

EDEN HALL CAMPUS

A brighter, healthier tomorrow.

chatham[®]
UNIVERSITY



Critical issues such as climate change, an environment in crisis, and dwindling natural resources demand a future led by those who understand how to build a more healthy and sustainable world. Chatham University has risen to this challenge with its Eden Hall Campus.

On 388 acres just north of Pittsburgh, Pennsylvania, Eden Hall is the place to imagine, model, and practice sustainable learning and living through scholarly training, research, and application of sustainable principles and values.



WHERE ACADEMICS MEETS SUSTAINABILITY

This unique academic community, home of the Falk School of Sustainability & Environment, is focused on sustainable approaches to energy, water and soil; food and agriculture; air quality and climate; the interaction of natural and built systems; and business and public policy.

Eden Hall Campus (EHC) extends Chatham's commitment to sustainability and the environment while also serving as a model for leadership. The evidence is everywhere from radiant heating and cooling ceiling tiles in Orchard Hall to collaborative student and faculty research to working with community, regional and state groups to create a better environment.

► ► ► ► ► *“Eden Hall has been a remarkable experience for me. We can go to a classroom and learn about the environment, but then walk out the door with access to nearly 400 acres of forest where our instructors can take us out and show us what they’re talking about.”*

— Sarah Daugherty, Bachelor of Sustainability '17



AT THE FOREFRONT OF SUSTAINABLE LEARNING

As the first academic community in the world built for sustainable living, learning, and development, Eden Hall:

- Generates its own electricity through solar panels; manages all storm- and wastewater onsite; harnesses the earth's natural temperature to heat and cool the buildings; grows food for the campus; and manages its own woodland.
- Uses the latest in environmentally and socially responsible design and technology.
- Produces tomorrow's green economy workforce today, equipping graduates with the skills they need to succeed in a variety of jobs and fields.
- Welcomes educators, students from around the world, developers, planners, policy makers, and community members, encouraging them to explore more sustainable ways of organizing work and governance.
- Partners with industries as well as the surrounding neighborhood, city, and region, providing more opportunities for students to address real-world challenges.

Chatham University's EHC embodies these things and more. Read on to learn more about this campus community that is ensuring a brighter, healthier tomorrow.



A SHOWCASE FOR SUSTAINABILITY

Step onto Eden Hall Campus and be surrounded by sustainable design. It's a hands-on laboratory where sustainability can be experimented with and explored in an exciting and unique way.

Concentrating on energy; water and soil; food and agriculture; and air quality and climate, Eden Hall employs systems, technology, processes and dedicated areas to inspire and enrich its students and faculty, members of the academic community at large, and education-seeking professionals from across the world.

Sustainability is in everything we do at Eden Hall



Energy

- Over 400 large solar panels generate 126,000 kilowatt hours annually
- Energy that does not get used on campus feeds back into the public electric grid
- Orchard Hall residence housing boasts radiant heating and cooling ceiling panels, the largest installation of its kind in the country
- Solar thermal panels heat water for the residence hall and warm the main hoop house year-round
- A geothermal heating and cooling loop system, consisting of 48 geothermal wells, dramatically reduces energy cost
- Buildings are monitored for continued efficiency through an energy data system



Water & Soil

- Approximately 34,316 gallons of rainwater are used for irrigation each year
- Over 30,000 square feet of rain gardens and 41,983 square feet of permeable paving
- On-site wastewater management handles up to 6,000 gallons each day





Food & Agriculture

- Experimentation with growing food hydroponically year-round
- A variety of growing environments including a demonstration garden, hoop houses, and 30+-acre field crop area
- Aquaculture system, capable of growing up to 1,000 trout
- Small-scale mushroom, honey, and maple syrup production



Air Quality & Climate

- Indoor air quality monitored and data used in student experiments
- Indoor air temperature and humidity set to stay within a comfortable range rather than a single set temperature
- Weather station collects data on solar radiation, air temperature, precipitation, wind speed and direction, and leaf wetness
- Soil sensors are installed to collect data on items like volumetric water content and electrical conductivity
- Plans are underway for carbon farming, a variety of methods to increase the carbon content of soil to improve plant growth and reduce fertilizer use

The entire Eden Hall Campus operates as a learning laboratory where students use their surroundings to explore topics such as sustainable land management; food production and delivery; and energy generation.

