Course Descriptions for Train-the-Trainer 17 West-MEC - Phoenix, AZ January 25th – 29th, 2016

All classes include teaching strategies for effective delivery and integration ideas on how to seamlessly weave these certifications into your program's already existing curriculum. Share your ideas and learn new ones as you build a professional network of instructors from across the country.

Automotive Scanner Diagnostics Certification:

This course is designed to create Power Users, individuals who can efficiently and effectively utilize 90%+ of all available features, found on the various platforms of Snap-on diagnostic equipment. This includes diagnostic research and repair information such as ShopKey5, Scanner navigation with the Solus Edge, and Verus Pro, and then continues with Lab Scope operation found on Verus Pro. Details from basic navigation through effective use of the Fast-Track Troubleshooter, Component Test Meter, PID Triggers, and glitch capture techniques are thoroughly explained while each student demonstrates these techniques using his/her individual diagnostic tool supplied during the training. Individual hands-on attention is a cornerstone to this program. Learn by doing!

Advanced Diagnostics Certification:

Participants will dive deeper into the functionality of the Verus Pro, including discussion about the use of ignition and transducer accessories used during the diagnostic process. The Verus Pro, in conjunction with ShopKey Pro will be applied to multiple diagnostic situations using various ATech training boards to simulate faulty vehicle systems. An interactive and hands-on approach to operating the Verus Pro scanner and lab scope along with integrated service information is used to guide participants through diagnostic scenarios. Emphasis will be placed on diagnostic strategy and utilizing a systematic procedure to tackle any diagnostic issue. Successful completion of Shopkey Pro and the Verus Pro Scanner and Lab Scope certification exams are required **before** taking Advanced Diagnostics.

Mechanical and Electronic Torque:

This course has two key objectives. First, students will develop a new appreciation for the complexities behind the proper tightening of fasteners. Second, students will be trained, tested, and certified on various torque instruments ensuring proper tool set-up and physical technique. This course begins on the relationship between tightening torque versus clamping pressure and how various external factors can greatly affect this relationship, and thus cause a fastened joint to fail prematurely. This concept is discovered by the students through a number of lab activities and demonstrations illustrating how external factors affect torque and clamping pressure. Students then demonstrate proficiency on a number of mechanical and electrical torque tools developed by Snap-on. Students will get instant "actual torque applied" feedback while using each tool on a calibration machine, so they can hone their technique and become both accurate and precise in the use of each tool.

Wheel Service:

This course is designed to create Power Users, individuals who can efficiently and effectively utilize 90%+ of all available features, found on the RFV 2000 Wheel balancer, EHP System V Tire Changer, and Pro42 Alignment Software. Details from basic navigation through effective use of the Diagnostic software, calibration menus and use of all accessories are thoroughly explained while each student demonstrates these techniques using each piece of equipment during the training. The Pro42 software instruction is delivered utilizing a laptop loaded with the Pro42 alignment software for each student. The Pro42 class includes EZstream technology training for vehicles that require OBD connection to complete alignment, covers optional scan tool use also. This class also includes delivery techniques and recommendation for integration into existing under car courses. Individual hands-on attention is a cornerstone to this program. Learn by doing!

Building Performance Instrument Certification:

This three-day course for instructors will provide information and certifications on several areas of Building Performance Instruments utilized in the HVAC & Refrigeration industry. The topics covered will include: Basic Equipment Installation and Diagnostics, Flue Gas Analysis, Leak Detection and Vacuum (refrigeration), Indoor Air Quality, Fluid Integrity, RPM and Vibration Testing. Participants will learn manufacture guidelines and industry protocols for proper use of test equipment and testing accuracy. At the conclusion of the course students will test for NC3 certification.

Multimeter:

This course is designed to create Power Users, individuals who can efficiently and effectively utilize 90%+ of all available features, found on the multimeter equipment. Through the use of a demonstration signal generator board, all of the electrical measurement features and options will be performed by the student. Learn how to perform initial safety and reliability checks on the meter using the meter itself, followed by common voltage, amperage, and resistances measurements with a focus of meter set-up and connection to avoid overload and blown fuses in the future. Next the advanced features of the meter are explored including recording values, temperature, frequency, and other special settings dependent on the actual meter model used in the training. When conducted for instructors special attention is placed on meter curriculum integration within normal program courses, student activities, and other teaching strategies for implementing the meter program.

Precision Measurement Instruments Certification:

This course is designed to help career and technical occupations with the proper operation, handling, adjustments and technique's needed for utilizing precision measurement equipment effectively. Both SAE and Metric Equipment will be covered including steel rules, feeler gauges, precision straight edge, calipers, inside and outside micrometers, small hole gauges, telescoping gauges and dial indicators. Various precision measuring specialty equipment used for specific tasks will also be covered.

Pro-Cut Rotor Matching Master Technician Certification:

From the recognized leader in on-car brake lathing systems, the Pro-cut Rotor Matching Master Technician certification will teach technicians how to properly correct and avoid common brake problems associated with today's precisely engineered vehicles. Upon successful completion, technicians will be certified as Master Rotor Matching Technicians and develop a highly valuable skillset by being able to diagnose and repair one of the most common and misunderstood customer issues facing the automotive repair industry.