

## **Diesel Engines I**

**Course Information** Diesel Engines I introduces the theory of operation and the use of the engine's mechanical components; disassembling, inspecting, measuring, reassembling and performing maintenance procedures on diesel engines.

**Developers:** Diesel Technology State Curriculum Committee

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**Development Date:** 5/6/13 and 10/3/13

**KBOR Facilitators:** Shirley Antes/ Rita Johnson/Connie Beene  
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**Business & Industry Liaisons:** Randy Kemper, Cummins Central Power, Wichita; John Logan, MHC Kenworth, Salina; Anthony Dahl, Foley Equipment, Topeka

**Credit Hours:** 5

**Course Competencies:**

**Students will be able to:**

1. Identify cylinder head, camshaft & valve train
2. Operate cylinder head, camshaft & valve train
3. Identify cylinder block
4. Reassemble cylinder block
5. Identify lubrication system
6. Reassemble lubrication system
7. Identify cooling system
8. Reassemble cooling system
9. Identify internal engine components
10. Reassemble internal engine components
11. Identify proper use of sealing mediums
12. Install proper use of sealing mediums
13. Demonstrate proper use of sealing mediums
14. Identify timing procedures
15. Demonstrate timing procedures
16. Identify various exhaust and intake systems
17. Install various exhaust and intake systems