The campus features a student-run teaching garden; crop production and aquaculture lab for use in food studies and sustainability courses; and innovative research spaces for studying such subjects as storm- and wastewater management, agriculture, aquaponics, and ecology.



“I am always excited to see and learn about progressive agricultural methods which attempt to increase sustainability while maintaining yield and profit. In this sense, I think of Eden Hall as an academic demonstration farm that can take risks ordinary farmers might not.”

—Scott Fisher, Master of Arts in Food Studies '18

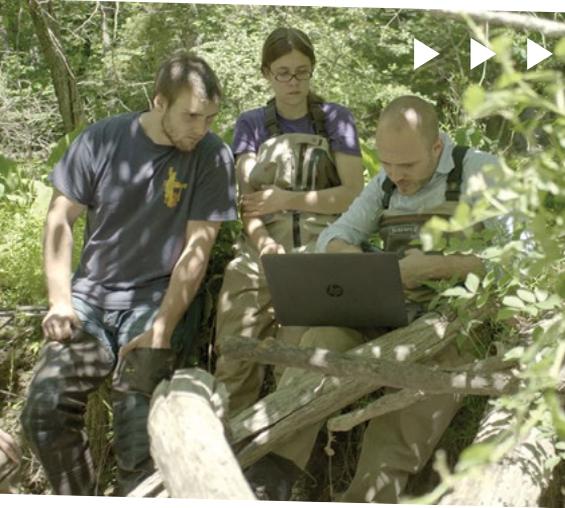


WORKING TOGETHER IN A COLLABORATIVE ENVIRONMENT

EHC operates two specific centers that allow students, faculty, researchers, and businesses to address real-world challenges and build a more sustainable and healthy world.

The **Center for Regional Agriculture, Food, and Transformation** (CRAFT) provides resources, learning opportunities, and technical assistance around food systems, regional food cultures, and sustainable economies to individuals, organizations, and businesses.

The **Center for Sustainable Leadership** (CSL) is a joint initiative of the Falk School and Chatham's Business Department. CSL helps organizations enhance and maintain employee engagement with sustainability at work to boost organizational performance.



► *"I like that I get to see what I'm studying. I get to actually put my hands in the water and talk directly about the way cities are run that affects the way water quality changes. These projects are affecting the greater picture of Eden Hall and also of Pittsburgh as a city."*

—Valerie Skinner, Master of Sustainability + MBA '17





RESEARCHING REAL-WORLD PROBLEMS

Eden Hall is where undergraduate and graduate students work side-by-side with professors to understand issues and solve problems. Below is a sampling of current faculty and/or student research.

Food & Agriculture

- Heirloom cacao preservation
- Start-up food (chocolate & confection) business viability
- Pesticide safety in fruit tree orchards
- Small-scale aquaponics systems
- Alternative protein and lipids for fish feedstocks
- Strengthening local farms and businesses (USDA)

Community Engagement

- Exploring Pittsburgh's biophilic strategy and neighborhood development in Homewood
- Intersections of public health and the alternative food system

Water & Soil

- Aquatic environmental toxicity of common urban pollutants
- Long term, intensive monitoring of stream ecosystems along an urbanized watershed gradient

Ecology & Biology

- Cumulative ecological effects of an invasive forest understory shrub, Japanese barberry
- Biodiversity monitoring of western Pennsylvanian nocturnal moths
- Long-term changes in biodiversity, species richness and metabolic diversity in Pennsylvania forests
- Long-term changes in lichen diversity and coverage in forest edges, intact forest interiors and wind-cleared canopy openings
- Variation in evolutionary and ecological traits in populations of cardinal flower and blue cardinal flower in western Pennsylvania

Energy & Climate

- Modeling and policy analysis of large-scale solar electricity production and distribution
- Climate adaptation and the water-energy-food nexus

► ► *“Through Eden Hall Campus, our faculty and students discover theories and explore practices that will sustain the land, and, by extension, our cities and those who live in them.”*

