

Residential Building Performance Technology Program

Energy Efficient Green Building Institute



David Eishen, Director

deishen@dcccd.edu

972-860-2984

www.cedarvalleycollege.edu/eegbi

Residential Building Performance Technology Program

Combining the needs of ...

Home Energy Rating Industry

Green Home Rating Industry

Residential Building Performance Technology Program

Including information on...

Onsite Power Generation

Sustainable Neighborhoods

Residential Building Performance Specialist/Rater

- Homeowners need a source of professional, reliable, unbiased expertise.
- The level of expertise should be as high as the residential building market can afford.
- A two year degree is a perfect balance between the level of professionalism required, and affordability for the residential building market.

... applies a systems approach to improve the health, safety, comfort, durability, environmental quality, and energy efficiency of a home.

... have a thorough knowledge of traditional and non-traditional building elements, including how to evaluate and score each element from a whole house perspective, and gage their effects on comfort, indoor environmental quality, cost effectiveness, safety, impact on the environment, and heat/moisture/air movement through the envelope/enclosure.

... knowledge of all mechanical and electrical systems used in houses including heating, air conditioning, appliances, lighting, and plumbing.

...be familiar with a variety of testing techniques including testing indoor air quality, water quality, thermal bypasses, and air leakage.

...identify different onsite power generation technologies such as fuel cell, solar thermal, solar electric, and wind electric and match their energy output to a specific building load.

...make building recommendations using recognized green building standards with the intent of lowering the impact on the environment and improving the quality of life for the people who live in and around those buildings.

...be able to perform the tasks of a rater in a variety of energy efficient and green rating systems.

...examples: the National Home Energy Rating System, the U.S. Green Building Council LEED for Homes, and LEED for Neighborhood Development, Built Green, Health House, and the National Association of Home Builders Green Home.

Delivered Nationally

14 new technical courses

12 courses - internet only

2 courses- internet plus two weeks at EEGBI

0-6 academic courses

any accredited college or university

1 Year Certificate

First 7 technical courses

2 Year Certificate

All 14 technical courses

3 academic courses

2 Year Degree

All 14 technical courses

6 academic courses

New Technical Courses (14)

1. Fundamentals of Residential Building Science
2. Residential Lighting, Appliances, and Plug Loads
3. Residential Mechanical Systems
4. Residential Energy Conservation Codes
5. Energy Rating Systems for Homes
6. Green Rating Systems for Homes
7. Residential Verification and Rating **

** Capstone course

8. Advanced Residential Building Science
9. Residential Environmental Quality
10. Advanced Residential Mechanical Systems
11. Onsite Power Generation and Renewable Energy
12. Residential Retrofit Strategies
13. Sustainable Neighborhood Development
14. Residential Building Performance Consulting **

** Capstone course

MOU-EEGBI/RESNET

EEGBI Commitments

- Develop a curriculum suitable to the needs of students who wish to become RESNET professionals.
- Work collaboratively with RESNET to validate the rater curriculum and the RESNET national rater test.
- Use the curriculum development process to help standardized the technical language used between professionals in the rater industry.
- Actively promote and provide training to students nationally that prepares them for careers as home energy raters.
- Develop an educational program for existing certified raters to prepare for the RESNET national rater test.
- Provide home energy rater training and continuing education courses.

- Make the home energy rater curriculum available to other colleges and universities.
- Train faculty from other colleges and universities to use the home energy rater curriculum.
- Increase the awareness of RESNET to students new to the home energy rater industry.
- Incorporate the RESNET Standards of Practice and Rater Code of Ethics into the curriculum for raters.
- Maintain a level of quality assurance in awarding certificates and degrees suitable to the needs of the home energy rater industry.
- Provide RESNET with public recognition through the EEGBI website, participation in professional events, and other media such as brochures, newspaper articles, etc.

RESNET Commitments

- Provide the EEGBI professional expertise in a collaborative effort to validate the home energy rater curriculum.
- Assist the EEGBI in finding suitable instructors to deliver the home energy rater curriculum to a national audience.
- Increase the awareness of the EEGBI to potential students in the home energy rater industry.
- Maintain and share data on the quality of EEGBI graduates who become RESNET certified home energy raters.
- Provide information to the EEGBI on changes within the home energy rater industry that might impact the quality of the home energy rater curriculum.
- Use the curriculum development process to help standardized the technical language used between professionals in the rater industry.
- Provide the EEGBI with public recognition on the RESNET website, participation in professional events, and other media such as brochures, newspaper articles, etc.