



***Training &
Learning Center***

COURSE CATALOG

TECHNICAL, OPERATOR, DIGITAL LEARNING AND MORE



TRAINING FOR SUCCESS

The T56 Training and Learning Center is proud to provide high-quality, engaging trainings to ensure our clients are knowledgeable, safe and confident in their ability to operate and perform routine maintenance on their machines.

Our technical classes, taught by professionally trained and Cat certified instructors, give client technicians hands-on experience working with equipment. Participants develop the confidence to accurately identify and troubleshoot maintenance and repair needs and walk away with a strong understanding of the fundamentals, while also being able to recognize when to seek service support from the dealership.

Operator classes, also taught by Cat certified professionals, emphasize the importance of safety on all equipment. Participants in these classes understand their responsibility to utilize safe operating practices, and learn to identify potential safety issues when preparing to operate equipment.

With over 100 web-based courses and more than 20 instructor-led trainings, the T56 Training and Learning Center is a phenomenal resource for operators, client technicians and equipment owners looking to gain a strong understanding of operating and maintaining equipment.

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Western States Equipment Company has years of proven experience in operator and technical training, safety, and applications for heavy machine use. Our deep roots date back to 1933, when J.A. Terteling & Sons created Western Equipment Company to meet the growing need for construction equipment in their region. In 1956, the Terteling family was presented with the opportunity to expand their company and become a Caterpillar dealership in Boise, Idaho, now known as Western States Cat. TODAY, OUR T56 TRAINING AND LEARNING CENTER REPRESENTS OUR HISTORY, HERITAGE AND LEGACY AS A FAMILY-OWNED CATERPILLAR DEALER.

OUR INSTRUCTORS



BRIAN COFER | Director of Talent Development

Brian facilitates our Leadership Development and Sales Development courses. He is passionate about helping others to develop the skills they need to be successful. He's held several positions at Western States since he joined the company in 2001, including sales, regional management, and executive management. Brian has been in his current role leading the training team since 2017. In his free time, he enjoys skiing, golfing, and watching his daughters' sporting events.



ANDREW FACKLER | Technical Training Instructor

Andrew is a former dealership technician and facilitates our technical training courses. He began working for Western States a few days after his 18th birthday. Since then, he's spent 10 years as a technician and became a trainer in 2017. His favorite course to teach is the F Series Paver Technical class. Outside of work, Andrew enjoys playing with his young sons, fishing, hunting and hiking, and recently began training pack goats to come along on family backpacking trips.



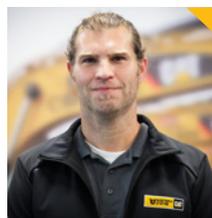
BRANNON WRIGHT | Technical Training Instructor

Brannon is a former dealership technician and facilitates our technical training courses. He has been with Western States as a trainer since 2016. He was introduced to the heavy equipment industry when he joined the military shortly after graduating from high school. Today, his favorite courses to teach are any of the hydraulics courses. Brannon married his high school sweetheart, and they have been married for 28 years. When he isn't working, Brannon loves to fish, paint landscapes, and practice drumming (which he's done since he was 14).



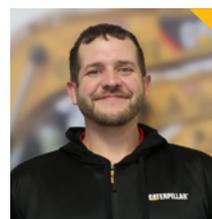
KRISTINA BOCK | Technical Training Instructor

Kristina is a former dealership technician and facilitates our technical training courses. She started with Western States in 2013 at our Twin Falls branch, where she spent three and a half years as a technician before becoming a shop foreman. Today, in her current position as a trainer, her favorite course to teach is the Advanced Electrical curriculum. With four boys at home, Kristina says almost 100% of her time is in the dirt and mud (when she isn't playing video games with her sons). In her free time, Kristina likes to go camping and kayaking.



AARON BALL | Technical Training Instructor

Aaron joined the Western States team in 2020, but began his career as an instructor in 2002. Since then, he has taught both secondary and post-secondary diesel and automotive courses, as well as electrical and electronics courses at the Manukau Institute of Technology in Auckland, New Zealand. Outside of the classroom Aaron is a musician, and has traveled around the world playing music. He enjoys being outdoors, traveling, and spending time with his wife Jenny and their four children.



MICHAEL SPANGLER | Client Services Trainer

Michael facilitates our forklift and aerial lift safe operator and train-the-trainer courses. He has been with Western States since August 2019, and became part of the Training Team in January 2020. Before joining the Western States team, Michael was a Trainer of Heavy Equipment and Telehandlers in the Army for five years. His favorite course to teach is the MEWP class, because it gives him the chance to get into a piece of equipment up off of the ground. Michael always strives to look for the positive in any situation. Outside of Western States, he enjoys taking his kids fishing or camping and spending time with them.

