

# Green Building and Architecture

The University of Virginia is home to one of the nation's leading architecture schools. Accordingly, there are a number of student- and University-led organizations, initiatives, and courses designed to improve the sustainability of buildings and architecture design.

## CIOs/Clubs

- BiHOOphilic at UVA
- Green Frame

## Tracker

• You can track how much energy each building at UVA is using from an <u>online tracker</u> provided by the OFS. You can also find tips as to how to lower your building's energy usage.

# **Standards**

• All newly constructed buildings are required to be <u>LEED certified</u>, striving to use less energy, create less waste, and use more sustainable materials than traditional construction.

#### **Initiatives**

#### Delta Force Initiative

- General Description from the OFS website: "To reduce energy use across UVA's nearly 18,000,000 million square feet of building space, the UVA Delta Force Program in the Office for Sustainability works as an internal performance contracting program that increases energy efficiency in buildings and achieves energy savings. Delta Force targets high-energy buildings that present opportunities for energy savings, funds and implements those projects and recovers the investment through utility savings."
- o Cav Daily article

# **Educational Programs**

- <u>LEED Green Associates</u> Training
  - Being a LEED Green Associate means that you are certified in green building practices.
  - A program funded through the Equity and Environment Fund was held in January of 2020 to train students on green building practices in preparation for taking the LEED Green Associate exam. Prospective students had to apply and confirm in order to reserve their spots. There is talk of holding a similar program in the coming year. The primary contact for this program is Natalie LaRoe, class of 2020.

# Link Lab at UVA

 The Link Lab at UVA is currently doing research on <u>Smart Cities</u>. Some of their projects include Smart Buildings, Battery-less Internet of Things, and Transportation Optimization. Check out their website to see the rest of their projects and how to get involved!

# LEAP: The Local Energy Alliance Program

• <u>LEAP</u> is a great Charlottesville-area energy program that offers a number of resources to residents in the community. They offer energy assessments, weatherization consultations, and work with local solar energy contractors on solar campaigns.

 If you live in or know someone who lives in a pass-down house (club sport, a capella group, club, etc.), and would like to be considered for an energy assessment and smart retrofitting, contact Jack Mills at jm5upw@virginia.edu.

# Past Project: EcoMOD

• In the past, a team from UVA has been involved in the EcoMOD project, an architectural design initiative focused on affordable, sustainable housing. The team, a cross-disciplinary coalition of engineering, architecture, business, and historical preservation students and professors, designed three homes, all of which are occupied today. In the process, they even won Architect Magazine's 2013 Research and Development Award. While this initiative has not been active for several years, if you'd like to learn more, contact the Dean of Architecture, Ila Berman, at <a href="mailto:ilb8r@virginia.edu">ilb8r@virginia.edu</a> or the Dean of Engineering, Craig Benson, at <a href="mailto:engrdean@virginia.edu">engrdean@virginia.edu</a>.

#### **Professors and Courses**

- The <u>Urban + Environmental Planning major</u> in the School of Architecture UVA is a great way to immerse yourself in coursework dedicated to informing knowledge on ways to make our urban spaces more resilient, healthy, and equitable. Major research areas include biophilic cities, smart technologies/mobility, design, health, and social justice.
- Notable professors who teach sustainable building/architecture courses:
  - o <u>Tim Beatley</u>
  - Phoebe Crisman
  - Suzanne Moomaw
  - o Ellen Bassett
  - o <u>Julie Bargmann</u>
- Notable courses in sustainable architecture, as recommended by other students:
  - o PLAN 1010 "Intro to Urban Environmental Planning"
  - o PLAN 2111 "GIS for Planners"
  - o ARCH 2150 "Global Sustainability"
  - PLAN 3060 "Land, Law and the Environment"

o PLAN 3860 "Cities and Nature"

Updated as of: 04/18/2020