

BUILDING SCIENCE & TRADES



BPI BUILDING ANALYST PROFESSIONAL - INTRODUCTION TO HOME ENERGY AUDITING

Prepares students to perform “whole-house” energy assessments, identifying a building’s problems at the root cause and prescribing and prioritizing solutions based on building science principals. Upon successful completion of the written and field exams, students receive Building Analyst Certification. Approved by New York State Bureau of Veterans Education for payment of VA Education Benefits.



Approved for 8.5 BPI CEUs.
Prerequisite: Basic building science background strongly recommended.
Reference textbook: *Residential Energy* (ISBN-13: 978-1880120231) Instructor: N. Jen

DCB 1842-01 M-F 9/24-28 8am-5pm SRC, Kelder \$995
Class on Friday is from 9-11am and is held at KSU in Kingston.

BPI WRITTEN EXAMS

Written Exams are \$200 each when taken with a BPI Class & \$400 each on all other dates.

All written exams are by appointment and subject to a \$200 non-refundable fee. Exams are held at the Kingston Center. To register call 845-339-2025.

DCB 1025	BPI Building Analyst Written Exam
DCB 1026	BPI Building Envelope Field Exam
DCB 1635	BPI Building Heating Professional Field Exam
DCB 1262	BPI Building A/C Heat Pump Field Exam

BPI FIELD EXAMS

All field exams are by appointment and subject to a \$200 non-refundable fee. Exams are held in Kelder located on the SRC. To register call 845-339-2025.

DCB 1143	BPI Building Analyst Field Exam	\$400
DCB 1149	BPI Building Envelope Field Exam	\$400
DCB 1150	BPI Building Heating Professional Field Exam	\$400
DCB 1270	BPI Building A/C Heat Pump Field Exam	\$400

BPI INFILTRATION & DUCT LEAKAGE (IDL)

Deliver the tests that builders need to meet IECC codes for air infiltration and duct leakage. This course is designed for those new to the field. Course will cover the theory of operation of blower doors and hands-on field work with a blower door and duct equipment. For certification, students should also register for the BPI Infiltration and Duct Leakage Certification Field Exam.

DCB 7840-01 W 10/10 8am-5pm SRC, Kelder \$400

BPI INFILTRATION & DUCT LEAKAGE (IDL) CERTIFICATION REVIEW

For those that are familiar with the equipment and looking to review before certification.

DCB 2091-01 W 10/24 8am-noon SRC, Kelder \$200

BPI INFILTRATION & DUCT LEAKAGE (IDL) CERTIFICATION FIELD EXAM

Subject to a \$200 non-refundable fee.

DCB 8380-01	10/11 or by appointment	SRC, Kelder	\$400
DCB 8380-02	10/24 or by appointment	SRC, Kelder	\$400

NEW!

HEP ENERGY AUDITOR

Written Exam: DCB 1268-01 by appointment \$500
Field Exam: DCB 1269-01 by appointment \$600

NEW!

HEP QUALITY CONTROL INSPECTOR

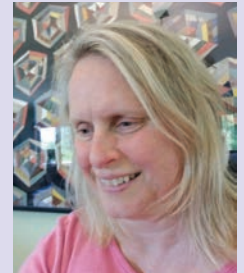
By appointment.
Contact reerb@sunyulster.edu at 845-802-7171 for more details.

SUNY Ulster’s Kelder Test House is an approved field test site for both the BPI Energy Auditor and BPI Quality Control Inspector Certifications.

ANITA HENRY

ANITA HENRY IS OWNER OF CAPITAL GREEN BUILDING.

WORKING WITH BUILDING CONTRACTORS, HOMEOWNERS AND CODE ENFORCEMENT



OFFICIALS SINCE 2009, ANITA

PROVIDES ENERGY EFFICIENCY INSPECTIONS

AND CONSULTING IN NEW YORK STATE

AND MASSACHUSETTS. ANITA ALSO TEACHES

CLASSES RELATED TO BUILDING PERFORMANCE

AND CODE ENFORCEMENT FOR ULSTER AND

HUDSON VALLEY COMMUNITY COLLEGES,

STONEHENGE ASSOCIATES, THE INSTITUTE

FOR BUILDING TECHNOLOGY AND SAFETY

AND OTHER ORGANIZATIONS. SHE IS NOTED

FOR HER ABILITY TO MAKE ENERGY EFFICIENCY

AND RELATED CONCEPTS ACCESSIBLE TO

BUILDERS, CODE OFFICIALS, AND HOMEOWNERS

THROUGH HER PATIENT EXPLANATIONS AND

PROBLEM-SOLVING ABILITY. ANITA HOLDS

CERTIFICATIONS WITH THE BUILDING

PERFORMANCE INSTITUTE, THE INTERNATIONAL

CODE COUNCIL, RESIDENTIAL ENERGY SERVICE

NETWORK (RESNET), AND OTHERS.

