

Green Building Alliance

Education & Trainings

Course Catalog



Green
Building
Alliance

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ABOUT GREEN BUILDING ALLIANCE

Founded in 1993, Green Building Alliance (GBA) is an independent 501(c)3 nonprofit organization—and one of the oldest regional green building organizations in the United States. We proudly serve 26 counties of Western Pennsylvania, with stakeholders across the Mid-Atlantic, United States, and the world. GBA advances innovation in the built environment by empowering people to create environmentally, economically, and socially vibrant places.

MISSION & VISION

Our vision is that every building and community is healthy, efficient, resilient, and sustainable so that people and the economy can thrive. We positively transform the world through the built environment to create a sustainable, healthy, resilient, and economically vibrant future for everyone.

We work with businesses, schools, and entire communities to create spaces where people live, work, and learn that are energy efficient and as healthy for people as they are for the environment. We champion cutting-edge research while equipping practitioners to design, power, and operate the most advanced buildings in the world. Our aim is to definitively transform how we build communities, from the materials we use, to the structure of buildings, to the plans and policies that set new standards for the future.

GBA is proud to employ a group of passionate and experienced professional staff members, each of whom offers unique expertise and perspectives. While all GBA staff members share a deep interest in the environment and a commitment to green building and sustainable development practices, their backgrounds include: construction, engineering, community engagement, environmental studies, and more.

READY TO GET STARTED?

Contact us for more information on how to take advantage of courses, trainings, and personalized content Green Building Alliance can provide to you and your team.

Email: info@gba.org

Call: 412-773-6000

Visit: gba.org

TRAINED BY GBA

By working with employers, unions, and individuals seeking professional development, GBA has helped employees from the following organizations and more obtain their green building credential.



WORKFORCE DEVELOPMENT

Through our **Workforce Pathways Initiative**, GBA engages with residents in counties across Western PA, including **Allegheny, Beaver, Fayette, Greene, Washington** and **Westmoreland** counties, to provide workers and students with training, credentials, and knowledge to pursue **well-paying jobs** in the rapidly growing green building design, operations, services, and construction sector.

In partnership with regional trade unions, workforce development boards, private employers, PA CareerLink Agencies, high schools, technical institutes and community and technical colleges, GBA conducts green building trades seminars, facilitates career exploration, presents **industry-recognized upskilling** programs, and helps participants **develop in-demand skills** that position them to **thrive in the green building and clean energy workforce**.

