

# 4 complete energy-environment professional course

Four professionals in Physical Facilities have attained accreditation in sustainability of buildings.

The four, all at the West Lafayette campus, recently completed the LEED program in new construction and major renovation. LEED is Leadership in Energy and Environmental Design, a nationally prominent set of programs and standards.

Those accredited are Gene Hatke, senior architect; Luci Keazer, mechanical project engineer; Dan Schuster, project engineering group manager; and Don Staley, senior landscape architect.

"This is a very broad-based challenge, and it brings a lot of interest and enthusiasm," Hatke says. "It's certainly the way we need to be going, some commitments we need to make."

Of course, it isn't Purdue's first step in this direction. Besides many energy conservation steps, Purdue has been looking at LEED standards "as a checklist" during the building boom of the past six years, Hatke says.

"We knew it wouldn't take all that much more to meet LEED certification," he says. "As we read the material, we felt good about it."

The four attended a one-day seminar last fall, then met twice a week at lunch to help them prepare for the program's examinations, he says.

In LEED's New Construction 2.2 program, project planners must meet seven prerequisites to register their project. One of those is minimum energy performance.

Keazer says that beyond those seven is a list of 69 optional credits. Meeting 26 of those points



PHOTO BY GAIL RIESE, PHYSICAL FACILITIES

(From left) Gene Hatke, Luci Keazer, Don Staley and Dan Schuster, all of whom are in sections of Physical Facilities, are now accredited in the national LEED program, administered by the U.S. Green Building Council. They are the first staff members in Physical Facilities to earn the accreditation. LEED certifies building projects for sustainability. The four are standing at bicycle parking outside Pao Hall. Under the heading of "alternative transportation," LEED awards 4.2 credits in its points system for design including bicycle storage and cyclist changing rooms. Basic design certification is earned at 26 credits.

earns the project a certification. Higher levels of certification are silver, 33 credits; gold, 39; platinum, 52.

Credits are in many categories and at increments within a category, Keazer says. For example, up to 10 credits are available for optimizing energy performance up to 40 percent above the minimum.

Architects and mechanical engineers team up to achieve such goals.

"I'm very enthusiastic and a champion of LEED because I can see that it will deliver high-performance buildings for the

long term, not just in initial cost — though accurate and energy-efficient system design can mean buying smaller equipment in the first place," she says.

Hatke says Purdue's group came from various outlooks at the encouragement of Larry Fusaro, university architect.

The study material was divided largely by discipline, Hatke says, and naturally he noticed the content of the architecture part.

"They focused on recycled materials, reusable materials, energy savings in obtaining materials from within a 500-mile radius, and waste generated dur-

ing construction," he says.

More generally, he says, LEED emphasizes the human environment in a building more than practices of recent decades have done. That includes natural lighting, outdoor views and more attention to fresh air.

Hatke says Purdue will aim for LEED "silver" certification for the addition to the Mechanical Engineering Building, which is entering its design phase.

The ability to acquire some credits hinges on where the project is, he says. California, by its laws, has a much more extensive recycling industry than any Midwestern state.

Keazer says LEED is becoming a driver to motivate industry and professionals to be more attentive to energy and environmental issues.

"We are focusing more in depth on the industry standards for energy, ventilation, and thermal comfort," she says. "LEED has more stringent energy requirements than the Indiana code."

Indoor air quality and commissioning of energy systems are also included in LEED's seven basic prerequisites. Increased ventilation, thermal comfort, water-efficient landscaping, and water use reduction are examples of optional credits.

"I'm excited about the higher design standards," Keazer says. "Many are things we should be doing for a smarter long-range vision."

Hatke hopes that viewpoint will spread.

"We hope to expand the mentality of what it takes to make buildings more sustainable," he says.

## About LEED

LEED is an initiative of the nonprofit U.S. Green Building Council. Founded in 1993, USGBC says it "is a community of more than 11,000 organizations from every sector of the building industry united by a common purpose: to transform the building marketplace to sustainability."

LEED identifies five key areas: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

Professionals from real estate to loans to government to interior design have roles in applying LEED standards.

More than 3 billion square feet are involved in LEED, according to [www.usgbc.org](http://www.usgbc.org). The organization has about 75 chapters including an Indiana chapter.

USGBC supports research and education, and annually it conducts Greenbuild, the largest conference/exposition of its kind. At Greenbuild on Nov. 7-9 in Chicago, former President Bill Clinton will be the top speaker.

USGBC is featured in "The 11th Hour," a documentary produced and narrated by Leonardo di Caprio and released in August.

"Obviously, we all share in the responsibility to address the issues we see more and more about conserving our natural resources. We need to use less and have less impact on the environment."