

## Course Descriptions for NC3 Train-the-Trainer 11

Gateway Technical College, Kenosha, WI.

July 14th- 19th, 2014

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.

### **Snap-on Solus Ultra, Verus Pro, and ShopKey Pro 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 ShopKey Pro, Scanner navigation with the Solus Ultra, 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!



### **Snap-on 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.**



### **Snap-on Torque Certification:**

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. There is also a section dedicated to hydraulic torque delivered by Hytorc, a leading company in this industry, in which they describe the proper tightening of large fasteners using hydraulic pressure.

### **Snap-on Wheel Service Certification:**

This course is designed to create Power Users, individuals who can efficiently and effectively utilize 90%+ of all available features, found on the RFV2000, BH1000 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!

**Snap-on Pro-Link iQ:**

This course is designed to create Power Users, individuals who can efficiently and effectively utilize 90%+ of all available features, found on the ProLink-NEXIQ equipment. This includes Scanner navigation of all available heavy-duty application menus to include: Allison transmission, Caterpillar, Detroit Diesel, Mack Trucks, Cummins and OBDII applications. Details from basic navigation through effective use of Code structure techniques, vehicle applications, bi-direction testing are thoroughly explained while each student demonstrates these techniques using his/her individual diagnostic tool supplied during the training. This class also includes delivery techniques and recommendation for integration into existing Diesel courses. Individual hands-on attention is a cornerstone to this program. Learn by doing!



**HVAC BAS Level I:**

NC3 Participants will have the opportunity to work in a state of the art building automation laboratory at the Gateway Technical College Kenosha Campus. This training will focus on Building Automation Curriculum and newly developed lab activities to be performed on the Trane SC Building Automation platform. Instructors will have the opportunity to work on the latest HVAC automation equipment, and interact with industry experts and peers to help enhance their own personal skills and program quality.



Building Automation Systems will cover the following topics: Building Automation Systems and Controllers, Operator Interfaces, BAS Inputs and Outputs, BAS Installation, Networks and Web Based Controls, Control Strategies, Scheduling and Alarms.

**Snap-on Building Performance Instruments 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, attendees will test for NC3 certification.



### **Bahco Horticulture Certification:**

The Bahco pruning and lopper certification is a specialized course consisting of curriculum and lab activities that address areas critical to a student's successful introduction to professional horticulture tools. A participant who successfully completes the course will have a working knowledge of the proper use and maintenance of horticulture tools in use today. Participants will cover areas such as safety, design, application, and maintenance of the professional series horticulture tools used in today's industry. Participants will have the opportunity to a hands-on experience of the latest equipment used in the industry, and the chance to interact with experts and peers.



### **Snap-on Multi-Meter Certification:**

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.

