

SPRING 2019 CAT CONFERENCE

Solano Community College
Automotive Technology Campus
1687 North Ascot Parkway
Vallejo, CA 94591
April 26th-April 27th, 2019

Dear CAT Member;

We are excitedly preparing our campus in anticipation for your attendance at this years' conference. Our new state of the art facility opened last fall, and was custom built specifically to house our automotive technology building and program, which we are eager to display. Below you will find more information and details for the spring conference.

For those attendees who are traveling via air, the nearest airports are Oakland, San Francisco, and Sacramento. All three airports are approximately 45-60 minutes from our campus depending on the time of day during which you plan to travel. Google.com/maps has a great estimator for travel times where you can input departure/arrival times for specific dates for more accurate information. (Please see the attached map of our campus location for further clarification.)

We have several hotels located within 5-10 minutes of our campus. The two listed below have a number of rooms reserved at a reduced rate for CAT attendees. When making a reservation mention that you are attending the CAT Conference or CAT 2019, and they will provide you with a discounted rate while vacancies are still available. Please see the addendum on the CAT website "Additional Hotel Information" for more details on booking to take advantage of the special rates.

Courtyard Marriott Vallejo Napa 1000 Fairgrounds Dr. Vallejo, CA 94589 (707) 644-1200	Quality Inn-Vallejo 1185 Admiral Callaghan Vallejo, CA 94591 (707) 648-1400
Room Rate: \$140.00	Room Rate: \$124 Single, \$144 Double

For the Marriott: Please book online via the following link: [Marriott-California Auto Teachers Association](#), or you can call group sales directly at (707) 563-3004, and they can assist you in booking at the group rate, if they are unavailable, please leave a message with your name and contact information and they will get back to you as soon as possible. They are available Monday-Friday during normal business hours.

For attendees (exhibitors and presenters) that are arriving early on Thursday, the 25th, our campus will be busy setting up for Friday, and you are welcome to come by and view the campus and exhibitor/presenter spaces available for your use Friday. Please keep in mind that preparation/setup for the conference will be in full swing though, and not all areas will be ready at that time. Also, please coordinate with us if you have large items being shipped/arriving, especially if those items are arriving ahead of you, so we can adequately assist. For any additional special requests/needs please reach out to the Solano Automotive Technology staff.

Friday, April 26 th , 2019			
7:30am-9am	Early Bird Registration	Registration for all members that have pre-registered. This will occur in the lobby area.	N/A
9:30am-12pm	American Armory Museum Tour	Tour the museum, and view various military vehicles, and displays. For more information visit: americanarmorymuseum.org	Cost: \$26/person (lunch/transportation included)
10:30am-1:30pm	Jelly Belly Factory Tour with Wine & Chocolate Experience	Tour one of Solano's local attractions, you'll get to see how Jelly Belly makes its jelly beans, and enjoy a tasting of wine and chocolates afterwards. This is a family friendly tour, for more information visit: jellybelly.com/california-factory-tours	Cost: \$29 for non-alcoholic, \$36-alcoholic (lunch/transportation included)
12pm-1:30pm	Lunch at ATEC	Boxed lunch options for tour participants.	FREE, for tour attendees
12pm-3pm	Driven Raceway	Race go karts with the family, and other attendees. For ages allowed and more information visit: drivenraceway.com	Cost: \$56/person (lunch/transportation included)
12pm-2pm	Red Line Oil Factory Tour	Take a behind the scenes tour of Red Line Oil and see firsthand the processes and work that goes into producing small batch full synthetic lubricants and additives.	Cost: FREE, Lunch included; this tour however does not include transportation
2pm-9pm	Friday Workshops	There will be several workshops offered Friday afternoon. (Please see the presenter schedule for those offered Friday.)	FREE
5pm-6:30pm	Dinner at ATEC	Dinner catered by Rafael's Catering of Vallejo; the menu will be traditional American food with a few international dishes. All attendees, presenters, and vendors are invited, please be sure to RSVP.	FREE, sponsored by JK Architecture Engineering and Clark/Sullivan Construction
6:30pm-8:30pm	BAR Meeting	BAR Update Presentation given by Cory Jang, open to all attendees.	FREE
6:30pm-8:30pm	CAT Board Meeting	Open to board members and vendors.	FREE

Saturday, April 27 th , 2019	
7:30am-9am	Welcome, Coffee, and Trade Show
9am-10:15am	Early Morning Workshops
10:30am-11:45am	Morning Workshops
11:45am-1:15pm	Lunch (Kinders Barbeque) and General Business Meeting
1:15pm-2:15pm	Trade Show and Raffle
2:15pm-3:30pm	Afternoon Workshops
3:45pm-5pm	Late Afternoon Workshops
5pm-5:30pm	Final Raffle Items/Giveaways, and Thank You