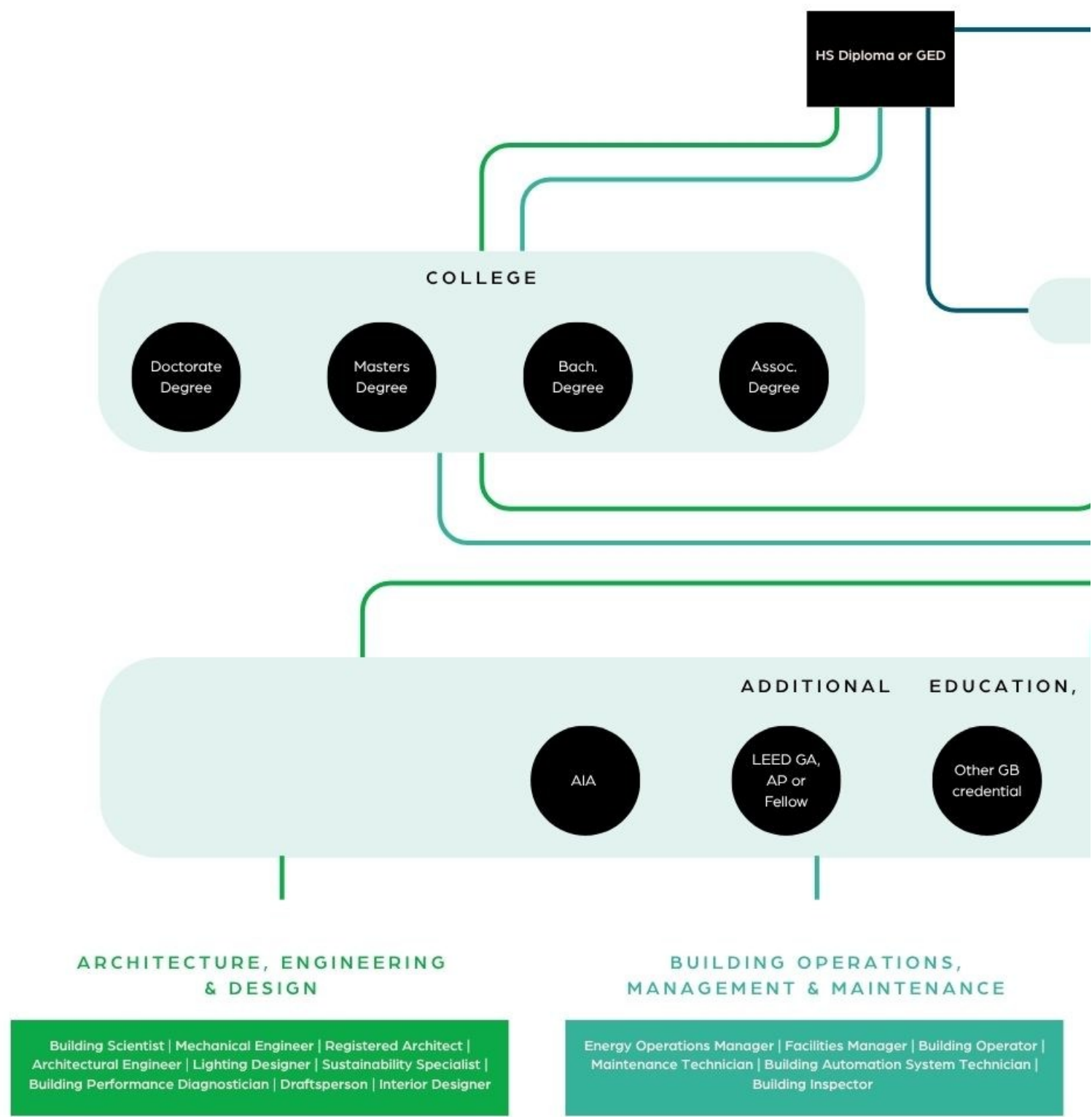
GBA also coordinates and hosts **youth workforce training** seminars and high school educational conferences to increase environmental literacy and **exposure to green building, sustainability, and clean energy careers**. Seminar and conference curriculum provides foundational green skills workforce training, fosters interest in the green construction industry, and prepares youth for a sustainable future.