— David Finegold, DPhil, president, Chatham University



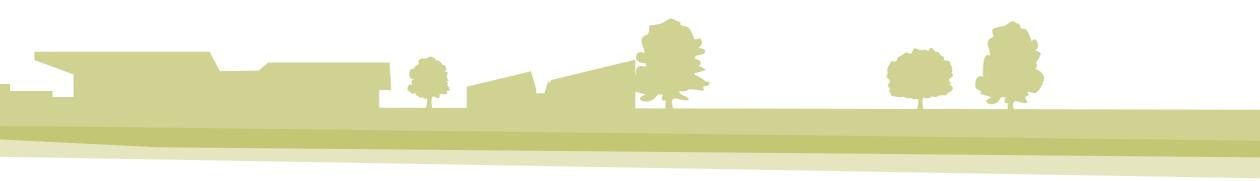
CULTIVATING LEADERS FOR TOMORROW

The world is changing at a dizzying pace. From how we grow our food and feed our communities to making the most of our natural resources to water quality and energy use, sustainability is now a huge part of how our world works.

Having leaders who understand sustainability and the environment, and the impact we have on it, will be crucial in the coming years. Eden Hall and the Falk School produce leaders who possess sought-after skills in sustainability, collaboration, problem solving, project management, and driving change.

Chatham's Falk School of Sustainability & Environment offers a **Bachelor of Sustainability (BSUS)**, **Master of Arts in Food Studies (MAFS)**, **Master of Sustainability (MSUS)**, and **dual degrees in MAFS/MBA and in MSUS/MBA**.





DEGREES TO MAKE A DIFFERENCE

The **BSUS** degree allows students to focus on one of three tracks: sustainable energy and urban systems, natural resource management, and sustainable business. Students practice what they learn, integrating lessons into their work and discovering new ways to tackle the challenges facing the world today.

The **MAFS** program emphasizes an interdisciplinary approach to food systems, from agriculture and food production to cuisines and consumption, providing intellectual and practical experience from field to table.

The **MAFS/MBA** program provides breadth and depth in food studies, business, and sustainable business, equipping all students with a holistic understanding of food systems and business skills.

The **MSUS** program prepares students with full-scale thinking to act upon our important local and large-scale global problems and be the agents of change that corporations, governments, and other organizations need to lead their sustainability initiatives.

MSUS/MBA students work on projects informed by real world challenges, and include activities such as creating business plans for sustainability-focused organizations or collaboration on various projects that involve sustainability issues. Graduates will be capable of driving sustainability initiatives for companies, government agencies, and nonprofits that return triple-bottom-line success.

▶ ▶ *“What unites our students is a commitment to the principles of sustainability, a willingness to work with people from diverse backgrounds, and an interest in understanding complex problems — from an individual to a global level.”*

— Peter Walker, dean,
Falk School of Sustainability & Environment



HIGHLIGHTING OUR GRADUATES

Nicolette Spudic, MAFS '12, is a program administrator with the Food Policy Council of Pittsburgh, and the owner of Pick Your Poison Consulting Company, which helps food and farm-based businesses with product development, innovation start-up services, and business plan development.

James Snow, MSUS '14, is the manager of corporate relations at the Pittsburgh Parks Conservancy where he builds strategic relationships in order to maintain and expand a high-quality public park system that is accessible to everyone in Pittsburgh. James is also a member of the Chatham Alumni Board. ▶▶▶

Komal Kooduvalli, MSUS '16, is a research associate with the Oak Ridge National Laboratory, where she evaluates various bio-based, renewable materials and aims to bridge the gap in communication related to sustainable, bio-based production in manufacturing, materials and agricultural sciences. Komal is also a member of the Chatham Board of Trustees.

Valerie Skinner, MSUS/MBA '17, is the manager of corporate sustainability reporting for MGM Resorts International. She analyzes sustainability metrics and prepares sustainability data for annual reports, including greenhouse gas surveys and the GRI, for the global resort and entertainment company.

Allie Frownfelter, BSUS '17, is the founder and sales director for Bottle Thread, a sustainable high-end clothing line. Bottle Thread creates high-quality, ecofriendly garments from recycled plastic bottles in order to combat textile waste. Allie also hosts a sustainable fashion podcast. ▶▶▶





“Graduates of this program will be able to filter through the noise. To detect the trends. To understand what is going to happen when humans take one action vs. another.”

