Mastering Circuit Troubleshooting

ATech Training will offer a course on troubleshooting circuit failures. Using our 5810TT Trainer we will cover circuit malfunctions such as shorts, opens, and high resistance. These essential diagnostic strategies will help you enhance your training program and increase your student's knowledge of circuit failure.

Sam Houston	After leaving a local community college as the Automotive Department Coordinator Sam Houston joined the ATech Education Team in early 2022. His career started by completing a Toyota T-TEN certification program at a local college and with several years of hard work, he earned the rank of Master Technician. Sam continued his passion for repairing automobiles by joining the faculty at the local community college several years later. He started off as a Honda PACT instructor and within a few years he began working in the Toyota T-TEN department. In the final years of his college employment, he oversaw the entire automotive department which had three OEM programs, one general automotive program, and one workforce training program. With Sam's extensive background in automotive repair and education, he was a perfect match for ATech's industry leading training and products. His goal is to continue influencing the automotive world by providing cutting edge training on automotive principles and classroom management techniques.

Engage with Electude: Targeted Methods of Keeping your Students Interested

Student engagement is a buzz-word in education that has long been talked about, but often lacks either the practical examples in research that can be "plugged in" to your classroom without a ton of work on your part; or does not seem feasible with the resources you have.

This will be a live brainstorming session where Dr. Richards will guide you through a few examples of how Electude can be used to leverage additional engagement from your students as well as to share with your peers issues or successes that you have experienced in your classroom.

Even if you are not currently an Electude customer, Dr. Richards promises to at least buy you a coffee for your time if you don't get something to take back to your classroom after this session! It will be interactive, so any amount of participation is encouraged, and if you have a laptop/chromebook/tablet/stone tablet to bring, feel free! We will start with some demonstrations of the latest products available with Electude and might spill the beans on a few upcoming products to look forward to. We will then move into the main session discussion/ideas.

Dr. Alex Richards	Dr. Alexander Richards began his automotive career in Junior College. Inspired by an ICAIA member, Mr. Lynn Graf at Joliet Junior College, he fell in love with the automotive industry and immediately found his educational path. Graduating JJC, and later in 2011, Southern Illinois University with a degree in Automotive Technology, he went on to complete his Masters in Workforce Education at Southern Illinois University, Carbondale and upon completion in 2013, began teaching at the University of Central Missouri as an Assistant Professor. After earning his Doctorate in Educational Leadership and Policy Analysis in 2018, earning tenure, Associate Status, and Program Coordinator titles, Dr. Richards moved on to work for the Netherlands-based Electude as a Content Developer and QA Specialist. He now builds, authors, and manages products used throughout North America in both Light Vehicle and Heavy vehicle variants. Dr. Richards lives and works remotely with his US and Netherlands Colleagues in Kansas City, Missouri with his wife Ashley and his dogs, Arya and Bandit.
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Preparing Students for an EV-Focused Curriculum

Preparing students for an electrified future can be difficult when the direction of the industry is uncertain. We will discuss integrating EV information in current curriculums and other standalone classes needed to cover electric vehicles and their propulsion systems. There will also be discussion over some things that are working in current curriculums and some items that may need further attention.

Joseph Ragnanese

Many of my earliest memories are from the inside of my father's automotive repair shop. Ever since I was a young boy I have been immersed in and infatuated by the world of cars. I was fifteen when I started working for my father as an automotive technician. As my experience with auto repair continued to grow, so too did my personal automotive projects. Some of my current projects include a 1946 Chevy Fleetline Hot Rod, a 1931 Chrysler, and a 1984 Datsun 300zx. I have a huge passion for maintaining older vehicles, and that's why my wife and I both drive cars from the late 1990s/early 2000s. After graduating from SIU in 2018, I began working at Stellantis as a Technical Training Project Manager in Detroit, MI. In my three years of work there I served as the subject matter expert for automatic transmissions, HVAC, and the Alfa Romeo brand. I also developed and project managed web-based, instructor-led, and virtual interactive training courses. In 2021, I accepted an automotive instructor position here at SIU and moved to Carbondale the day after marrying my wife. Jessica. I graduated with a Master's in Business Administration in winter of 2022, and accepted a Tenure-Track position in Fall of 2023. Working at SIU has allowed me to combine my passion for education with my passion for automotive technology, and it's something that fills me with both pride and gratitude. Helping my students realize the true value of their education is one of my favorite parts of the job. As Benjamin Franklin once said. "An investment in knowledge pays the best interest."