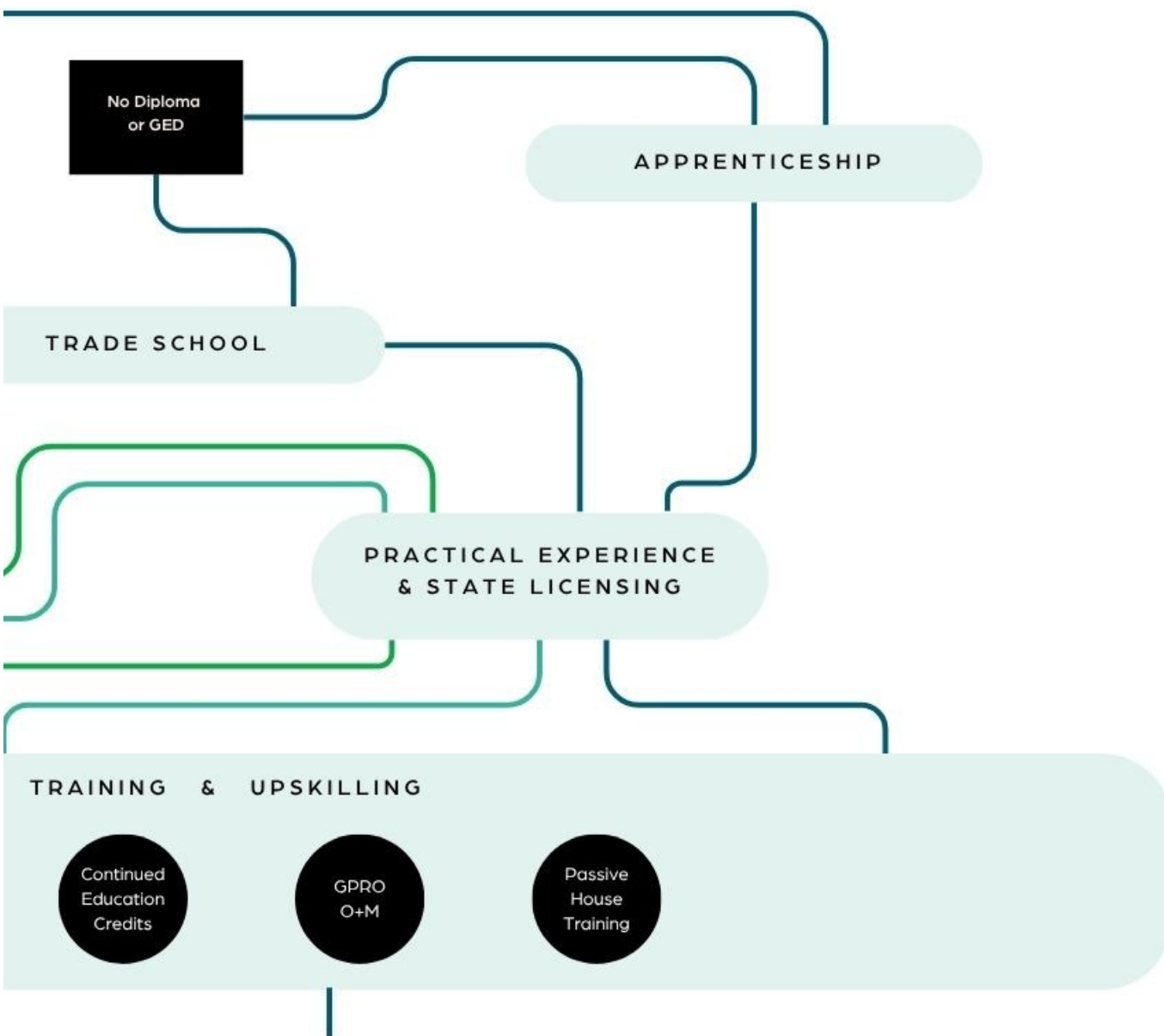
Our programs provide certification training and upskilling to **enhance skills** in high performance design and construction, and energy-efficient building operations, **connect trained individuals with employers** in the green building and clean energy industries, and **support career progression** by providing workers and students with transferable and stackable skills and credentials.

To address workforce challenges and barriers in our region, GBA is proud to partner with regional and local organizations to conduct outreach and engagement with marginalized communities.

The following catalog contains the **classes and trainings facilitated by GBA staff**. While some courses are offered publicly a few times a year, **private trainings are available upon request**. Private sessions may be hosted virtually or in-person. In addition to **discounted prices for GBA Members**, K-12 students are taught at no charge, and scholarships are available for all trainings offered.

GREEN BUILDING CAREER PATHWAYS





CONSTRUCTION & TRADES

Building Performance Contractor | Building Code Official | Construction Manager | Sustainable Construction Supervisor | Mechanic | Electrician | Carpenter | Mason | Landscaper | Energy Installation Technician

OTHER PROFESSIONS IN GREEN BUILDING

Energy Auditor | Real Estate Developer | Real Estate Agent | Appraiser | Indoor Environmental Health Specialist | Energy Sales Representative | Sustainable Product Sales Representative | Professional Trainer | Sustainability Communications | Office Manager

GBA SPEAKERS & TRAINERS



Leslie Montgomery

Vice President of Education & Communications

LEED AP BD+C

Leslie is responsible for developing GBA's education and training. She conceptualizes different learning models while tracking the most relevant innovations in sustainable buildings. Leslie is a member of the Master Builders' Association's Green Builders Committee, and served for six years on the Board or Directors for Habitat for Humanity of Greater Pittsburgh, where she was co-chair of its Sustainable Construction Committee. Leslie holds a Masters of Science in Sustainable Systems from Slippery Rock University and a Bachelors of Science of Integrated Marketing Communications from Winthrop University.

Appropriate for: LEED GA, GPRO O+M, Green Building 101, Customized Trainings, and other speaking opportunities



Destiny Knetzer

Director of Education & Events

Over the length of her career, Destiny has been involved in the successful conception and execution of various events and programs within multiple organizations. Her work in the non-profit sector allows her to indulge in a lifelong love of learning and satisfy her passions for stewardship, placemaking, and the art of gathering. At GBA, Destiny collaborates with team members to curate events that educate and inspire others to live (and build) more sustainably. With sustainability in mind, she oversees logistics and manages the delivery of the organization's online and in-person content across all program areas.

