# Hydraulics & Pneumatics Course No. 39302 Credit: 0.5

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

Pathways and CIP Codes:Aviation Maintenance (47.0608) - Airframs Strand; Energy (17.2071); **Manufacturing (48.0000) - Maintenance Strand**

Course Description: An **application level** course designed to provide students with advanced knowledge and skills in operating, maintaining, and troubleshooting hydraulic & pneumatic systems.

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 | Compare & contrast the principles of hydraulics & pneumatics. |  |
| 1.2 | Demonstrate a working knowledge of hydraulics & pneumatics terminology. |  |
| 1.3 | Identify basic hydraulic and pneumatic symbols. |  |
| 1.4 | Read and understand Schematic Diagrams. |  |
| 1.5 | Design and construct basic hydraulic and pneumatic circuits. |  |
| 1.6 | Demonstrate proper use of pneumatic and hydraulic-operated Tools. |  |
| 1.7 | Explain the operation of air compressors and vacuum pumps. |  |
| 1.8 | Perform diagnostic procedures on hydraulic and pneumatic systems. |  |
| 1.9 | Compare & contrast the use of synthetic and petroleum-based lubricants in hydraulic systems. |  |
| 1.10 | Create a comprehensive maintenance schedule for hydraulic & pneumatic systems. |  |
| 1.11 | Identify components in a fluid power/pneumatic circuit. |  |

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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