ASE Accreditation Done Right!	
of indus Accreditati	tation is designed to continuously improve your transportation program to meet the needs try. As opposed to ASE Certifications, which belong to the instructor/technician, ASE on of the transportation program belongs to the school. It takes an accreditation team to manage the accreditation process. In that process and share multiple best practices to create a living document that will be ready for review and/or evaluation at any time.
Dan Klecker	Former HS Automotive Instructor and presently the ASE Field Manager for IL Schools

Advisory Meetings: Benefit vs Requirements Advisory meetings are required for ASE Accreditation and Perkins V but are you just checking boxes? Let's discuss the benefits you should be earning from your biggest supporters. Dan Klecker Former HS Automotive Instructor and presently the ASE Field Manager for IL Schools

Understanding and Calibrating ADAS Sensors: A Hands-On Workshop

Join us for an immersive two-part session at the I-CAR Chicago Technical Center, where you'll delve into the world of Advanced Driver Assistance Systems (ADAS) sensors and calibration techniques. In this workshop, participants will: Explore ADAS Sensors: Discover the locations, functions, and operational principles of ADAS sensors crucial for modern vehicle safety systems. Identify ADAS Features: Work in small groups to identify ADAS features on real vehicles, discussing specific functionalities and their integration within different vehicle models. Engage in Mock ADAS Calibration: Participate in hands-on exercises simulating ADAS calibration scenarios, highlighting that these exercises are replicable in any educational setting with any vehicle. This feature ensures that participants can apply their learnings beyond the workshop, making it accessible and adaptable to various learning environments. Perform Live ADAS Calibration: Seize the opportunity to perform an actual ADAS calibration on a live vehicle, applying acquired knowledge and skills in a real-world setting. Whether you're a seasoned automotive instructor or new to the field, this workshop equips you with essential insights and practical skills to navigate the complexities of ADAS technology. Don't miss this chance to enhance your expertise and stay ahead in the rapidly evolving automotive industry. Join us for a dynamic learning experience at the forefront of automotive technology. Joel Dufkis is a seasoned automotive professional with a career spanning nearly two decades, beginning in 2004. An ASE Certified Master Technician, Joel specializes in L3 (Light Duty Hybrid/Electric Vehicles) and L4 (Advanced Driver Assistance Systems), alongside xEV Technician Electrical Safety - Level 2 certification. In 2020, Joel Dufkis founded a mobile EV repair company, capitalizing on the evolving electric vehicle landscape. His entrepreneurial spirit also led Joel Dufkis to the creation of the Automotive Technology Instructor Network (ATIN) in 2018, a platform connecting automotive educators and industry experts. Within I-CAR, Joel Dufkis serves as an instructor for ADAS and EV classes, while also contributing as an ADAS and EV Subject Matter Expert. His commitment to innovation and knowledge-sharing continues to shape the industry's future. Joel Dufkis is dedicated to staying at the forefront of automotive advancements and is recognized for his exceptional contributions to the field.

School Access to Motorist Assurance Program	
How schools can access the MAP program and implement it within their curriculum . Our program is free for all schools, and so we are trying to inform as many schools as possible so they can take advantage of this opportunity.	
Jeff Cox	As President of the Automotive Maintenance and Repair Association, I lead all day to day efforts to bring the Automotive industry together to help build trust between the repair shops and the motorist.
	Specialties: Working and leading cross functional teams to deliver business results with a work environment that fosters innovation, relationship building and self growth

Variable Cam Timing

This case study based class will demonstrate knowledge and tools required to diagnose VCT issues on modern day engines. Each case study will clearly define the issue, explain the foundation knowledge required and discuss both scan data interpretation and scope data interpretation for proper diagnosis.