Appropriate for: Green Building 101, Youth Engagement, Customized Tours, Presentations & Workshops



Ariel Levin-Antila

Communications Coordinator

WELL AP

Ariel assists with communication, marketing, and content creation tasks at GBA. She graduated from Dickinson College with degrees in Environmental Studies and Psychology. Ariel brings a variety of skills and interests to her role, including web design, video production, and writing. She strives to incorporate her knowledge of behavioral science into her work with sustainability and environmental justice. Ariel also manages GBA Membership with a strong focus on relationship building and member engagement.

Appropriate for: Green Building 101, Career Fairs, Customized Presentations & Workshops



Ashley DiGregorio

Senior Director of Energy and Communities

LEED GA, GPRO O+M, Zero Waste Associate

By providing technical assistance and resources to the 2030 District and Resilient Communities partners, Ashley works with building owners, facility managers, sustainability personnel, and developers across Western PA to reduce their building's carbon emissions, energy usage, water usage, and improve indoor air quality. In previous roles, Ashley has collaborated with local government and institutional partners to achieve sustainability goals through various zero waste projects. She is also involved in various local boards and committees.

Appropriate for: Green Building 101, Energy Efficiency 101, Customized Presentations & Workshops, other speaking opportunities.



Tobias Chan

Director of Performance & Engagement

LEED GA

An environmental engineering graduate of Geneva College, Tobias joined GBA in the summer of 2021 as an intern while completing his Masters of Sustainability at Chatham University. Tobias then transitioned into a full-time role where he supports the education, performance, and growth of all GBA's 2030 Districts and Resilient Community territories.

Appropriate for: Green Building 101, Energy Efficiency 101, Youth Engagement, Customized Tours, Presentations & Workshops



Lisbet Searle-White

Director of Outreach & Technical Assistance

GPRO

Based primarily in Meadville, PA, Lisbet creates and maintains relationships with a variety of stakeholders as a part of GBA's Resilient Communities initiative, working across local government, commercial, educational, and nonprofit sectors. Lisbet's expertise in energy efficiency, as well as her dedication to her community, positions her to excel as a liaison and resource for those looking to gain insight into the green building sector, especially GBA's northwestern PA service territories.

Appropriate for: Green Building 101, Energy Efficiency 101, Customized Presentations & Workshops

GREEN BUILDING 101

Total Hours: 1

Exam / Credential Included: NA

Pre-Requisites: NA

Certified By: NA

Customizable: Yes

Maintenance Required: NA

COURSE OVERVIEW

Green Building 101 is a beginner level course providing foundational knowledge for understanding the green building industry and the built environment's impact on climate, the economy, and human health. This course provides an overview of key concepts such as green building best practices, trusted rating systems and certifications, healthy materials, and more.

This course can be customized to suit any age group or skill level.

SAMPLE SCHEDULE

This course is typically delivered in one 1-hour session.

10 minutes	Impact of the built environment
10 minutes	What is a green building?
10 minutes	How green buildings impact you & your health
5 minutes	Green building rating systems
10 minutes	Intro to LEED
10 minutes	Green products, materials & waste diversion
5 minutes	Local green building examples
5 minutes	Roles in a green building (building users, jobs, and more)
5 minutes	Next steps

GBA MEMBERS: \$30 per person

NON-MEMBERS: \$50 per person

Offered publicly 2x per year, private classes upon request with a minimum of 10 people

Free for K-12 students and can be customized to grade-level

ENERGY EFFICIENCY 101

Total Hours: 1

Exam / Credential Included: NA

Pre-Requisites: NA

Certified By: NA

Customizable: Yes

Maintenance Required: NA

COURSE OVERVIEW

Energy Efficiency 101 details simple strategies for understanding, managing, and **reducing energy and water use** within buildings. This course covers energy and cost-saving strategies for the **building envelope** (walls, roofing, windows); heating, ventilation, and cooling (**HVAC**) systems; office equipment and **plug loads**; and **lighting**. Content from this course is applicable for all building use types, including commercial, small business, multifamily residential, hospitals, nonprofit, K-12 schools, higher education, and manufacturing.

SAMPLE SCHEDULE

This course is typically delivered in one 1-hour session.