TECHNICAL CLASSES



COURSE

COST

Advanced Hydraulics

This two day training will enable participants to have a better understanding of hydraulic safety and theory, hydraulic components, hydraulic systems, and schematics. This course is non-manufacturer specific.

\$800*
per person

Learning Outcomes

- » Understand hydraulic safety, theory, and principles and how these concepts apply to equipment
- » Understand core component operation, inspection, and common failures
- » Understand universal type hydraulic systems and schematics
- » Understand and apply hydraulic symbols to a function in a schematic.

*Group rates can be negotiated for clients who choose to fill a class



Journeyman Hydraulics

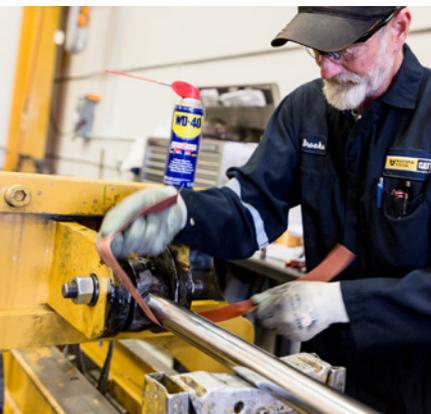
This two day training will develop the participant's knowledge and understanding of load sense pressure compensating and proportional priority pressure compensating hydraulic systems.

\$800*
per person

Learning Outcomes

- » Understand how LSPC and PPC systems work.
- » Have the ability to read and understand LSPC and PPC within a schematic.
- » Have the ability to identify the various components associated in these systems adjustments.
- » Understand how to test, troubleshoot and make adjustments in these systems

*Group rates can be negotiated for clients who choose to fill a class



Hydraulic Reuse

This two day training is designed to provide a sound understanding of the process to determine the reusability of Caterpillar parts and the advantages/benefits clients receive from this effort. This course will focus solely on hydraulic components.

\$800*
per person

Learning Outcomes

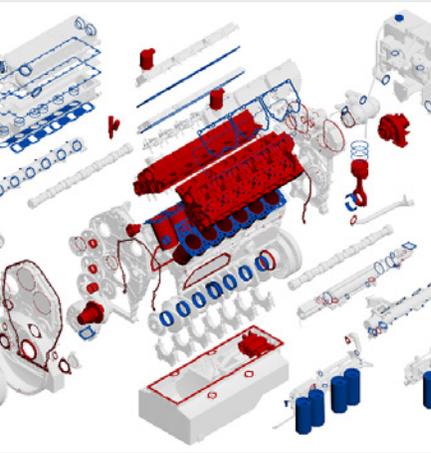
- » Demonstrate competency when identifying parts during disassembly exhibiting a high degree of wear
- » Show evidence of understanding of correct metrology by using proper equipment and measuring processes
- » Know where to find the latest Caterpillar technical information and specifications
- » Efficiently perform disassembly using good material handling techniques and contamination control.

*Group rates can be negotiated for clients who choose to fill a class

TECHNICAL CLASSES

COURSE

COST



Advanced Engines

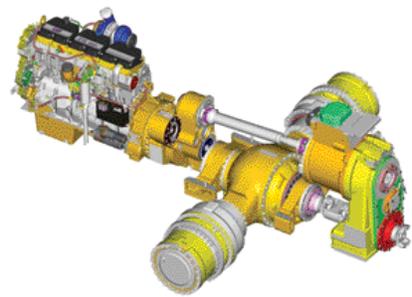
This two day training will instruct the technician on engine component identification and functionality. It will also introduce basic troubleshooting as well as develop skills for testing and adjusting engine components.

Learning Outcomes

- » Understand the fundamentals of engines and component identification.
- » Develop an understanding of basic troubleshooting techniques and tests
- » Demonstrate engine servicing and adjustments using proper specifications
- » Develop an understanding of numerous fuel delivery components and how they are controlled and adjusted

*Group rates can be negotiated for clients who choose to fill a class

\$800*
per person



Advanced Powertrain

This three day training will introduce the powertrain system to the learner. It will cover component identification, terminology, and function of the powertrain components along with how to properly service them. It will also introduce some troubleshooting along with a deeper understanding of gears and the hardware inside these components (seals, bearings, bolts, nuts and washers).

