

DEPARTMENT OF ENVIRONMENTAL SCIENCE & TECHNOLOGY

Undergraduate Program	Graduate Program
Ecological Technology Design	Soil and Watershed Sciences
Ecosystem Health	Ecological Technology Design
Soil and Watershed Science	Wetland Science
Natural Resources Management	Ecosystem Health & Natural Resource Management



Ecological Innovation and Entrepreneurship

Creating positive social and environmental impact requires that innovative ideas be scaled to reach a large audience. Ecological entrepreneurship fosters the launch of innovative ideas into socially and environmentally focused enterprises, whether for-profit or not-for-profit, that do good for people and nature in a synergistic manner.

Ecological Design Thinking

Innovation in ecological technology is best advanced when a customer-centric perspective is mashed up with an evolutionary approach that equally considers natural ecological evolution and the human techno-industrial revolution. This approach is called Ecological Design Thinking.

Ecological Innovation

The Ecosystem Engineering Design lab of the Environmental Science



and Technology Department conducts research to:

- Quantify the energy balance of green walls, green roofs, and vine canopies to determine how much effect they have on the surface and indoor temperatures of buildings and outdoor human spaces;
- Determine how much vegetated green infrastructure can reduce the 'urban heat island effect'; and
- Learn how the natural flows of rainwater can be emulated by green infrastructure.

Ecological Entrepreneurship

Entrepreneurial students are taught the Lean Startup method for starting their own green start-up. Lean Startup was developed by entrepreneurs in Silicon Valley to improve the chances for success at starting a business based on a new technology. It uses customer discovery--an approach based on the scientific method of validating hypotheses with data--to empathize with customers' to determine whether the new technology satisfies their pain, gains and jobs.

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Temperature

Students learn about creating Benefit Corporations to explore their hurdles, opportunities, and caveats.

Students are prepared to enter the College's AgEnterprise Challenge which awards \$1000's to the teams with the best entrepreneurial ideas.

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