

Rutgers offers Continuous Education in Energy Related Fields

The Center for Continuing Professional Development is pleased to offer the following courses in the Energy field.

The course catalog currently includes but is not limited to:

Wind Energy Technology

This program is designed for people who seek an entry level job in a wind-based electric power generation facilities. Currently there are thousands of wind-based electric generators operating in the United States. Due to environmental reasons as well as a desire to limit reliance on foreign oil, it is expected that wind-based energy is going to be developed at a rapid pace over the next decade. It should also be noted that during the last decade, wind-based energy has dramatically improved its economical competitive position. Some believe that this type of energy is already competitive enough to replace large segments of conventional energy sources. In many other countries this source of energy is being used widely in a successful manner. This indicates that there are no technological impediments stopping wide expansion of this energy sector in the United States. There are very few institutions in the country that provide training for entry-level workers for wind-based electric power plants. Wind-based electric plants are operated by small groups of highly trained individuals.

Principles of Green Buildings

Principles of Green Buildings was developed and written in partnership with nationally recognized building science experts from Advanced Energy of North Carolina. This course will introduce and provide the science behind the House as a System by going through all of the major sub-systems that affect the way the entire structure system performs. A building is the sum of many parts and for best performance for the occupants it must be set up correctly with those sub systems "synced" together. The 9 modules of Principles of Green Buildings introduce the building as a system concept and then steps you through an explanation of the major individual system components and concepts. The modules teach scientific fact coupled with common sense using pictures, videos, graphics, and text. For more in-depth questions or explanation of content you are provided with an SME (Subject Matter Expert) mentor. The Principles of Green Buildings (PGB) course explains the science that an individual in the building, remodeling, or trade industry needs to know if they are working to make buildings perform more efficiently. The PGB course also helps prepare individuals for BPI, NATE, NARI, RESNET, and other industry credentials for green buildings. Successful completion of this course is recognized by both BPI and NATE for 28 hours of continuing education units (CEUs) applicable to several BPI and NATE certifications. To receive recognition for the 28 CEUs you must complete this course of study scoring 75% or higher on your overall grade. You are tested at the completion of each module within the course and will also be required to successfully complete a comprehensive final exam after completing module 9. This course is open-enrollment and self-paced. Students will be given an initial 3 months to complete their program. If you

need more time, a 3 month extension can be purchased for \$45.

Building Analyst Quick Start Program (BPI BA Certification)

This is the first online course of its kind. It was developed and written in partnership with nationally recognized building science experts from Advanced Energy of North Carolina and is full of scientific facts, interactive exercises, pictures, videos, graphics, and text. Everything an individual in the building, remodeling, or trade industry needs to know to make buildings perform more efficiently. The PBS course 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 & Maintenance Standards. This course is both BPI and NATE recognized for 28 hours of continuing education (CEHs) applicable to NATE and BPI re-certification. Students who successfully complete this course will have demonstrated they have the requisite knowledge and ability to apply these concepts working on real world buildings and their systems. It is important to point out that mastery of these skills will come only through real world experience working in buildings over the years. It requires them to not only learn what the various assessment tools and techniques are, when to use these assessment tools but also how to use these various assessment tools, how to use the information gained to prioritize decision making and how to report this information to various stakeholders. At the end of each module is a comprehensive exam of the material covered. In addition every person that completes the Principles of Building Science course successfully will receive a one year subscription (six issues) to Home Energy Magazine in both an online and print version (an \$85.00 retail value). Students also receive a study guide that is provided for the course. This first course in the program allows 90 days enrollment to complete. Must obtain a 75% or higher to obtain CEH recognition.

Natural Gas Plant Operations

The Natural Gas Plant Operations online course provides the knowledge and skills you'll need to begin an exciting career in natural gas plant operations. Natural gas has two things going for it. First, it provides clean energy. Second, it is plentiful in the United States. For decades to come, natural gas will be produced and consumed in the United States - creating ongoing demand for natural gas plant operators. For people who want to enter this field it is difficult to find suitable training to become prospective entry level workers. This online course provides fundamental technical background to such workers. To take this course no prior science or math education is necessary - the course includes all of the necessary basic science and technology elements.

Please visit the Center for Continuing Professional Development website for more information.

