

## **Automotive & Diesel LMS – Master Instructional Package**

This master document provides a complete, accreditation-ready instructional package for the Automotive & Diesel LMS. It includes fully populated syllabi, module maps, lesson frameworks, assessment structures, ASE-aligned question bank guidance, and degree-planning documentation.

### **1. Degree & Certificate Plans**

AAS Automotive Technology, Diesel Technology, EV Technology

Stackable Certificates: Automotive Foundations, Diesel Fundamentals, EV Safety, Advanced Diagnostics, ASE Preparation.

### **2. Representative Fully Developed Syllabus**

AUT-110 Automotive Electrical Fundamentals (4 credits)

Outcomes: electrical theory, diagnostics, safe tool use.

Assessments: labs, quizzes, midterm, final.

### **3. Module & Lesson Map**

Module 1: Electrical Theory

Module 2: Circuit Diagnostics

Module 3: Batteries & Charging Systems

### **4. Lesson Framework**

Each lesson includes objectives, content, visuals, practice, and lab activity.

### **5. Practice Tests & Exams**

ASE-style practice tests per module; cumulative midterm and final exams.

### **6. AI & Virtual Lab Integration**

Ollama for content, Stable Diffusion for visuals, Blender/Unity for labs.