

General Automotive Systems & Service

Abris Automotive Curriculum, LLC

Course Outline

Unit 1 – Safety

- 1.1 Personal Safety
- 1.2 Tool, Equipment Safety
- 1.3 Fire Safety
- 1.4 Hazard Communication, Hazardous Materials, Environmental Concerns

Unit 2 – Tools and Equipment

- 2.1 Hand Tools
- 2.2 Power Tools

Unit 3 – Automotive Service

- 3.1 Vehicle Terminology and Systems Identification
- 3.2 Vehicle Safety, Maintenance Inspection
- 3.3 Engine, Transmission, Chassis Service
- 3.4 Tire Terminology, Construction, Service

Unit 4 – Automotive Physics

- 4.1 Basic Math
- 4.2 Principles of Physics, Chemistry
- 4.3 Four-stroke Cycle Spark Ignition Engine
- 4.4 Direct Current Electrical Principles

Unit 5 – Shop Operations

- 5.1 Entrepreneurship, Communication
- 5.2 Automotive Databases, Vehicle Identification, Decals
- 5.3 Interpreting Data on Charts, Graphs
- 5.4 Estimating, Repair Orders, 3-C Reports, Repair Summary

Unit 6 – Automotive Fasteners

- 6.1 Types of Fasteners
- 6.2 Thread Pitches, Fastener Strength
- 6.3 Taps, Dies, Thread Restoration
- 6.4 Broken Screw Extraction, Tube Bending, Flaring

Unit 7 – Precision Measuring (Fractional and Metric)

- 7.1 Ruler
- 7.2 Micrometer
- 7.3 Other Automotive Measuring Instruments

Unit 8 – Becoming an Automotive Technician

- 8.1 Automotive Career Paths
- 8.2 Personal Automotive Skills, Resume, Job Application
- 8.3 Interview Skills, Job Retention Skills, Post-Secondary Visit
- 8.4 ASE Certification