Workshop Descriptions:		
Presenter/Organization	Workshop Title/Length	Description
Bryan Perrin, Automotive Training Group	Monitors and Why They Don't Run, 2.5 hours (Part 1 and 2)	This will cover the common reasons that monitors don't complete even though the drive cycle has been completed multiple times. Diagnostic strategies and case studies will be presented showing ways to use commonly available resources to solve the problem and set monitors. Hint: It's not running the drive cycle!
David Bjurlin, Butte College/Lucas-Nuelle	ASE L3 Hybrid & Electric Vehicle Technology in the Classroom, 1.25 hours	All topics related to the new ASE L3 test are now covered by our newest Hybrid/Electric vehicle trainer. We offer a blending of comprehensive curriculum with practical tasks to make sure your students have the competencies and system understanding needed to succeed in this emerging, highly technical market.
Donald Schumacher, Yuba Community College	Automotive Paint Correction and Detailing, 2.5 hours (Part 1 and 2)	This seminar will cover the basic tools, products and techniques used to correct and detail your vehicles finish. The seminar will have two parts. Part A will address tools, cleaning and polishing products and how to properly wash your vehicle. Part B will cover application techniques used to restore your vehicles finish.
John Merris-Coots, California Department of Education	Career Exploration for Automotive Students, 1.25 hours	This session will provide an overview of the California Department of Education-California Career Resource Network (CalCRN) program's career planning resources. Session attendees will learn how CalCRN's resources can be used to help automotive students assess their career related interests, identify occupational options, and relate their school experiences to career goals. Visit www.californiacareers.info .
Cory Jang, Bureau of Automotive Repair	BAR Update, 1.25 hours+	Annual BAR updates, presented Friday evening and in a special Saturday morning workshop for those who can't make it the prior day.

Workshop Descriptions (continued):

Presenter/Organization	Workshop Title/Length	Description
Dave Hobbs, Delphi Technologies	48-Volts and Beyond, 2.5 hours (Part 1 and 2)	<p>48 Volts and Beyond-Advanced Hybrid & Variable Displacement Engine Diagnostics:</p> <ul style="list-style-type: none"> •Diagnosing system main relays and high voltage interlock circuits (POAOD) •HV isolation fault circuits & battery pack data PIDs/load tests •New 48-volt system coming soon •GM AFM, Chrysler/Dodge MDS and Honda VCM Operation •Service issues for variable displacement engines •Real world in bay testing you can do
Bobby Bassett, Gates Corporation	We Can't Do It Like We Used To! Be System Smart provided by Gates, 2.5 hours (Part 1 and 2)	<p>During the session with Bobby Bassett, Training Manager for the Gates Corporation, you will explore the percentage of high rates of warranties for components in the Accessory Belt Drive System (ABDS) and why it's happening. Bobby will communicate system insight, examine root cause failures and provide best practices when working on this system. The discussion will be continued in part two by exploring the percentage of high rates of warranties for components in the coolant system and why condition of coolant means everything for the coolant system.</p>
Jeffrey Curtis, ConsuLab	Learning Automotive Electrical Using An X-Y Axis Voltmeter, 2.5 hours (Part 1 and 2)	<p>Why not expose your beginning electrical classes to the use of an X-Y Voltmeter from the very first day of class?</p> <p>This hands-on class will explore various learning preferences of students by engaging their senses of sight, hearing, smell and proprioception.</p> <p>Come, participate, and walk out the door with a different view of how you can reach the learner at their level using more than just one of their senses.</p>
Dave Capitolo Automotive, Engine Builders Association	Incorporating Online Training into the Classroom, 1.25 hours	<p>De Anza College Auto Tech Instructor Dave Capitolo will go into detail on how you can save both preparation/class room time by using AERA's Online Training Program. Dave will go into detail on how he gets his students engaged and why he has such a good student success rate in all of his engine classes.</p>
Michael Andrew, Red Line Oil	Not All Synthetics are the Same, 1.25 hours	<p>Not all synthetic oils are the same! Have you ever wondered why one quart of synthetic oil costs \$11.95, while another costs \$6.95? Is it worth almost twice the price? Learn these answers, as well as the basic fundamentals of lubricants and the science behind full synthetic oils from Red Line Oil's Chief Chemist, Roy Howell and Managing Director, Michael Andrew.</p>

Workshop Descriptions (continued):