BUILDING SCIENCE & TRADES

GREEN BUILDING MAINTENANCE & MANAGEMENT A.A.S. 61-63 credits

Gain the skills and knowledge needed to maintain and manage high-performance commercial buildings. Learn current theories and get hands-on training to work with evolving technologies like photovoltaic cells, wind generators, geothermal heating, and HVAC systems.

INTRODUCTION TO GREEN BUILDINGS

In this course, students study the principles, methods, and equipment associated with sustainable building systems and design. Topics include ecological design, energy efficiency, passive and renewable energy, water conservation and treatment, sustainable site selection, green building materials, indoor and outdoor environmental quality, and building assessment tools. Assigned graded work is due each week. **Note: This is an online class. Students have the option of attending the recorded live webinar on date and time noted using Adobe Connect. To do such, students must have access to a computer, internet access, headset and webcam.**

GRB 1100-01 R 8/27-12/14 9-11:50am ONLINE

INTRODUCTION TO RENEWABLE ENERGY SYSTEMS

In this course, students study the principles, methods, and equipment associated with renewable energy systems. Topics include solar, wind, biomass and biofuels, fuel cells, hydropower, oceanic energy, geothermal, and energy storage. Nonrenewable energy sources, climate change, and the economics and politics of energy are also discussed. Assigned graded work is due each week. **Note: This is an online class. Students have the option of attending the recorded live webinar on date and time noted using Adobe Connect. To do such, students must have access to a computer, internet access, headset and webcam.**

GRB 1200-01 T 8/27-12/14 9-11:50am ONLINE

BUILDING AUTOMATION & CONTROLS

In this course, students study the principles, methods, and equipment associated with renewable energy systems. Topics include solar, wind, biomass and biofuels, fuel cells, hydropower, oceanic energy, geothermal, and energy storage. Nonrenewable energy sources, climate change, and the economics and politics of energy are also discussed. Assigned graded work is due each week. **Note: This is an online class.**

GRB 2100-01 8/27-12/14 ONLINE

SOLAR & WIND SYSTEMS

In this course, students learn the basic principles of photovoltaic and wind generated power, with an emphasis on how to maintain and manage these technologies, as well as the buildings with which they are associated. The key components and principles, site issues, and economic considerations of solar and wind systems are covered. Assigned graded work is due each week. **Note: This is an online class. Students have the option of attending the recorded live webinar on date and time noted using Adobe Connect. To do such, students must have access to a computer, internet access, headset and webcam.**

GRB 2200-01 M 8/27-12/14 9-11:50am ONLINE

COMMERCIAL ELECTRIC

In this course, students learn about the essential components of the electrical systems of commercial buildings. Topics include reading commercial building plans and specifications, computing electrical loads, branch circuits and components, and electronic service equipment. Electrical considerations specific to renewable energy systems are also covered. **Note: This is an online class. Students have the option of attending the recorded live webinar on date and time noted using Adobe Connect. To do such, students must have access to a computer, internet access, headset and webcam.**

GRB 2300-01 W 8/27-12/14 9-11:30am ONLINE

WELDING CERTIFICATION COURSE

This entry level course will provide the training necessary to sit for the American Welding Society (AWS) shielded metal arc welding entry level certification. Includes instruction in welding safety and health, drawing and welding symbol interpretation, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux cored arc welding, gas tungsten arc welding (GTAW), thermal cutting, plasma arc welding (PAC), and welding inspection and testing. Tuition includes personal welding equipment and materials.

WW112-0912CT M/W 9/12-11/20 6-9pm CT \$1,499
WW112-0918CT T/R 9/18-11/29 6-9pm CT \$1,499

AWS STRUCTURAL WELDING EXAM

AWS D 1.1 structural steel, 1" groove weld, 3G and/or 4G Positions. Proctor: C. Hubert, AWS CWI
Exam fee is \$175 per position, maximum of two.

WWExam-1208CT S 12/8 8:30am-3pm CT \$175

AUTOMOTIVE ALIGNMENT FUNDAMENTALS

This course is designed for the less experienced individual with a desire to learn fundamental four-wheel alignment. This course prepares the technician by covering alignment theory, equipment operation, common OEM adjustment methods found on light duty vehicles and basic tire/wheel balancing theory. It also includes an overview of suspension and steering systems with instruction in performing proper inspection procedures. Course consists of a combination of classroom lectures and hands-on shop training. Hands-on/Lab modules are structured to provide the student in-depth skills relating to alignment equipment operation in combination with additional opportunities to perform actual vehicle alignment processes. The amount of actual vehicle alignments will vary with each class.

TR666-0924CT M/W 9/24 - 10/29 5:30 - 8:30pm CT \$499
No class 10/8

AIR CONDITIONING CERTIFICATION

Become an Air Conditioning Technician with this project-based program toward entry-level basics for residential systems. Specific topics will include HVAC theory, air conditioning systems, heat pump systems, troubleshooting and maintenance of units found in many residential situations. Students will also participate in a mock-install of an A/C condensing unit and air handler. Industry standard examinations are proctored at the end of the session in both R410A certification and Universal EPA 608 certification. Safety glasses are required. Recommended textbook for self-acquisition is: ISBN-13: 978-1305578296 Refrigeration and Air Conditioning Technology, 8th edition and accompanying lab book.

