

RECOGNIZING INSTITUTIONS THAT PREPARE STUDENTS FOR 21ST CENTURY BUILDING CAREERS

The Zero Energy Design Designation (ZEDD) Showcases Higher Education Institutions that Catapult Students' Careers



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Earning the ZEDD designation has been a very positive experience for many academic institutions, and this fact became clear in recent interviews with two designees—Appalachian State University and the University of Cincinnati. When originally asked about the program, Anton Harfmann, a professor and director of architectural engineering with the University of Cincinnati, said “I was really excited and delighted when Jaime (Van Mourik, U.S. Department of Energy ZEDD lead) told us about the idea, I said, ‘sign us up.’” Since receiving the designation, **ZEDD has given these two universities a unique point of pride and also provides a differentiator that can aid in recruiting prospective students.**

Buildings play a significant role in reaching the White House’s goal of a net-zero emissions economy by 2050, so it is critical that building professionals are prepared to design and construct high-efficiency, low-carbon buildings powered by renewables. The U.S. Department

of Energy’s (DOE) Zero Energy Design Designation (ZEDD) recognizes post-secondary academic programs that prepare students for 21st century building careers.

ZEDD is a three-year designation, and as of 2023 almost 40 programs of study from more than 25 institutions have been recognized and supported by DOE for their work educating the next generation of the clean energy workforce. The University of Cincinnati received the ZEDD designation for their Net Zero Energy Design Track in Architectural Engineering Program. Appalachian State University received the ZEDD designation for two programs: Master of Science in Technology with a Sustainable Building Design and Construction Concentration, and a Bachelor of Science in Building Sciences with a Sustainable Buildings Concentration. **Tracks, majors, minors, certificates, and both master’s and bachelor’s programs are eligible for ZEDD.**

In recent interviews with faculty from the University of Cincinnati and Appalachian State University about their experiences with ZEDD, many common topics came up. Both faculty members mentioned that the students who graduate with ZEDD on their resume are often the only people in their future design firms who understand and can create net-zero-energy designs.

Rob Howard, a lecturer on the built environment at Appalachian State University and small business owner, said he is confident that the zero-energy design skills the students are receiving through ZEDD-awarded programs are providing them with a competitive advantage as they move forward with their careers.

Both universities were already teaching zero-energy design principles in their programs, so **completing the application was a straightforward process in which they simply had to show what they were already doing.** Now, both universities can show that they are among an elite set of institutions nationally offering future and current students a well-rounded mixture of building science education and applied practice through a design practicum that has been verified by DOE.

While these two programs have received the designation for their engineering and construction programs, any program, track, or combination of classes teaching students about zero-energy design can receive the designation. **Architecture, building science, and STEM degrees are popular academic programs that can qualify for the DOE recognition.**

Both universities plan to re-apply for the designation after their initial three-year designation period expires. In fact, Harfmann, said, "Of course, yeah, it's a no-brainer."

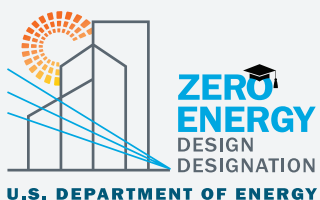
Harfmann and his department use ZEDD to meet Accreditation Board for Engineering and Technology (ABET) requirements. ABET is a worldwide accrediting body that evaluates most engineering programs.

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In addition to helping meet vital ABET requirements, both faculty members said ZEDD is helping bring more industry recognition to students. Local co-op employers, industry professionals, and community members are seeking out graduates from ZEDD-certified programs and the experience they bring to the table after graduating. **These two universities, and all the universities that obtain the ZEDD designation, are receiving more local and national recognition because of what they are teaching their students.**

You and your academic program can receive all of these positive benefits too through the Zero Energy Design Designation. Contact our team or visit our website to learn more about application deadlines, informational webinars, and program requirements.



Questions: zedd@nrel.gov

Learn more on our website:
www.energy.gov/eere/buildings/zero-energy-design-designation

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