

# Chabot Community College - Automotive Program Mercedes-Benz Training Curriculum Integration 22 Courses - 145 Sections



## **ATEC 50 - Introduction to Automotive Technology**

Automotive industry fundamentals include careers; safety; fasteners, hand tool identification, and usage; vehicle systems, electrical fundamentals; service information access and use; automotive chemical and fluid applications; hazardous waste handling; general shop equipment usage, and vehicle servicing.

## **MB Learning Component**

- 1. **X0003E-US.TTB Maintenance El:** This course introduces the student to the basic Mercedes-Benz maintenance principles and workplace standards
- 2. X0007E-US.TTA Single-Use Fasteners: This brief (5 Minute) course focuses on the requirements for self-locking single-use fasteners
- 3. **X0015E-US.TTA Pre-Delivery Inspection (PDI) Overview:** An overview and explanation of why and how to properly perform the Mercedes-Benz Pre-Delivery Inspection process.

# **ATEC 1 Automotive Engines**

Automotive engine fundamentals including; configurations and designs, operation, diagnostic tests; disassembly, inspection, thread repair, broken bolt removal, precision measurement, assembly, timing chains and belts, valve adjustments, cooling systems, introduction to engine machining, proper use of shop related tools and equipment, and safety practices.

## **MB Learning Component:**

1. **X0003E-US.TPC Info Systems:** This course is an online introduction to Mercedes-Benz products and technical information.

## **ATEC 3 Automotive Manual Transmissions and Transaxles**

Automotive Manual Transmission fundamentals include theory, diagnosis, repair, and adjustment of automotive manual transmissions/transaxles, driveshafts, half shafts, final drives, clutches, viscous couplings, and transfer cases. Two, four, and all-wheel drive assemblies, theory, service, and repair.

## **MB Learning Component:**

Additional eLearning Courses (not required but recommended)
Mercedes-Benz Transmissions: This is an additional course designed to introduce you to the Mercedes-Benz Transmissions

## **ATEC 4 Automotive Suspension and Steering**

Automotive Suspension and Steering fundamentals include diagnosis, inspection, repair, and adjustment of modern automotive steering, suspension, supplemental restraint, tire pressure monitoring, and alignment systems, theory of operation, standard automotive steering and suspension systems, wheel alignment principles, methods of diagnosis, adjustment, and repair, suspension service equipment.

## **MB Learning Component**

1. **X0002E-US.MTA MOE Tires:** This AKUBIS® video program provides information on MOE tires, workshop cleanliness, and other topics for Mercedes-Benz vehicles

## ATEC 6A - Automotive Electrical and Electronic Fundamentals

Automotive Electrical and Electronic Fundamentals including Ohm's Law, basic electrical circuits, components, battery, starting, charging, and basic wiring systems, electrical components and the use of basic wiring diagrams for troubleshooting systems, repair of wiring circuits, and correct use of diagnostic equipment.

# **MB Learning Component:**

- 1. X0001E-US.TTE\ Electrical Fundamentals (X0001E-US.TTE): The Electrical Fundamentals online training course provides new dealership technicians with the fundamental knowledge required for essential electrical servicing of vehicles
- 2. T121E-US.TTC Networking Part I
- 3. Mercedes-Benz Wiring Repair

# ATEC 6B - Automotive Electrical and Electronic Systems

Automotive body electronics, vehicle lighting, instrumentation, OEM audio, navigation, and communication systems, supplemental restraint systems, starter interlock systems, computer-controlled charging systems.

# **MB Learning Component:**

- 1. T1218E-US.TTC Networking Part II
- 2. Additional eLearning Courses (not required but recommended)
  - a) Systems
  - b) Supplemental Restraints
  - c) Electrical
  - d) Electrical Networking

## ATEC 7 - Automotive Heating and Air Conditioning Systems

Automotive Heating and Air Conditioning include diagnosis, testing, adjustment, and repair of air conditioning, cooling and heating systems, heat and energy, airflow, refrigerant recycling, equipment, and controls.

