

TECHNICIAN TRAINING

Louisiana Cat provides hands-on technician training at our Training Facilities in New Iberia and Morgan City. These classes provide a comprehensive understanding of both diesel and natural gas engines. Our engine and heavy equipment programs begin with the basics, and build in complexity as the student progresses. Our courses will enable your technicians to troubleshoot problems and make repairs necessary to minimize equipment downtime. Small class sizes ensure that each participant receives adequate attention and hands-on training.



» **Electronics Troubleshooting I (4½ days)**

This course is a foundational course to aid mechanical technicians in transition to electrical and electronic systems repair. This course teaches students the procedures for maximizing battery life and reducing operational cost while reducing the environmental impact in disposing of spent batteries.

» **Electronic Sensors and Control Logics (4½ days)**

This course is an in-depth study of effective techniques utilized for troubleshooting Caterpillar electronic engine control systems. The course covers electronic components and their functions for all electronic systems. It teaches the use of the diagnostic tooling required to troubleshoot and repair electronic engine systems, basic troubleshooting techniques, and basic control logics.

» **Hydraulics Troubleshooting (4½ days)**

This course is designed to familiarize the participant with basic hydraulics tests and inspection techniques required to demonstrate diagnostic procedures with hydraulic concerns.

» **Powertrain Troubleshooting (4½ days)**

This course covers basic powertrain theory, studying the various components used in Caterpillar equipment. The topics include, but are not limited to, the transmissions and differentials, torque converters, final drives and axles.

» **Air Conditioning Troubleshooting (2½ days)**

This course is designed to introduce the technician to the basic principles and theories of air conditioning in relation to Caterpillar equipment.

» **Fuel System Troubleshooting (4½ days)**

This course is an in-depth study of Caterpillar fuel systems for 3114, 3116, 3126, C-9 series engines and the C-10/C12, C15 and 3400 series engines. Students learn fuel system disassembly and assembly procedures.

» **Engine Diagnostics (4½ days)**

This course is an in-depth study of engine diagnostic and repair techniques. The majority of the class time is spent diagnosing and correcting engine problems through hands-on activities.

» **D3500 Electrical, Operation & Maintenance (2½ days)**

This course covers air, lubrication, cooling and fuel engine systems. Lab activities will include the Caterpillar software program, Electronic Technician, on the D3500 Series I & II engines.

» **D3500 A,B,C, Tier III Engine Master Mechanic (4½ days)**

The primary focus of this course is on the planned maintenance and repair for the Caterpillar 3500 A, B and C diesel engines including troubleshooting techniques, operations and adjustments.

» **C280 Electrical, Operation and Maintenance (2½ days)**

The MMS II/GMS II Controls course provides an in-depth study and hands-on activities for installation, start-up, tuning, maintenance, and troubleshooting of the MMS II/GMS II controls.

» **C280 Engine Master Mechanic (4½ days)**

This course covers systems operation and teaches service procedures unique to the C280 diesel engine. Students use the special tooling, Electronic Technician, to view and troubleshoot minor electrical problems with engine components.

» **D3600 Diesel Engine Master Mechanic (4½ days)**

This course focuses on the basic operating principles of the D3600 engine components and systems. This course is designed for those who have a good theoretical and practical understanding of diesel engines and mechanical procedures.

» **Natural Gas Engines 1 (4½ days)**

This course focuses on the basic operating principles of gaseous fueled engines. Emphasis is on fuel systems, horsepower calculations, maintenance, intake and exhaust systems, and the timing and ignition system.

» **Natural Gas Engines II (4½ days)**

This course covers electrical systems and special considerations necessitated by low emissions gas engines, specifically the G3500 engine families. One day is spent reviewing stoichiometric principles. The remainder of the class is spent discussing principles of rich burn engines, the advanced wiring associated with the accompanying control systems, and doing tests and adjustments on a running G3508 Natural Gas engine.

» **G3600 Natural Gas Engine Master Mechanic (4½ days)**

This course focuses on the basic operating principles of the G3600 engine mechanical systems. This course is designed for those who have a good theoretical and practical understanding of gas fueled engines and correct mechanical procedures.

» **C175 Engine Electrical, Operation, and Maintenance (2½ days)**

This course will teach the CAT C175 Diesel Engine electronic systems, related wiring harness, component hardware and the use of Electronic Technician (ET) on the engine electronic control systems. The emphasis of this course will be to provide the participant with hands on diagnostic troubleshooting of all major systems of running C175 Diesel Engine.

Go to LouisianaCat.com and click on the "Parts and Service" heading. Then in the drop down box select "Training" for more information on our training capabilities.

866-843-7440

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