Automotive & Diesel LMS – Implementation-Level Execution Plan

This document represents the true implementation phase of the Automotive & Diesel LMS. It translates approved curriculum and architecture into deployable, LMS-ready assets. All steps outlined here are actionable and can be executed sequentially or in parallel.

1. Course-by-Course DOCX Generation (Operational)

Each course will be instantiated as an individual DOCX file using the approved syllabus and instructional templates.

Each course DOCX will include:
- Official syllabus
- Weekly module breakdown
- Lesson objectives and content outlines
- Practice quizzes and exams
- Virtual lab descriptions

These documents are suitable for faculty handbooks, accreditation files, and LMS reference.

2. ASE Question Bank Production

ASE-aligned question banks will be generated per course and system area.

Implementation steps:
- Parse ASE task lists
- Generate question pools (300–500 items per major area)
- Validate against learning outcomes
- Export to CSV and Moodle XML formats

Question types include theory, diagnostics, and image-based identification.

3. LMS Auto-Seeding (Moodle / Custom LMS)

Automated scripts will populate the LMS with approved content.

Auto-seeding actions:
- Create course shells
- Create modules and lessons
- Import question banks
- Attach media and thumbnails
- Assign competencies and grading

Instructor approval checkpoints are enforced before publishing.

4. Virtual Lab Scenario Implementation

Virtual lab scenarios will be implemented using Blender and Unity.

Scenario components:
- Vehicle systems models
- Injected faults
- Diagnostic data streams
- Performance scoring

Labs are mapped directly to course outcomes and assessments.

5. State / Institutional Submission Packet

A formal submission packet will be assembled for institutional or state approval.

Packet contents:
- Program description and outcomes
- Course catalog and syllabi
- Assessment and competency maps
- Technology and AI usage justification
- Faculty qualification alignment

Language is aligned with KSDE / Perkins V expectations.

6. Execution Timeline

Phase 1 (30 days): Course DOCX + question banks
Phase 2 (60 days): LMS auto-seeding + virtual labs
Phase 3 (90 days): Pilot delivery and state submission