Learning Outcomes

- » Understand fundamentals of a powertrain
- » Develop knowledge of gears and associated hardware
- » Demonstrate ability to properly service powertrain components

*Group rates can be negotiated for clients who choose to fill a class

\$1200*
per person



Service Information System (SIS)

This four hour training is designed to help participants improve their knowledge of SIS and be able to work more comfortably in it. This will help the user speed up their time in SIS making them more efficient which has a direct result on customer service and company profitability.

Learning Outcomes

- » Utilize the product identification section of SIS
- » Navigate Access methods- product ID required
- » Carry out tasks in Access method-product ID not required

*Group rates can be negotiated for clients who choose to fill a class

\$250*
per person

TECHNICAL CLASSES

COURSE

COST



Advanced Electronic Technician (ET)

This four hour course is designed to instruct technicians on how to download and read a PSR, update/flash software, view active/logged codes and events. Participants will also gain familiarity with how to change configurations. This course is completely hands on and requires the user be familiar with SIS and have an active ET subscription.

\$250*
per person

Learning Outcomes

- » Understand what a PSR is/does for you
- » Understand what configurations are and how to change them
- » Be able to understand codes vs events and how to view/clear them

*Group rates can be negotiated for clients who choose to fill a class



Technical Analysis (TA1) Inspection

This one day workshop is designed for anyone that performs TA1 inspections and is looking to improve the efficiency and quality of their inspections. In this hands on workshop, we will start off by discussing in depth how to use the new Cat Inspect 3.0 app, Inspect Web and what is required to complete a thorough inspection. Please wear weather appropriate work clothing because we will then go out to the yard and take a hands on look at several different families of machines and discuss common points of damage or wear. The learners will then be assessed on their skills by completing an inspection of their own and submitting it to the instructor for evaluation.

\$400*
per person

Learning Outcomes

- » Understand why inspections are an important part of equipment upkeep
- » Develop understanding of how to complete a CAT inspection
- » Understand different common types of machine wear

*Group rates can be negotiated for clients who choose to fill a class



Heating, Ventilation and Air Conditioning (HVAC) Systems

This two day training will develop the participant's knowledge and understanding of heating and air conditioning systems as well as how to service and troubleshoot them.

\$800*
per person

Learning Outcomes

- » Understand fundamentals of how heating and air conditioning systems function.
- » Develop understanding of purpose and function of all major HVAC components.
- » Understand how to service and troubleshoot heating and air conditioning systems

*Group rates can be negotiated for clients who choose to fill a class

TECHNICAL CLASSES

COURSE

COST



Powertrain Reuse

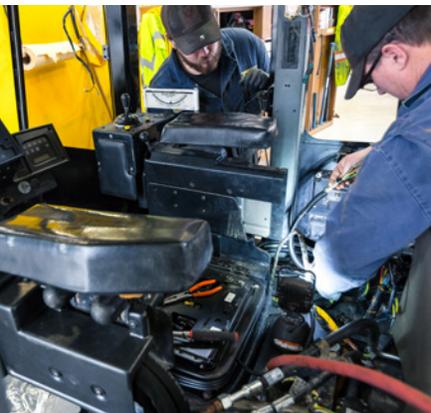
This two day training will increase a technician's confidence, speed and accuracy when making reuse decisions on powertrain parts.

Learning Outcomes

- » Increase technician's confidence when making reusability decisions
- » Decrease rebuild costs due to replacing reusable parts
- » Decrease rework costs and machine downtime due to reusing parts at the end of their usable life.

*Group rates can be negotiated for clients who choose to fill a class

\$800*
per person



Advanced Electrical

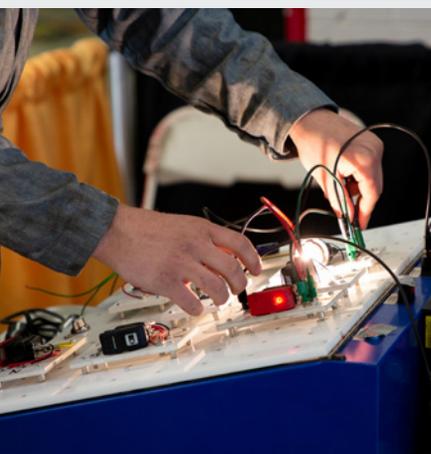
This three day training will develop the participant's knowledge and understanding of electrical theory, basic components and simple electrical systems.

Learning Outcomes

- » Understand electrical theory and how it applies to equipment.
- » Understand basic component operation and repair.
- » Basic electrical system operation and troubleshooting.

*Group rates can be negotiated for clients who choose to fill a class

\$1200*
per person



Journeyman Electrical

This three day training will develop the participant's knowledge and understanding of electronic inputs, outputs and diagnostic code troubleshooting.

Learning Outcomes

- » Understand how and why electronic control circuits are used.
- » Understand how all sensor types function and their output signals.
- » Understand how all outputs are controlled and operate.
- » Understand how to troubleshoot electronic inputs, outputs, harnesses and ECM's.

*Group rates can be negotiated for clients who choose to fill a class

\$1200*
per person

TECHNICAL CLASSES

COURSE

COST



Tier 4 Diagnostics

This three day training will enable technicians to understand systems operation and confidently troubleshoot C9.3 – C32 engines systems necessary to meet Tier 4 emissions.

Learning Outcomes

- » Be able to identify all Tier 4 specific components.
- » Develop understanding of how all Tier 4 systems function.
- » Understand how to troubleshoot and repair Tier 4 system issues

*Group rates can be negotiated for clients who choose to fill a class

\$1200*
per person



F Series Paver/Technical

This four day training will give technicians the ability to confidently and efficiently troubleshoot and repair Caterpillar F series tracked pavers with SE series screeds.

Learning Outcomes

- » Be able to locate and identify all components of F series pavers electrical, hydraulic, propel, undercarriage, material feed and screed heat systems.
- » Understand systems operation of all F series pavers systems as well as how these systems work together.
- » Gain confidence to be able to quickly and efficiently troubleshoot and repair F series paver issues.

*Group rates can be negotiated for clients who choose to fill a class

\$1600*
per person



Applied Failure Analysis (AFA)

This two day training focuses on the principles of metallurgy, component wear and fractures. Participants will also learn to manage the failure analysis process itself to arrive at the most probable root cause of failure. After initial instruction, students will then learn to apply the fundamentals to major engine components: bearings, crankshafts, valves, pistons, rings, liners, connecting rods and threaded fasteners. This course consists of classroom discussion and laboratory exercises, and concludes with the participants completing a case study of a failure that has occurred in the field.

Learning Outcomes

- » Understand the Failure Analysis process and how to manage it
- » How to identify different wear and fracture types
- » How to understand and describe the basic principles of metallurgy and how to correctly identify cause of metallurgical failure

*Group rates can be negotiated for clients who choose to fill a class

\$800*
per person

TECHNICAL CLASSES

COURSE

COST



Next Generation Excavator/Operation & Functionality

This is a two day course designed to give the participant the skills needed to confidently set-up and operate a Next Generation Hydraulic Excavator. Participants will learn about major product changes including changes to both the hydraulic and electrical architectures, new standard features, and physical machine design. This course will have a large hands-on element that will include setting up and operating the Ease-of-Use features (Assist, E-fence, Payload, Grade Control), adjusting the Machine Security System, performing software downloads, component identification, operator set-up, and usage of the ET program. This course is open to all those who wish to learn how to effectively set-up and operate a Next Gen machine.

\$800*
per person

This course is a required pre-requisite for the Next Generation Excavator / Technical course.

Learning Outcomes

- » Understand and be able to discuss in detail the Ease-of-Use features (Assist, E-Fence, Payload, Grade Control)
- » How to perform the bucket measure-up procedure as well as all other required calibrations and setup for successfully setting up Grade Control, Payload and all other Ease-of-Use features
- » How to set-up and manage the Machine Security System

*Group rates can be negotiated for clients who choose to fill a class



Next Generation Excavator/Technical

This is a three day class designed to build off of the knowledge acquired in the Operations & Functionality course. This is a technical course which will focus on the changes to the hydraulic and electrical architecture of the Next Gen HEX machines, with particular attention to how they pertain to the new Ease-of-Use features, EH hydraulic system, Ethernet circuit, and operating system. During this course participants will identify and locate components, test and adjust components and systems, and gain working knowledge of the strategies used in the 320/320GC/323 Next Gen Hydraulic Excavators. Lab exercises will be used for skill development and as a way of checking the knowledge of the participant.

\$1200*
per person

Employees must have completed the Next Gen: Operations & Functionality course prior to attending this course. The instructor will review each registration to ensure pre-requisites are met.