Presenter/Organization	Workshop Title/Length	Description
Larry Engelbrecht, Career Education Accreditation Consultant	Fast Track Your Students for ASE Certification and Employment in Less Than Half the Time, 1.25 hours	Attention Administrators and Instructors: Are your program completer numbers down? Then you should know that your ASE Education Foundation (formerly NATEF) Auto program could be under threat of closure. Find out how a pioneering CA college is teaming with area high schools to not only fast track auto students to highly employable ASE certification and be better able to meet industry stakeholder needs, but also reopen high school feeder auto programs. Don't miss this one!
Jim Halderman, Pearson Education	Teaching Advanced Engine Performance, 1.25 hours	This fast-paced technical presentation will answer the following questions: What are the eight steps in the diagnostic process? Why is a funnel used to help illustrate the diagnostic process? What is total fuel trim? Why is module reprogramming a must teach topic? What is meant by the five whys? Why should DTCs be checked before checking for TSBs?
Lyle Taylor, ATech Training, Inc.	Shocking Hands-on Electrical Training in the Classroom, 2.5 hours (Part 1 and 2)	With part one of this class we will explore the Applied Electrical Trainer - used for teaching basic electrical, such as OHM's law, meter usage, series and parallel circuits just to begin with. Then moving on to the newly designed Electromechanical Trainer to continue the exploration of electromechanical systems and components. Specially relays, solenoids, and electric motors. In part two, discover the benefits of using "Hands-On" activities while teaching Electrical/Electronic Diagnostics in today's classroom. We will be demonstrating the use of diagnostic training aids in the ATech Lab!
Ian Hamilton, Cengage	Deep Dive Cengage's Career Readiness Features and Customer Service Resources, 1.25 hours	Join Cengage's, Ian Hamilton, as he walks through Cengage's career readiness features for Transportation that can help prepare your students for the workforce! Ian will discuss using S/P2's training modules in MindTap, simulations and more! Ian will also share key Cengage customer service resources that you can take advantage of for easy course setup and support.
Dan Hubbard, DH Sales LLC	Past, Present, and Future and the Significance of Under Car with the Headlights of Tomorrow, 1.25 hours	Current and future vehicle alignment technology with integrated OEM, ADAR, and ADOS calibration. Helping develop a new strong workforce program certification.

Workshop Descriptions (continued):

Presenter/Organization	Workshop Title/Length	Description
Darcy Wedel, Electude USA	Introducing Electude Classroom-A New Solution for Colleges, 1.25 hours	Welcome to Electude Classroom - a new and complete solution for college automotive programs. From pre-course safety, interactive online content, and printed companion guides, to pre-lab practice with ConsuLab trainers, new digital labs, and access to MotoLogic service information; Electude Classroom brings everything together, into one convenient, and seamless package.
Ian Giddings, CDX Learning Solutions	Using a Digital Solution to Improve Success, 1.25 hours	This seminar will introduce instructors to the CDX digital solution. Instructors will be able to learn how they can incorporate the solution into their current program to utilize both inside and outside of the classroom to cater to each individual student's learning styles which will improve overall success and lab readiness.
Willy Lybrand, Megatech Corporation	Sensors and Controls for Automotive: A Hands-On Workshop, 1.25 hours	This workshop is a unique hands-on approach for teaching Analog, Digital, and PWM Sensors and Control Circuits using the same locktronics kits as utilized in national automotive competitions. *Please note this workshop is limited to 12 attendees each workshop session. *
Rick Escalambre, Skyline College (Retired)	Systematic Approach to Reaching Computerized Engine Controls, 2.5 hours (Part 1 and 2)	The workshop will provide a Systematic Approach to Reaching Computerized Engine Controls. Understanding the principles of Input, Processing, and Output (IPO) will help the technician become a better diagnostician. Organizing inputs into categorized groups, learning known good values, and knowing the relationship between sensors are key to effective diagnostics. Attendees will diagnose scan tool Snapshot problems. Questions to be answered are: Why didn't the problem set a DTC? Was the problem computer related or was the computer just reacting to a mechanical or electrical condition? Can you truly believe what the scan tool is displaying?
Mike Coley, ASE Education Foundation	Updates from the ASE Education Foundation (NATEF/AYES) and ASE, 1.25 hours	Come hear about recent activities of the ASE Education Foundation (formerly NATEF and AYES). Bring your questions about Accreditation, ASE Entry-Level Certification, Internships and other Work-Based Learning. We will also share details on ASE's new mobile app for recertification, myASE Renewal.