10 minutes	Introductions & how energy is used in buildings
10 minutes	Building envelope
20 minutes	Equipment, plug loads & lighting
10 minutes	Water efficiency
10 minutes	Q&A and closing

GBA MEMBERS: \$30 per person

NON-MEMBERS: \$50 per person

Offered publicly 2x per year, private classes upon request with a minimum of 10 people

GETTING STARTED WITH GREEN BUILDING

Total Hours: 3

Exam / Credential Included: NA

Pre-Requisites: NA

Certified By: Urban Green Council

Customizable: Yes

Maintenance Required: NA

COURSE OVERVIEW

Getting Started with Green Building helps participants explore and understand the high-performance building industry, its goals, and **many opportunities**. In this course, discover an array of career paths in **construction**, building **design**, and **operations & maintenance**. Those entering the workforce or interested in exploring careers in the green building industry can expect to leave this class with a deeper understanding of key systems that contribute to **high-performing buildings**, as well as the wide variety of **critical jobs and skills** needed to design and operate efficient buildings.

SAMPLE SCHEDULE

This course can be delivered in one 3-hour session, or multiple 1-hour sessions.

20 minutes	The what and why of green building
20 minutes	The whole building approach
20 minutes	The green building workforce
20 minutes	Industry innovations driving job growth
20 minutes	Careers in real estate
20 minutes	Careers in design
20 minutes	Careers in construction & construction management
20 minutes	Careers in building operations
20 minutes	Careers in the broader green building ecosystem

GBA MEMBERS: \$100 per person

NON-MEMBERS: \$150 per person

Offered publicly 2x per year, private classes upon request with a minimum of 10 people

LEED GREEN ASSOCIATE

Total Hours: 8

Exam / Credential Included: Yes

Pre-Requisites: NA

Certified By: USGBC/GBCI

Customizable: Yes

Maintenance Required: Yes, annual continued education required.

COURSE OVERVIEW

The Leadership in Energy and Environmental Design (LEED) Green Associate (GA) credential denotes a **basic understanding** of green building design and construction and serves as the **first step for professionals** pursuing a more advanced LEED Accredited Professional (AP) specialization. This course teaches the **core concepts** of the U.S. Green Building Council's (USGBC) LEED certification program and helps participants effectively navigate both **requirements and practical context** relating to the LEED **Building Design and Construction** (BD+C) rating system. Through this course, participants will build a strong foundation towards successfully passing the LEED v4 Green Associate exam.

SAMPLE SCHEDULE

This course can be delivered in one 8-hour day, two half-days, or four 2-hour sessions.

1 Hours	Introductions, housekeeping & material review
2 Hours	Integrative process, location & transport, sustainable sites
2 Hours	Water efficiency, energy & atmosphere, materials & resources
2 Hours	Indoor environmental quality, innovation & regional priority
1 Hour	Closing questions & reflections

GBA MEMBERS: \$450 per person

NON-MEMBERS: \$600 per person

Offered publicly 2x per year, private classes upon request with a minimum of 10 people

GPRO OPERATIONS & MAINTENANCE

Total Hours: 8	Exam / Credential Included: Yes
Pre-Requisites: NA	Certified By: Urban Green Council
Customizable: Yes	Maintenance Required: NA

COURSE OVERVIEW

GPRO Operations & Maintenance (O+M) training equips **facility and custodial teams** with practical, actionable, and affordable strategies for improving **energy efficiency**, reducing **water use**, and improving **indoor air quality**. This course will help facility teams identify ways to **reduce energy and water demand and cut utility costs** as well as strategies to create **healthier indoor air** quality by addressing cleaning products, chemical use, pest management, ventilation and air filtration, and more. This course focuses on **preventative maintenance**, offers best practices developed by **green building facility experts**, and provide opportunities to share lessons learned and questions with peers.

SAMPLE SCHEDULE

This course can be delivered in one 8-hour day, two half-days, or four 2-hour sessions.