—Ryan Utz, assistant professor of water resources



Clockwise from top left: Dianne Shen, MAFS '12, Owner, Dylamato Market; Catherine Giles '15, MSUS '17, Curatorial Assistant of Invertebrate Zoology, Carnegie Museum of Natural History; Hal B. Klein, MAFS '12, Associate editor and food critic, Pittsburgh Magazine; Cassandra Malis, MAFS '16, Project manager, Center for Regional Agriculture, Food, and Transformation at Chatham University; Trey Turnblacer, BSUS '18, Operations Manager, ZeroFossil Energy Outfitters; Leland Scales, MAFS '16, Food Recovery & Field Operations Associate, 412 Food Rescue



CAREERS THAT LOOK FORWARD

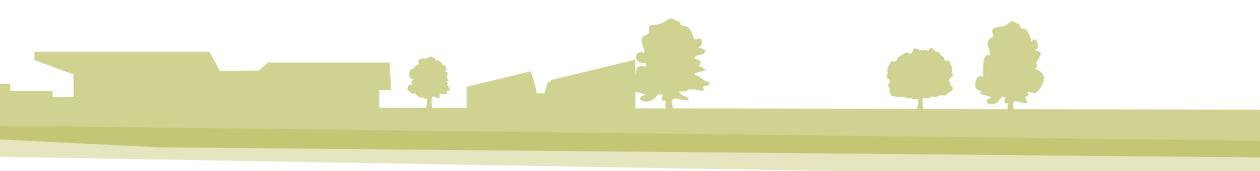
The number of jobs related to sustainability has grown over the past few years in fields like healthcare, energy, manufacturing, public policy, education, design, construction, agriculture, media, and food safety and security.

Sustainability-related skills are in demand as businesses and nonprofits look to be more socially and environmentally responsible. Chatham prepares graduate and undergraduate students to compete for leadership positions in sustainability.

Graduate Employment Outcomes (Class of 2016)

- **100%** employed in some capacity
- **85.2%** employed in field





WHERE GRADUATES ARE WORKING

- 412 Food Rescue
- Adagio Health
- Aldi
- Allegheny County Economic Development Office
- Allegheny County Health Department
- Ascension
- Bangkok Air Catering Co., Ltd.
- Bottle Thread
- Cambridge Housing Authority
- Carnegie Museum of Natural History
- Cengage
- Center for Regional Agriculture, Food, and Transformation
- Chef Ann Foundation
- Children's Table
- City of Pittsburgh
- Cleveland State, University of Akron
- Dang Foods
- Dylamato's Fresh Food Market
- Eden Hall Farm
- Ethical Farming Fund
- Florida Gulf Coast University
- Food Policy Council of Pittsburgh
- foodguyadventures.com
- GNC
- Grainger
- Greater Pittsburgh Community Food Bank
- Grow Pittsburgh
- Harlem Children's Zone
- Head Start/Early Head Start of Fayette County
- Heinz Family Farm
- Highmark
- Homewood Children's Village
- Idea Foundry
- lobby
- Kompyte
- Marty's Market
- MGM Resorts International
- MOFAD
- Monroe County School District
- Morrison Healthcare
- Oak Ridge National Lab
- Penn's Corner Farm Alliance
- Phoenix Naturopathic Center
- Pittsburgh Center for Creative Reuse
- Pittsburgh Community Kitchen
- Pittsburgh Magazine
- Pittsburgh Parks Conservancy
- Pittsburgh Public Schools
- Public Health Solutions
- Quasar Energy Group
- Rachio
- San Francisco Food Systems
- Shadyside Academy
- Sign Language Interpreting Professionals
- Student Conservation Association
- Three Season Growing Network
- Town Hall Seattle
- University of Georgia
- University of Maryland Extension
- University of Pittsburgh
- UPMC
- UPMC Mercy Hospital
- USDA
- VA Department of Health
- Virginia Commonwealth University ASPIRE program
- Virginia Tech University
- Wayne State University
- Wigle Whiskey
- Women for a Healthy Environment
- Xanterra Parks & Resorts
- YMCA of Greater Pittsburgh
- ZeroFossil Energy Outfitters



INSPIRATION FOR ALL

“Eden Hall was designed to reach a vast set of audiences, to interface with the community, and to bring people to this place. I think that’s part of what makes it such a dynamic environment.”