CAT WORKSHOP SCHEDULE

Friday, April 27th-Solano Community College-Automotive Technology

	Room 1103	Room ATECH Trainers	Room 1207	Room Bays 5 & 7	Room BAR
2pm-3:15pm	A Systematic Approach to Teaching Computerized Engine Controls PART 1 Rick Escalambre		Career Exploration for Automotive Students John Merris-Coots	48-Volts and Beyond PART 1 Dave Hobbs	Past, Present, & Future and the Significance of Under Car with the Headlights of Tomorrow Dan Hubbard
15 min	TRANSITION				
3:30pm-4:45pm	A Systematic Approach to Teaching Computerized Engine Controls PART 2 Rick Escalambre		Career Exploration for Automotive Students John Merris-Coots	48-Volts and Beyond PART 2 Dave Hobbs	
5pm-6:30pm	DINNER-FREE AND SPONSORED BY JK ARCHITECTURE ENGINEERING AND CLARK/SULLIVAN CONSTRUCTION				
6:30pm-7:45pm		Shocking Hands-On Electrical Training in the Classroom PART 1 Lyle Taylor			BAR/CAT Board Meeting Cory Jang
15 min	TRANSITION				
8pm-9:15pm		Shocking Hands-On Electrical Training in the Classroom PART 2 Lyle Taylor			BAR/CAT Board Meeting Cory Jang

CAT WORKSHOP SCHEDULE

Saturday, April 27th-Solano Community College-Automotive Technology

	Room 1103	Room 1207	Room Outside Lift	Room 1205	Room Bays 5 & 7	Room 1206	Room ATECH Trainers	Room BAR	Room Alignment Bay	Room 1105
7:30am-9am	WELCOME, COFFEE, & TRADE SHOW									
9am to 10:15am	Monitors and Why They Don't Run PART 1 Bryan Perrin	Learning Automotive Electrical Using an X-Y Axis Voltmeter PART 1 Jeffry Curtis	Automotive Paint Correction and Detailing PART 1 Donald Schumacher	ASE L3 Hybrid & Electric Vehicle Technology in the Classroom David Bjurlin	48-Volts and Beyond Dave Hobbs	Learning Automotive Electrical Using an X-Y Axis Voltmeter PART 1 Jeff Curtis	Shocking Hands-On Electrical Training in the Classroom PART 1 Lyle Taylor	BAR Update Cory Jang		Updates from the ASE Education Foundation (NATEF/AYES) and ASE Mike Coley
15 min	TRANSITION									
10:30am to 11:45am	Monitors and Why They Don't Run PART 2 Bryan Perrin	Learning Automotive Electrical Using an X-Y Axis Voltmeter PART 2 Jeffry Curtis	Automotive Paint Correction and Detailing PART 2 Donald Schumacher	ASE L3 Hybrid & Electric Vehicle Technology in the Classroom David Bjurlin	48-Volts and Beyond Dave Hobbs	Learning Automotive Electrical Using an X-Y Axis Voltmeter PART 2 Jeff Curtis	Shocking Hands-On Electrical Training in the Classroom PART 2 Lyle Taylor	Deep Dive Cengages Career Readiness Features and Customer Service Resources Ian Hamilton	Past, Present, & Future and the Significance of Under Car with the Headlights of Tomorrow Dan Hubbard	Sensors and Controls for Automotive: A Hands-On Workshop Willy Lybrand
11:45am-1:15pm	LUNCH & GENERAL BUSINESS MEETING LOCATED IN THE TENT OFF OF THE SHOP									
1:15pm-2:15pm	TRADE SHOW & RAFFLE									
2:15pm to 3:30pm	Fast Track Your Students for ASE Certification and Employment in Less Than Half the Time Larry Engelbrecht	We Can't Do It Like We Used To! Be System Smart Provided by Gates Bobby Bassett		Incorporating Online Training Into the Classroom Dave Capitolo				Introducing Electude Classroom A New Solution for Colleges Darcy Wedel		Sensors and Controls for Automotive: A Hands-On Workshop Willy Lybrand
15 min	TRANSITION									
3:45pm to 5:00pm	Teaching Advanced Engine Performance Jim Halderman	We Can't Do It Like We Used To! Be System Smart Provided by Gates Bobby Bassett		Synthetic Oil Michael Andrew				Using a Digital Solution to Improve Success Ian Giddings		Sensors and Controls for Automotive: A Hands-On Workshop Willy Lybrand
5pm-5:30pm	CLOSING RAFFLE AND THANK YOU FOR ATTENDING (PLEASE RETURN YOUR LANYARDS)									

It is our hope that you will bring the family and explore the surrounding areas and all that they have to offer. Please keep in mind that we are close to the bay though, so please pack for the possibility of cooler temperatures. Nearby attractions that may be of interest include Vallejo's Six Flags amusement park, Napa's Vineyards and Wine Tastings, and San Francisco's Alcatraz Island or Fisherman's Wharf.

For updated information, be sure to check the CAT website, www.calautoteachers.com. Those who want to take advantage of early bird savings when registering, it ends April 15th at midnight, so be sure to register before then. Please see the map below so you arrive at the correct location:

