and wheel run-out. |  |

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/)

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