# **MB Learning Component:**

- 1. Additional eLearning Course (not required but recommended)
  - a) Climate Control

#### **ATEC 8: Automotive Air and Fuel Delivery Systems**

Automotive Air and Fuel Delivery including Introduction to the principles of automotive fuel induction systems, including the inspection, diagnosis, and evaluation of fuel storage, fuel pumps, carburetion, intake and exhaust systems, engine operation principles, computerized engine controls, and fuel injection systems.

## **MB Learning Component:**

- 1. **X0010E-US.TTB Introduction to Workshop Information Systems (WIS) for Technicians:** This course will introduce you to the Workshop Information System (WIS) used in workshops to maintain and repair Mercedes-Benz passenger vehicles and vans.
- 2. **X0005E-US.TTC Engine Management Gasoline eL**: This is the eLearning for Engine Management Basics Gasoline
- 3. Additional eLearning Course (not required but recommended)

## **ATEC 10 - Automotive Advanced Engine Performance**

Automotive Engine Management Systems include ignition systems, combustion process, emission control devices, diagnostic practices for drivability, emissions, onboard diagnostic systems, vehicle systems integration, and new engine technology.

- 1. **X0002E-US.TPB Xentry Diagnostics Fundamentals and Functions eL Update:** This is the eLearning course Xentry Diagnostics Fundamentals and Functions
- 2. **X0011E-US.TTB Introduction to Diagnostic Strategy:** This course will better understand diagnosis as a defined and repeatable process by introducing you to the 4-Level diagnostic strategy Model.
- 3. **X0008E-US.TTB Engine Management Diesel eL:** This eLearning course explains some of the fundamental concepts of Engine Management: Mixture formation and ignition within diesel engines with common rail injection.
- 4. X0014E-US.TTB Mercedes me + Remote Diagnosis eL

#### **ATEC 75 - Automotive Service Consultant**

Automotive Service Consultant fundamentals include communications, customer service, legal documents, business interactions, billing, parts and labor guides, shop management applications, shop operations, sales, vehicle identification, and systems operations. Course content is aligned with tasks identified by Automotive Service Excellence (ASE) certification.

# **MB Learning Component:**

- 1. **X0039E-US.SSB The Best or Nothing:** The Mercedes-Benz Story
- 2. **X0040E-US.SSB Driven to Delight:** A Culture of Excellence. This course will remind you that not only does Mercedes-Benz offer superior products, but it is also a customer-centric culture, driven to lead, to listen to customers, to empathize with them, to add value to their lives, and to delight them every chance possible.
- 3. **X0055E-US.SSB Survey Integrity:** A Critical Priority. This eLearning course is intended to provide an in-depth awareness of integrity concerning surveying customers.
- 4. **X0014E-US.TTA Workshop Best Practices:** In this course, you will learn workshop best practices to assist you in your daily work as a professional automotive technician.
- 5. **X0027E-US.PPB Introduction to Mercedes-Benz Warranty eL:** This course explains the service process related to warranty reimbursement and how warranty information contributes to the brand's overall health. Additionally, it will highlight the various warranty resources available and how to utilize these resources.
- 6. **X0001E-US.PDC Service Matters:** This course has been designed to reinforce the importance of adequate repair order documentation.

# ATEC 90 - Hybrid Vehicle Operation and Servicing

Study of hybrid vehicle architecture, operation, and servicing.

## **MB Learning Component:**

1. **T0103E-US.TTD High Voltage Awareness:** This eLearning course explains the basics of High Voltage Systems in motor vehicles. All personnel who may have even casual contact with vehicles equipped with a high voltage system should complete this introductory awareness course.

This course introduces students to the Advanced Drivers Assistance Systems (ADAS) utilized in vehicles. This technology is also the foundation for autonomous vehicles. This course will cover the various Advanced Drivers Assistance Systems (ADAS), exploring system operation, diagnosis, service, repairs, and calibration.

1. **X0004E-US.TTC Telematics eL:** This eLearning course provides introductory knowledge related to Telematics systems on Mercedes-Benz vehicles