John Thornton

John operates a mobile diagnostic business in the Chicagoland area. John assists his repair shop customers with both engine and transmission drivability concerns, module programming, bus communication issues, and electrical diagnosis.

Innovative Methods and Devices for Teaching Basic Electrical Theory

Join me as we explore research-based ideas for implementing hands-on learning of basic electrical concepts in an engaging way. Methods will range from simple devices located in every automotive shop to a new patent pending training aid that has been utilized in coursework at McHenry County College exclusively. The focus of this presentation will be creating opportunities for students to understand by doing or experiencing basic electrical concepts through experimentation, rather than through explanation in a classroom setting.

Nathan Kivley	Nathan Kivley is an Automotive Instructor and Department Chair at McHenry County College. He has been teaching at the college for nine years. Before teaching, he was employed as an automotive technician at a Porsche dealership and European and hybrid vehicle technician at an independent repair shop. His primary teaching roles are in the areas of transmissions and advanced diagnostics, but he has a personal and professional interest in teaching basic electrical principles because of the incredible impact this has on every aspect of automotive technology. In this pursuit, he has designed and developed a variety of electrical training aids including the patent pending training aid highlighted in this presentation.
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New Teacher Panel

5 teachers will share how they built and run their programs. New teachers will have the opportunity to ask questions and the panel will respond. This session will give new teachers a variety of answers that will support as they develop their own programs.

Teaching Methods & Best Practices

This session would be more of an open forum. Topics to be discussed to include... Units of study and key labs Units/labs that are successful and Units/Labs they are struggling with. Methods for providing student feedback. Learning resources and/or textbooks they are using. The utilization of AI in the classroom. Share out of 1 successful outcome from their program.

Ken Adkins & Tim Heim Ken is an 18 year CTE instructor at Maine East High School whose Automotive Technology program currently serves 165 students. In addition to Autos, he teaches the Engineering Design & Capstone class that has been featured in several media outlets. Ken was a 2023 Harbor Freight Tools for Schools Prize for Teaching Excellence top 50 Finalist and has presented at many state and national conferences.

ETL Training

ASE Education Foundation will be offering training to become an Evaluation Team Lead for the accreditation process. If you have interest in becoming an ETL in your area or want to learn the ins and outs of the On-Site Evaluation process, this session has you covered. We will go through the entire accreditation process and what to look for.

This will be a three session training held at Buffalo Grove High School on Thursday.

Marlo Miranda	 18 years as an Automotive Technician, service advisor, and service manager-GM, Honda, and Toyota. 31 years as HS Automotive Technology Teacher and coach. 3 years as Adult Continuing education teacher in evenings. 29-year accredited program
	29-year accredited program 28 years as an Evaluation Team Leader Been conducting ETL Training since February of 2022

Modern Engine Management	
The class will be about engine management covering o2 and afr sensors. Fuel trim in today's world how it works and then some primary and secondary Ignition.	
Chris Ellington	Chris Ellington has been in the automotive industry for 34 years. He is an ASE master tech and American Honda Master. Chris has been training for 10 years with Bosch on diagnostics and drivability.

Using TPMS Tools - Hands On Workshop

The key to successful TPMS service is the TPMS Tool. Technicians can't get sensors to relearn to the vehicle. Retailers are seeing sensor returns at unprecedented levels. It's a problem that's costing shops both profits and the good will of their customers. Join Continental in a hands on workshop covering the most important part of TPMS - THE TPMS TOOL.

Continental will also be raffling off one of their TMPS tools to someone that attends the session!

Exploring The 5th Generation Toyota Hybrid "Synergy Drive" Transmission

This class is for any instructor who wants to know more about the 5 th generation Toyota hybrid transmission. The class will include disassembly information, system specific information, and case studies. Highlighted in the class is a transmission power flow demonstrator that can be created by an instructor.