Learning Outcomes

- » Understand and be able to discuss in detail the Ease-of-Use features (Assist, E-Fence, Payload, Grade Control)
- » How to perform the bucket measure-up procedure as well as all other required calibrations and setup for successfully setting up Grade Control, Payload and all other Ease-of-Use features
- » How to set-up and manage the Machine Security System

*Group rates can be negotiated for clients who choose to fill a class

OPERATOR CLASSES

COURSE

COST



Powered Industrial Truck (PIT) Safe Operator Training

Federal and state regulations require employers to certify forklift operators have received initial mandatory training and instruction and pass a practical hands-on evaluation prior to operating the forklift for work. This certification is valid for 36 months. Training records must be maintained by the employer. Our one day program includes the core forklift classroom instruction, student workbooks, written knowledge checks verifying comprehension, fundamental practical operating evaluation, proof of training ID card (valid for 36 months), copies of all training and evaluation documents for employer record retention.

\$100
per person

Learning Outcomes

- » Understand all instructions, warnings, decals and precautions.
- » Recognize location and function of all controls.
- » Competent in steering, maneuvering, and adjusting for restricted visibility.
- » Knowledgeable in forklift capacity and stability ratings
- » Properly conduct pre-shift and site specific inspections



Train-The-Trainer Option

Available for clients interested in training someone who can teach it to other members of their company.

\$500
per person



Mobile Elevating Work Platform (MEWP) Safe Operator Training

Federal and state regulations require employers to ensure mobile elevating work platform operators have received initial training, instruction, familiarization and evaluation on the safe use of the equipment. They must understand their responsibilities and be re-trained if necessary based on the employer's observations and evaluation of the operator. Training records must be maintained by the employer. Our one day program includes the core MEWP classroom instruction, student workbooks, written knowledge checks verifying comprehension, donning-doffing-fit-use of applicable personal fall protection equipment, fundamental practical operating evaluation, proof of training ID card (valid for 36 months), copies of all training and evaluation documents for employer record retention.

\$100
per person

Learning Outcomes

- » Understand proper terminology used with various types of mobile elevating work platforms.
- » Be able to identify the correct aerial platform to use for various applications.
- » Understand the operator's responsibility regarding safe use and operations of aerial platforms
- » Develop safe operating practices when using mobile elevating work platforms.
- » Know the five principles of safe machine operation



Train-The-Trainer Option

Available for clients interested in training someone who can teach it to other members of their company.

\$500
per person

OPERATOR CLASSES



COURSE

COST

Smith Driving System

The Smith Driving System is an 8-hour, hands-on training designed to provide you with new skills for driving differently. The training focuses on the Smith 5 Keys to Safety and on changing driving behavior in three ways: creating space for the vehicle, increasing visibility for the driver, and providing enough time to make decisions.

\$300
per person

Learning Outcomes

- » For experienced drivers to build upon the years of on road experience to become an even safer driver.
- » Identify and learn to prevent the human error factors that cause most vehicle collisions.
- » Understand the precautionary measures that form the series of interlocking techniques used for preventing collisions.

DIGITAL E-LEARNING CLASSES



COURSE

ANNUAL COST

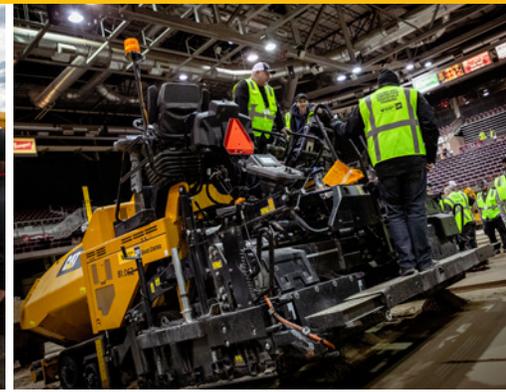
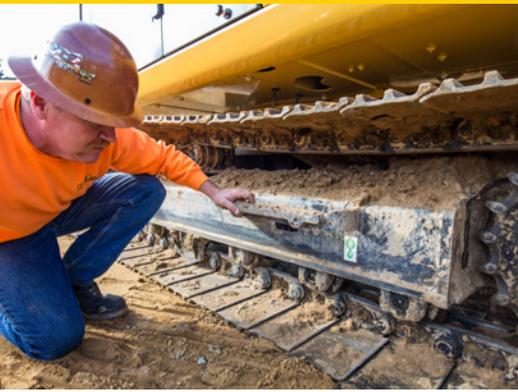
Dealer Performance Center (DPC) Subscription

A subscription to the Dealer Performance Center provides access to a learning catalog of hundreds of digital classes ranging from technical training, to safety training, to operator training, to leadership training.

\$5,000
up to 5
individuals

\$7,500
up to 10
individuals

\$10,000
up to 15
individuals



**Training &
Learning Center**

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