1 Hour	Performance metrics
1 Hour	Building envelope
1 Hour	Water use
1 Hour	Heating, cooling, and hot water
1 Hour	Indoor air quality
1 Hour	Lighting
1 Hour	Resiliency
1 Hour	Commissioning existing buildings

GBA MEMBERS: \$300 per person

NON-MEMBERS: \$350 per person

Offered publicly 2x per year, private classes upon request with a minimum of 10 people

PASSIVE HOUSE TRADESPERSON TRAINING

Total Hours: 40

Exam / Credential Included: Yes

Pre-Requisites: NA

Certified By: Passive House Institute

Customizable: No

Maintenance Required: Yes, annual continued education

COURSE OVERVIEW

Passive House (PH) is the world's most rigorous building energy standard, and principles of PH design can be applied to support **Net Zero Ready** Building policies and **climate-ready design** guidelines. This training combines lectures and hands-on learning to prepare contractors, developers, project managers, and tradespeople to build to the PH standard and become officially certified as a PH Tradesperson. PH design **optimizes light, air, and thermal energy, reducing a building's energy use**. PH principles prove especially lucrative in the commercial building sector, but thorough training is required to achieve this standard. PH can also be used to **achieve other high-value green building standards** (i.e. LEED, Living Building Challenge). GBA is a local host for this training provided by **Emu Passive©**

SAMPLE SCHEDULE

This course includes two lecture days, two workshop days, and one exam day.

Day 1	Building science basics, insulation, thermal bridging, windows/doors
Day 2	Retrofits, air & moisture, ERVs/HRVs, heat pumps, quality control
Day 3	Passive House Pod Workshop: Air sealing, windows, insulation
Day 4	Passive House Pod Games: Smoke test, infrared, resiliency test
Day 5	Testing

GBA MEMBERS: \$2490 per person

Private classes available upon request with a minimum of 20 people

BUILDING CAREERS COHORT

Total Hours: 28

Exam / Credential Included: Yes

Pre-Requisites: NA

Certified By: USGBC or Urban Green

Customizable: No

Maintenance Required: Yes, annual continued education

COURSE OVERVIEW

There is a growing demand for buildings that use sustainable and healthy products, deliver reduced utility and operating costs, can withstand extreme weather and emergency events, and reduce carbon emissions. This in turn is **driving demand across industries** for a workforce with the training and skill to design, construct, and operate those buildings. This cohort aims to provide **career exposure** and **certification training**; upskilling in sustainable design, construction, and energy-efficient building operations; and the opportunity to **network and connect** with peers and green building industry experts.

SAMPLE SCHEDULE

This cohort takes place one day per week, over the course of seven weeks.

Week 1	Orientation: <i>Getting Started with Green Building</i>
Week 2	<i>GPRO</i> or <i>LEED GA</i> training (TBD by class Week 1)
Week 3	<i>GPRO</i> or <i>LEED GA</i> training
Week 4	<i>GPRO</i> or <i>LEED GA</i> training
Week 5	<i>GPRO</i> or <i>LEED GA</i> training
Week 6	Study group, office hours & exam week
Week 7	Building tour, professional Q&A Panel, networking happy hour
Ongoing	GBA Membership, 1:1 exit interview, 1 add'l credential training (opt.)

Note: *Participants are required to attend at least one Green Building Alliance public education event (free of charge) during the seven weeks to supplement their learning.*

GBA MEMBERS & NON-PROFITS: \$450 per person

NON-MEMBERS: \$600 per person

Offered publicly every six weeks, by application only. Scholarships available upon assessment.

CUSTOMIZED LEARNING

OVERVIEW

Green Building Alliance seeks to develop knowledgeable champions for sustainability through **professional trainings that build hard and soft skills**. We are proud to offer custom curated learning to organizations looking to develop their team's skills, obtain industry trainings and credentials, and align passions and purpose.

We are able to customize any of the currently offered trainings (i.e. LEED GA, GPRO O+M, etc.) in a format that works best for your team and schedule, or design a custom cohort to fit your needs.



SCHEDULE

The schedule for private trainings is customizable and can be delivered in either one complete session, or broken up into multiple sessions, based on your team's needs.

GBA MEMBERS: Starting at \$200 per person

NON-MEMBERS: Starting at \$250 per person

Private, custom trainings available upon request with a minimum of 10 people

GREEN & HEALTHY SCHOOLS

GREEN & HEALTHY SCHOOLS ACADEMY (GHSA)

The Green & Healthy Schools Academy promotes vibrant, healthy, and high performing schools and environmental education through training, technical assistance, and engagement with educators, administrators, students, and school board members. Our team works across multiple areas to improve classrooms and learning spaces and make our schools more resilient. We provide tailored programs that educate and inspire K-12 students and educators on sustainable practices and environmental education.