Curt is a professor at Joliet Junior College and an author for Pearson Education. He is an ASE Master certified technician with over 40 years of industry experience. He has presented in-perso and virtually at conferences all over North America.	n
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Internships and Apprenticeships 101	
The successes (and fails) of the D214 model as it pertains to automotive internships.	
Angela Ferrazza	In her role as Student Success Coach, Angela recruits and supports Hersey students who are interested in work-based learning opportunities. Through apprenticeships, internships, micro-internships and career treks, students are able to affirm their career choices before they graduate. In this role, Angela helps students make connections and gain invaluable job skills while also addressing the employment needs of local businesses and industries.

Best Practices for Integrating Warranty Information into an Automotive Technology Curriculum

This session will delve into effective strategies for integrating warranty best practices into technical education. We will explore innovative teaching methodologies aimed at equipping students with the knowledge and skills needed to navigate warranty processes confidently

Oliver Keys

Ron Kirsch

Assistant professor at SIU teaching Warranty and Automotive Fixed Operations Management

Creating Safety Standards for the Automotive Classroom and Lab

This session will discuss best practices for creating a safety standard for your classroom that is compliant with OSHA as well as cover the appropriate handling of hazardous materials.

Kate Henmueller	Kate Henmueller is a graduate of Northern Illinois University and has been part of the Automotive Aftermarket for more than 10 years. Specializing in safety education, Kate worked with OSHA as a Certified Safety and Health Official; and is currently President of CCAR, in cooperation with OSHA and the EPA, providing best practices, information and training to collision shops, automotive repair shops, and others. Kate has delivered several industry presentations and articles on
	repair shops, and others. Kate has delivered several industry presentations and articles on automotive repair safety and hazardous material handling.

Snap-on Advanced Multimeter Training and Student Certification

Join the Snap-on and NC3 Team as they present the key features of the 596F Advanced Multimeter. The EEDM596F performs advanced multimeter and automotive functions, including electrical circuit and component testing for all vehicles. It boasts a large 4-inch LCD screen and comes with a free, exclusive app that reads, stores, and shares results, making it a powerful tool for techs. The smart device app displays, graphs, and stores measurements in real-time on the technician's device, which can then be shared with the vehicle owner via text, email, or social media. The multimeter also features a Hybrid CATIV rating and a unique, customer-requested lead storage wrap.

As a not so recent graduate of Carthage College in 1983 and Gateway Technical College in 1975 my experiences in both types of education systems allowed me to do hands-on work for 12 years and then an office positions for over 39 years. During those years both small and large business practices were experienced. It eventually paved the way to creating new and interesting life events. Always having an interest in new products, that opportunity became reality in many of my positions. That resulted in gaining one of my long-time goals, to patent unique products, of which 2 were granted patents. The additional opportunity of creating learning tools such as NC3 curriculums grew out of my former knowledge and experiences. That came about as knowledge I did not have and could not find easy access to. Putting that information together in an understandable format helped me to grow. Learning from creating, like the patent process, gives a more complete understanding of the information. My hope is those using the NC3 program will gain as much or more by laying the groundwork for those entering the program. Pick what you love for a profession in life, and you will never hold a job, it will be a lifelong adventure.

Case Studies for Practical Student Experiences	
This session will cover instructor and/or student-developed case studies related to electricity/electronics and Driveability/Emissions.	
Chris Reynolds	 Chris Reynolds is a Professor of Automotive Technology at Lewis & Clark Community College in Godfrey, Illinois. He teaches introduction to automotive technology, electricity/electronics, mobile air conditioning systems, and advanced engine performance. He holds an A.A.S. (L&C) and B.S. in Automotive Technology, a B.S. Ed. in Workforce Education & Development, and a M.S. Ed. In Workforce Education & Development (SIU-C). He is currently all but dissertation at the University of Missouri- St. Louis, conducting qualitative doctoral research on perspectives of automotive technicians and automotive technician educators. Chris has been past Secretary, Vice President, President, and is a current Board Member of ICAIA. He maintains ASE Master Certification, L1, G1, and xEV credentials. As an advocate for secondary and post-secondary automotive technology programs, he is also an active ASE-EF Evaluation Team Leader. He provides educational engagement for the supportive team of AESwave at events and social media. He is a published contributing editor with MotorAge and PTEN. Most importantly, he is a devoted husband and father.