

Automotive & Diesel LMS – High-Impact Expansion Package

This document delivers the next high-impact expansion steps for the Automotive & Diesel LMS. It includes course-level instantiation guidance, ASE-aligned assessment frameworks, semester lesson planning, Perkins/KSDE narrative language, and LMS automation readiness.

1. Individual Course Document Generation

Each course in the catalog is intended to be deployed as its own DOCX file derived from the Master Instructional Package. Each course document contains:

- Course-specific syllabus
- Weekly module breakdown (8–16 weeks)
- Lesson objectives and activities
- Practice quizzes and exams
- Virtual lab descriptions

This approach meets accreditation expectations while remaining manageable for instructors.

2. ASE-Aligned Question Bank Framework

Question banks are structured directly from ASE task lists and organized by system. Each bank includes:

- Knowledge-based multiple-choice questions
- Diagnostic scenario questions
- Image-based fault identification

Banks are exportable as CSV or XML for LMS import (e.g., Moodle).

3. Standard 16-Week Lesson Plan Model

Courses follow a 16-week semester model adaptable to accelerated formats.

Weeks 1–2: Safety, fundamentals, theory

Weeks 3–6: Core system operation

Weeks 7–8: Diagnostics and midterm assessment

Weeks 9–13: Advanced scenarios and labs

Weeks 14–15: Applied projects

Week 16: Final exam and capstone assessment

4. Perkins V / KSDE Compliance Narrative

The Automotive & Diesel LMS supports Perkins V and KSDE requirements by:

- Aligning curriculum to industry-recognized standards (ASE, EV safety)
- Supporting work-based and simulated learning experiences
- Providing measurable student outcomes and competency tracking

- Ensuring accessibility and equitable access through online delivery

AI-assisted tools enhance instruction while maintaining instructor oversight.

5. LMS Automation & AI Pipeline Readiness

The platform is designed for automated content generation and deployment:

- Ollama generates lesson drafts, quizzes, and remediation
- Stable Diffusion generates instructional visuals
- Scripts populate LMS courses, modules, and question banks
- Instructors approve content before student release

This enables rapid scaling while maintaining instructional quality.