Instructors: J. Henriksen & J. Santiago

TR101-0911CT T/R 9/11-12/13 5:30-9:30pm CT \$1,899

OIL HEAT TECHNICIAN

This course is designed for the beginner with little or no previous experience and combines HVAC theory with hands-on training. This course is useful for homeowners, maintenance personnel, or those seeking employment as an entry level technician. Ulster BOCES is a NORA (National Oil Heat Research Alliance) approved program and follows the NORA curriculum for Bronze level (entry level) technician training. Students will have the opportunity to sit for the NORA certification exam at the end of the program. The curriculum includes training in electrical theory, introduction to the burner and oil burner certification and controls. Safety glasses are required. Instructors: T. Fullman & A. Orton

TR102-0911CT T/R 9/11-27 5:30-9:30pm CT \$1,999
PLUS M/W 10/2-1/7 5:30-9:30pm CT

M - MONDAY • T - TUESDAY • W - WEDNESDAY • R - THURSDAY • F - FRIDAY • S - SATURDAY • U - SUNDAY

BUILDING SCIENCE & TRADES

UB ELECTRICAL APPRENTICE PROGRAM

This five-year program has been designed and developed to meet the mandated requirements for related instruction in the New York State Registered Electrical Apprentice Program. Students will receive in excess of 180 hours of instruction per year for 900 hours over five years while attending class two nights per week from September to June. Classes will offer both theory and hands-on training. Upon successful completion of the entire program, New York State Registered Electrical Apprentices will be qualified as journey-workers. This program of study is also open to:

- Those already employed in the electrical trade who are not affiliated with a registered program
- Those employed in related trades who wish to expand their skills
- Those who desire employment in the electrical trade

Instructors: **M Detweiler**, Master Electricians, and **C. Peone** is a Certified Electrical Inspector and Master Electrician. **B. Ecker** is a Distinguished Member of the Technical Staff at Verizon Communications, Inc.

Approved for the Training of Veterans. NYS Education Dept. & NYS Dept. of Labor Approved Program.

For additional information and to initiate the registration process, call Carolyn Detweiler at 845-331-5050 ext. 2226 and/or ext. 3214.

EAP-1819 • 60 Sessions/190 + hours - \$2,719 per year, and does not include textbooks.

ORIENTATION 8/15 AT THE OPEN HOUSE, OR 8/21 5:30-8:30pm.

TYPICAL SCHEDULE

1st YEAR COURSES

Sexual Harassment in the Workplace	3 hrs
OSHA	10 hrs
Trade Math	45 hrs
DC Theory	39 hrs
Trade Safety	24 hrs
Residential Wiring I	30 hrs
Residential Wiring II	30 hrs
Electrical Blueprint Reading & Drafting	24 hrs
TOTAL	205 hrs

2nd YEAR COURSES

Work Readiness	24 hrs
AC Theory	39 hrs
Industrial Safety & Labor Relations	21 hrs
Instruments Measuring & Testing	18 hrs
Commercial Wiring I	30 hrs
Commercial Wiring II	30 hrs
National Electric Code	30 hrs
CPR/FA	8 hrs
TOTAL	200 hrs

3rd YEAR COURSES

Welding for Electricians	24 hrs
Transformer Theory & Power Distribution	45 hrs
General Alarms, Fire Alarms, Security Systems	39 hrs
Semi-Conductor Theory	24 hrs
Industrial Semi-Conductor	27 hrs
Electrical Estimating	24 hrs
TOTAL	183 hrs

4th YEAR COURSES

Motor & Generator Theory	39 hrs
Motor Control Theory	39 hrs
Motor Control Wiring & Motor Wiring	15 hrs
Industrial Wiring	30 hrs
Programmable Logic Controls	27 hrs
Grounding & Bonding	30 hrs
Logic Circuits	21 hrs
TOTAL	201 hrs

5th YEAR COURSES

Telecommunications	30 hrs
Fiber Optics	24 hrs
PV Concepts and Systems	40 hrs
PV Installation	40 hrs
Networking	24 hrs
Elective Air Conditioning or Elective Oil Heat	40 hrs
TOTAL	198 hrs



Allied Trades Initial Asbestos Certification 4
Not offered through BOCES

UB BASICS OF HOUSEHOLD WIRING

Learn the basics of residential wiring from Master Electrician Chris Peone as he guides you through electrical instruction and information about building a complete working circuit, general lighting versus task and accent lighting, light switch replacement and wiring, different wiring methods and requirements, and much more. This hands-on class will leave you more confident the next time you find a faulty outlet.

Instructor: C. Peone

WW119-0912CT W 9/12-9/26 6-9pm CT \$149

M - MONDAY • T - TUESDAY • W - WEDNESDAY • R - THURSDAY • F - FRIDAY • S - SATURDAY • U - SUNDAY