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CENTER FOR PROFESSIONAL DEVELOPMENT

BUILDING ANALYST QUICK START

60 Hours/90 Days/Instructor-Facilitated Course Code: **CPD034** || Course Cost: **\$1195**

OVERVIEW

The Building Analyst Quick Start Program consists of two online training programs: Principles of Green Buildings and Performing Comprehensive Building Assessments.

Principles of Green Buildings

This is the first online program of its kind, developed and written in partnership with experts from Advanced Energy of North Carolina. It covers everything an individual in the building, remodeling, or trade industry needs to know to make buildings perform more efficiently. You'll learn about critical topics ranging from insulation to moisture management to indoor air quality basics.

Performing Comprehensive Building Assessments

This program expands the theories and concepts taught in the Principles of Green Buildings program. Designed for those entering or looking to expand their expertise in the industry, this program features a task-oriented format that will apply practical, real-world situations in each module.

Performing Comprehensive Building Assessments is intended for students who are engaged in conducting building assessments, energy audits, performance testing, energy ratings, green ratings, rating verifications, quality assurance, quality installations, building inspections, home inspections, home tune-ups, or any other related building improvement, evaluation, or repair services that make changes to the building as a system.

Building Analyst Quick Start

Students who successfully complete the Building Analyst Quick Start program will have demonstrated that they have the requisite knowledge and ability to apply these concepts to real-world buildings and their systems. However, it's important to point out that there is no program, lab, or other educational substitute for time spent in the field, working in buildings and experiencing situations first-hand. This program is designed to put you into close simulations of situations you can expect to encounter in the real world. It requires you to learn what the various assessment tools and techniques are, when to use them, and how to use the information gained to prioritize decision making and how to report this information to various stakeholders.

This program has also been designed to help prepare individuals on the path to various NATE, NARI, BPI, RESNET, and other industry credentials related to green building performance. Instruction aligns with ANSI/ACCA Quality Installation and Maintenance Standards. This program is recognized by North American Technician Excellence (NATE) and Building Performance Institute (BPI) for 28 hours of continuing education (28 CEHs) applicable to NATE and BPI recertification. Must obtain a 75% or higher to obtain CEH recognition.

Upon registering, you're given an initial ninety days to complete each section of this program. Should you need more time beyond the ninety days, an extension of one month is available with a fee of \$45.

OBJECTIVES

Upon completion of this program, you'll be able to:

- Have completed the initial portion of the BPI and other Home Performance certification processes.
- Have a better understanding of all the major systems found in a conventional building
- Understand issues of building science and how they can relate to occupant health
- Discover the relationships of building systems and building sustainability
- Know observation techniques and data-collection skills
- Use inspection and analysis approaches for comprehensive building assessments
- Understand diagnostic testing procedures for evaluating buildings
- Know how to prepare reports and findings for building owners

OUTLINE

1. Principles of Green Buildings

- a. House as a System
- b. Air Flow Basics
- c. Heat Flow, Insulation, Windows
- d. Framing and Air Sealing
- e. Moisture Management
- f. Conditioning Strategies
- g. Ventilation
- h. Combustion Safety
- i. Indoor Air Quality Basics

2. Performing Comprehensive Building Assessments

- a. Observation Techniques and Data Collection
- b. Exterior Inspection and Exterior Building Systems Analysis
- c. Interior Inspections and Building Analysis
- d. Blower Door and Zonal Pressure Diagnostics, Ventilation Rates
- e. Combustion Safety, Testing and Analysis I
- f. Combustion Safety, Testing and Analysis II
- g. Duct Diagnostics
- h. Reporting and Documentation

OPTIONAL TEXT

It is recommended that you purchase the following text for this program: Residential Energy: Cost Savings and Comfort for Existing Buildings by John T. Krigger and Chris Dorsi.

COMPUTER REQUIREMENTS

This program is compatible with Windows XP/Vista/7 and IE 7 and later browsers. Please note that AOL, MSN, Safari, and Camino browsers are not supported. You must also have an Internet connection (high-speed recommended).

INSTRUCTOR BIOS

Roger DesRosiers is the perfect example of a lifelong learner. He has worked in HVACR for a total of 30 years. Over the years, he has earned an Associates and a Bachelors degree in Air Conditioning and Refrigeration and an Associates in Electronics. Among his professional certificates are: Teaching Certificate in Vocational Education for Air Conditioning and Refrigeration; Certified Energy Manager from the Association of Energy Engineers, Certified Member of Refrigeration Service Engineers Society, Certified Member of Plumbing Industry Progress in Education, and the 608 EPA Certification. Recently, Roger authored and edited a number of online courses and an article on Tech Tips. He also completed a course in Online Faculty Training to bring our students the very best in both teaching and technical industry knowledge.

Keith Conrod has over 30 years of experience in the construction and installation of HVACR systems in a variety of settings. Upon graduating from high school, he attended the University of Calgary for 2 years (studying Mechanical Engineering), later transferring to the Southern Alberta Institute of Technology, where he received certification in plumbing and first class gas fitting. Keith has also received certification in Cross Connection Control and Backflow Prevention, Mechanical Estimating and Hydronic Heating Design (Northern Alberta Institute of Technology). He is also a member of the AWWA, WCWWA, and Local 496 (United Association of Plumbers and Pipefitters).

After becoming a certified journeyman, Keith installed the plumbing, heating, medical gas and HVACR systems in hospitals, schools, high-rise office and apartment buildings, food production facilities, sewage treatment plants and many homes. He has a broad range of acquired knowledge and experience in the light industrial, commercial, and housing disciplines. Presently employed as a Site Superintendent/Project Manager for a major mechanical contractor (in the Calgary, Alberta, Canada area), he oversees the onsite design and installation of all mechanical systems as well as providing a jobsite link to the engineers and architects. He is also responsible for the training of apprentices and giving guidance and direction to the certified tradesmen in his charge.

Keith is well versed in all aspects of the HVACR industry and provides us with a valuable link as well as hands-on insight to the HVACR practices and procedures in the field.