From training staff in green building operations, to enabling high school students to achieve their own credentials, GBA can create custom trainings or experiences for any school stakeholder.

GPRO O+M FOR SCHOOLS

Like the traditional GPRO training, this course helps facility teams identify ways to reduce energy and water demand, cut utility costs, and create healthier indoor air quality. While content includes information that facility members of any building type will find useful, this course contains customized information especially relevant to preK-12 school teams and the unique needs and challenges of school/classroom spaces.

Total Hours: 8

Pre-Requisites: NA

Customizable: Yes

Exam / Credential Included: Yes

Certified By: Urban Green Council

\$200 per person *with a minimum of 5 people*

CURRICULUM SUPPORT & TOPICAL PRESENTATIONS

GBA assists educators and administrators in meeting their PA Department of Education standards, particularly in Career Education and Science, Technology, Engineering, Environmental Literacy, and Sustainability (STEELS) standards. This can include technical assistance in curriculum development and train-the-trainer sessions in which we teach teachers how to deliver our content. We can also customize topical lectures and presentations to deliver to faculty, parent groups, and students. Topics include healthy indoor learning environments, green cleaning, sustainability career exposure, energy efficiency for schools, and more.

YOUTH CAREER EXPOSURE

CAREER FAIRS & YOUTH CONFERENCES

GBA works with partners to host or attend career fairs and conferences for youth who are interested in diving deeper into the topic of green buildings and related career opportunities. We share details about green buildings, career pathways, how roles in green building are addressing climate change and improving quality of life in our communities, and provide next steps toward pursuing these jobs.

GREEN BUILDING 101

Appropriate and customizable for all ages, GBA offers this beginner level course features an introduction to green building and green building careers.



BUILDING TOURS, PRESENTATIONS & WORKSHOPS

We host student groups on field trips of GBA's own LEED Platinum-certified office space or other regional green buildings, create custom topical presentations, bring hands-on demonstrations and interactive lessons, and can present game-like learning to your students!

LEED GREEN ASSOCIATE (GA)

We help prepare students for green building careers and enable them to leave high school with a stackable professional credential. The LEED GA credential communicates a strong knowledge of green building and sustainable development to potential employers and is a great fit for those pursuing a deeper understanding of green buildings and professional credentials under the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Rating System—the world's leading green building standard for healthy, high-performing buildings.

Total Hours: 8

Pre-Requisites: NA

Customizable: Yes

Exam / Credential Included: Yes

Certified By: USGBC/GBCI

Free for HS Students *thanks to generous funding provided by the PA Department of Labor*

GENERAL EDUCATION & EVENTS

TOPICAL LECTURES & PRESENTATIONS

GBA offers informative and educational **public programming** in a range of topics at the intersection of design, construction, operations, climate, human health, and economy. By **exploring projects** that demonstrate a more sustainable future, we create ways for regional experts as well as current and future leaders of high-performance building to **learn** from and **inspire** one another.

All General Education opportunities are eligible for **continued education credits** needed for annual credential maintenance through GBCI or AIA.

ACCELERATE TO ZERO (A TO Z) BUILDING TOURS

Led by building project and operations teams, building tours offer attendees the opportunity to explore **real world demonstrations** of green buildings. Attendees are able to ask everything from **A to Z**. Topics presented during tours are also integral to green building goals focusing on energy efficiency, water conservation, improving indoor environmental quality, and decarbonization (**Accelerating to Zero**).

HEALTH IN THE BUILT ENVIRONMENT

The Health in the Built Environment Series serves as a platform for **industry experts** to draw connections and spark conversation about the relationship between **public health and the built environment**. Since the launch of the series in 2019, GBA along with our speakers and audiences, has explored topics including Green Building Wellness Standards, Healthy Building Materials, Biophilic Design, Green Cleaning, and Native & Sustainable Landscapes.

GBA SPECIAL EVENTS

In addition to GBA's robust calendar of trainings and public education offerings, special events offer dynamic opportunities for **networking, connection, and career growth**, all while showcasing the latest in **regional industry innovation**. Signature events like *Emerald Evening*—our annual gala known for its **unmatched networking**—Inspire Speakers Series, Harvest Dinner, Green Building Expo and other special events create powerful moments of inspiration and collaboration that **drive both personal and professional advancement**.