— Sandy Mendler, principal, Mithūn

Eden Hall is first and foremost a community open to all. It serves as a model and demonstration site for researchers, the community and businesses, and offer educational and recreational activities to everyone from ecotourists to elementary school children.

The campus is a destination for those looking to incorporate sustainable principles and green development methods in higher education and urban and suburban residential and commercial settings; as well as community members who simply want to explore what sustainability looks like today, and might look like tomorrow.

Visitors can hike eco education trails, view sustainable agriculture sites including a solar high tunnel, orchard, and shiitake mushroom production, and observe natural wastewater treatment systems in action. EHC’s working organic farm provides opportunities for Chatham to connect to the community through farm-to-school programs and partnerships with local farmers and nonprofits. The campus and grounds also attract academic, public, and artistic communities through visual, performing, literary, and other creative arts programs.





Community-based Workshops

In partnership with the Center for Regional Agriculture, Food, and Transformation (CRAFT), Eden Hall offers hands-on workshops open to the public that explore everything from baking bread to cultivating fish to making chocolate. Additional workshops are offered on topics in sustainability and in the arts.



K-12 Partnerships

Eden Hall Campus offers an unparalleled range of opportunities to introduce sustainability related topics to K-12 education in the Pittsburgh area. Children explore topics including sustainable agriculture and ecology, and Chatham students get real-life experience as educators.



Arts & Culture Programming

The Summer Series at Eden Hall Campus features concerts, dramatic performances, festivals, and farm-to-table events for the whole family. Thousands of people have enjoyed memorable afternoons and evenings on the campus that was recognized nationwide with a 2018 Education Facility Design Award of Excellence from the American Institute of Architects. Permanent and temporary art installations are also planned.



Green Weddings & Events

Eden Hall Campus has hosted weddings, conferences and group meetings, including the Food and Climate Change Conference, the Green Building Alliance, and the Student Conservation Association. From the iconic Eden Hall Barn to the adaptable and inspirational Esther Barazzone Center, EHC can accommodate a range of party sizes, functions, and requirements.



