U.Va. Engineering School to Create Living Lab on Energy Use in Upcoming ITE Building

University of Virginia School of Engineering and Applied Science

Announces

Rice Hall’s Living Laboratory on Energy Use

To Enable

Real-world and real-time data for researchers, students and building visitors

The Rice Hall Information Technology and Engineering Building will be a visible example of sustainability at the University of Virginia. The entire building will function as a Living Lab with facilities to study energy optimization.
U.Va. Engineers to Research Energy Use in Living Lab

The Living Lab in Rice Hall will enable research; provide data on building, system and equipment performance; demonstrate performance monitoring; and facilitate real-world investigations in an operating building. The lab will:

- Make data from a real building available for performance analysis and side-by-side comparisons with models
- Incorporate the data into models developed to minimize total energy consumption
- Develop a “curriculum” for the building that engages students, faculty, industry, government and other partner organizations.

Designed to achieve a LEED silver rating, Rice Hall will incorporate the latest in space conditioning design for energy efficiency. The primary cooling will be through the use of chilled beams and low temperature variable air volume (VAV) systems, which provide exceptional cooling effects using a greatly reduced amount of energy while also providing independent cooling control at room level. Plans for other sustainable technologies include mechanical systems for energy recovery, advanced monitoring and control systems, smart lighting systems and energy efficient transformers.

www.seas.virginia.edu

THERE’S MORE WHERE THAT CAME FROM!