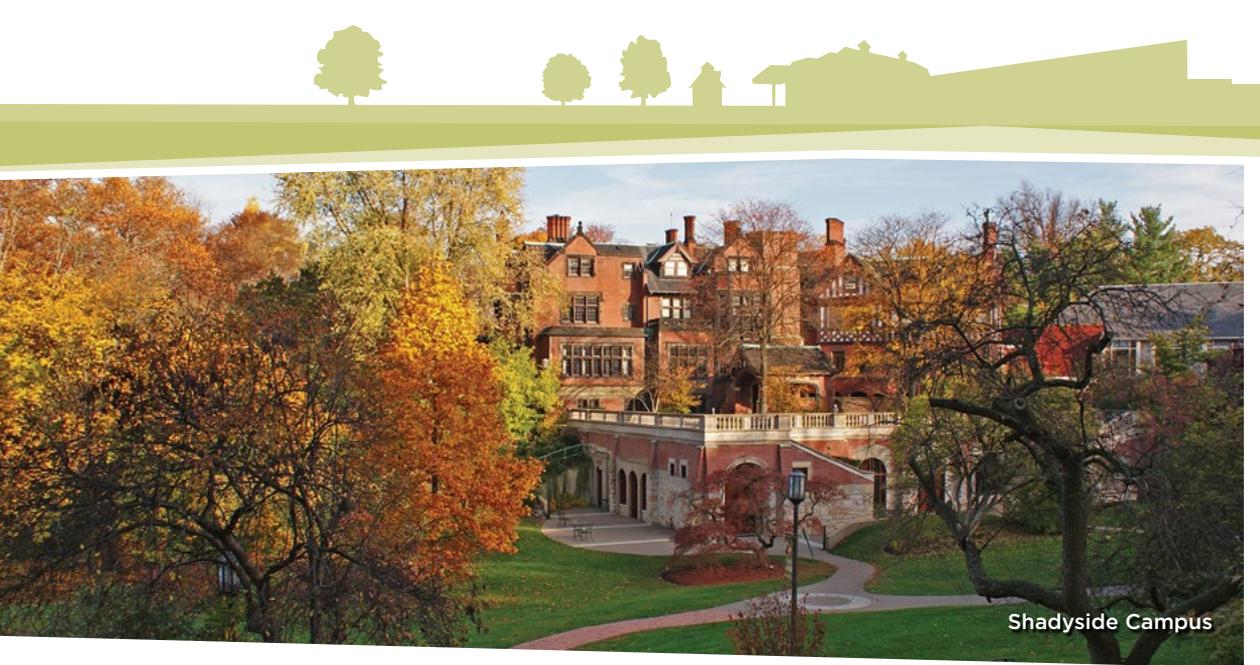
Accessible Woodlands & Trails

Eden Hall Campus boasts 250 acres of forest, used for recreational trails and education, and a low-ropes course behind the Lodge. Grants are underway with the Commonwealth of Pennsylvania to further enhance the woodlands.



► ► ► ► *“It’s a lovely natural space, comfortable and welcoming for any type of event, with rolling hills framing the stage.”*

— Pittsburgh Magazine



Shadyside Campus

FROM 1929 TO TODAY

Chatham is the alma mater of environmental icon Rachel Carson '29, whose book *Silent Spring* is widely credited with igniting the modern environmental movement. *Time* magazine named Carson to their list of the 100 Most Influential People – and 25 Most Powerful Women – of the 20th Century.

For half a century, Carson's inspiration has led Chatham to become a world leader in its environmentally responsible practices.

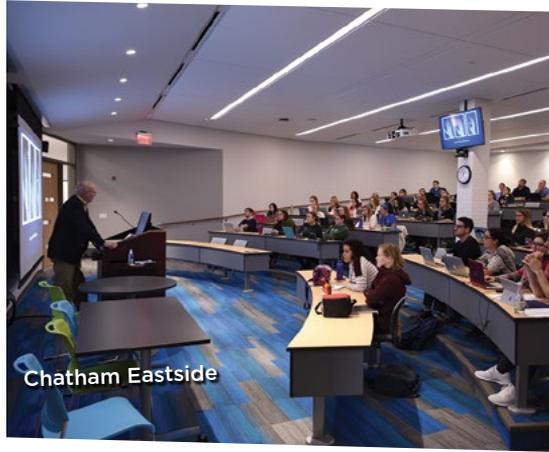
Chatham has been selected as one of the Top 50 Green Colleges by *The Princeton Review*; routinely ranks as a top university as measured by the Association for the Advancement of Sustainability in Higher Education (AASHE)'s Sustainability Tracking, Assessment & Rating System (STARS); and was mentioned in a 2012 *Forbes* article as one of the places “contributing to Pittsburgh's transformation into a destination for green living.”



“I feel better equipped to educate not just my family, but our school and our community as well so they can be more sustainable.”

—Sustainable Leadership Academy Participant





A WIDESPREAD COMMITMENT

Chatham was one of the first signatories of the American College and University Presidents Climate Commitment, committing to reducing greenhouse gas emissions and achieving climate neutrality. **Chatham Eastside**, located in East Liberty, is a LEED Silver renovation that reclaimed a former manufacturing facility and features sustainable design, recycled materials, and energy-efficient lighting.

Highlights of the **Shadyside Campus**, which features a 32-acre arboretum, include:

- Solar thermal water heating in two residence halls (the largest such installation in Pennsylvania)
- 100 percent of electric power purchased from a Green-e Certified mix of renewable energy, including wind-generated sources
- The elimination of chemical herbicide and pesticide use while implementing green cleaning products
- Food waste composting and recycling cooking oil as biofuel
- The elimination of selling bottled water on campus
- A Bicycle Friendly Business and University designation as the first employer in the state to offer tax breaks to employees who bike to work

“We stand now where two roads diverge. But unlike the roads in Robert Frost’s familiar poem, they are not equally fair. The road we have long been traveling is deceptively easy, a smooth superhighway on which we progress with great speed, but at its end lies disaster. The other fork of the road – the one less traveled by – offers our last, our only chance to reach a destination that assures the preservation of the earth.”

Rachel Carson,
Pennsylvania College for Women (now Chatham University) Class of 1929







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