



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<p>Following is a selection of courses Built Environment Plus (BE+) offers for the Commonwealth of MA's Workforce Training Fund's General and Express Programs and to the general public. To date, only a selection of the courses have been approved for the Express Program. Please contact Allison Zuchman with inquiries or to express interest: <a href="mailto:allison@builtenvironmentplus.org">allison@builtenvironmentplus.org</a>, (617) 752-2422. For more information on Built Environment Plus visit: <a href="https://builtenvironmentplus.org/">https://builtenvironmentplus.org/</a></p>					
<b>LEED Green Associate Exam Prep</b>	8	This LEED Exam Prep Course is a comprehensive course which will prepare attendees for the Green Associate exam. The day long curriculum is designed to cover the segments of the Green Associate Exam and to lightly cover the AP specialty exams. It will be a fast-paced class for real estate professionals, architects, engineers, and anyone else interested in green building practices and LEED. The majority of attendees have little previous knowledge of the LEED rating system, green building operations and green building construction. Upon completion of the class you will be eligible to sit for the LEED Green Associate exam at a local testing center.	YES	1131031	\$699
<b>LEED Building Design + Construction</b>	8	With this LEED AP Building Design and Construction training, you will know the requirements and calculations required for the following LEED credits: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, and Indoor Environmental Quality. You'll learn and practice the three exam areas – Recognition, Application, and Analysis, as well as be able to identify the key components of the LEED BD+C Rating System. Upon completion of the class you will be eligible to sit for the LEED BD+C exam at a local testing center.	YES	1131071	\$699
<b>LEED Interior Design + Construction Exam Prep</b>	8	With this LEED AP Interior Design and Construction training, you will learn the requirements and calculations required for the following LEED credits: LEED Process Integrative Strategies, Location and Transportation, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Upon completion of the class you will be eligible to sit for the LEED ID+C exam at a local testing center.	YES	1131175	\$699
<b>LEED Neighborhood Development</b>	8	With this LEED AP Neighborhood Development training, you will learn the requirements and calculations required for the following LEED credits: Smart Location & Linkage, Neighborhood Pattern & Design, Green Infrastructure & Buildings, Project Surroundings and Public Outreach. Upon completion of the class you will be eligible to sit for the LEED ND exam at a local testing center.	YES	1131176	\$699
<b>LEED v4 Project Management</b>	8	With this LEED Project Management training, you will learn how to facilitate an eco- charrette, navigate LEED Online, troubleshoot potential setbacks, develop tools for managing the documentation process (and use existing available tools) and evaluate the cost-to-benefit ratio of various design strategies. As part of the workshop, participants will take part in a mock LEED charrette in which we complete a detailed evaluation of how specific changes in the design of the project would affect key LEED BD&C credits. Upon completion of the class you will be eligible to sit for the LEED O+M exam at a local testing center.	NOT YET	—	—
<b>LEED v4 Healthcare: An Expert's Synopsis</b>	8	With this LEED Healthcare training, you will learn how to set objectives, establish criteria and plan integrative processes to achieve effective project collaborations and advance LEEP IP aims, understand how common vocabulary helps to discover contrasting environmental, social and economic perspectives, identify stakeholder interests and support productive outcomes, activate self-awareness to recognize and manage personal emotional triggers that endanger or block integrative relationships, as well as using collaboration-focused questions in the search for excellence in high performance building design, delivery and operations to produce healthy, enjoyable and inspiring green environments.	YES	1131179	\$699



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<b>LEED Materials</b>	2	This course provides an overview of the LEED v4 material credits, including life cycle assessment, environmental product declarations, raw materials, material Ingredients, and low-emitting materials. It covers the tools and knowledge necessary to integrate the materials credits into a project. Students will learn to identify appropriate materials and emissions criteria documentation required to meet targeted LEED v4 credit paths/options They will also understand how to implement tools and processes shared to guide the design team in LEED v4 materials research and specification development. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135184	\$175
<b>LEED for MEP Engineers</b>	2	This course provides an overview of the LEED Rating system's energy, indoor environmental quality and plumbing credits. It drills down into what building engineers need to know to optimize LEED certification. Students will gain an understanding of energy modeling criteria, building energy metering requirements, refrigerant management and grid harmonization strategies. They will learn the fundamentals of potable water-use reduction and water metering. Finally, they'll become familiar with indoor air quality and thermal comfort requirements while also diving into lighting, daylight and views. This course is intended for building design engineers. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135183	\$175
<b>Subcontractor LEED Documentation</b>	8	Submitting for credit compliance can seem overwhelming. What documents do you need and when? With this interactive course, you will learn the documents needed for submission. The following areas will be covered: <ul style="list-style-type: none"> <li>- New Construction and Major Renovations</li> <li>- Core and Shell</li> <li>- Existing Buildings: Operations and Maintenance</li> <li>- Commercial Interiors</li> <li>- Schools</li> <li>- Retail</li> <li>- Healthcare</li> <li>- Neighborhood Development</li> </ul>	NOT YET	—	—
<b>LEED for Homes Workshop: Part 1</b>	4	With this LEED AP Homes training, you will learn how to ensure your next project is healthy, efficient, built to last and affordable through using the LEED rating system and third party performance testing during the construction process. Project types include affordable housing, single family, duplex, multifamily, midrise and all mixed-use buildings up to 12 stories tall. Upon completion of the class you will be eligible to sit for the LEED Homes exam at a local testing center. Part 1 provides an overview.	YES	1131147	\$350
<b>LEED for Homes Workshop: Part 2</b>	4	With this LEED AP Homes training, you will learn how to ensure your next project is healthy, efficient, built to last and affordable through using the LEED rating system and third party performance testing during the construction process. Project types include affordable housing, single family, duplex, multifamily, midrise and all mixed-use buildings up to 12 stories tall. Upon completion of the class you will be eligible to sit for the LEED Homes exam at a local testing center. Part 2 goes into more depth.	YES	1131149	\$350
<b>Intro to WELL Building Standard</b>	2	The Introduction to the WELL Building Standard provides an overview of the WELL Building Standard ideology, structure, and certification process. The medical basis for the concept categories is introduced along with design and construction strategies to create healthy buildings. This training will introduce how to reinvent buildings that are better for both people and the planet using the WELL Building Standard as the framework.	YES	1131150	\$175
<b>WELL AP Exam Prep Course: Part 1</b>	4	The new WELL AP exam will evaluate your practical knowledge and understanding of WELL v2. Part 1 of the course will help you prepare for the new WELL AP exam by identifying the reference documents which the WELL AP exam is based on. Part 1 of the course will cover in depth the knowledge and skills needed to prepare for the WELL AP exam across the first 5 of 11 content areas (the 10 WELL v2 concepts and their features, and WELL certification). Lastly, this course will review what to expect from how the new WELL AP exam is structured, and the types of questions to anticipate. Upon completion of the course, it is strongly recommended to continue studies with the guidance and content covered within the course prior to sitting for the WELL AP exam.	YES	1131151	\$350



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<b>WELL AP Exam Prep Course: Part 2</b>	4	The new WELL AP exam will evaluate your practical knowledge and understanding of WELL v2. Part 2 of the course will help you prepare for the new WELL AP exam by covering in depth the knowledge and skills needed to prepare for the WELL AP exam across the remaining 6 of 11 content areas (the 10 WELL v2 concepts and their features, and WELL certification), picking up on what was not covered in Part 1 of this course. Lastly, this course will review what to expect from how the new WELL AP exam is structured, and the types of questions to anticipate. Upon completion of the course, it is strongly recommended to continue studies with the guidance and content covered within the course prior to sitting for the WELL AP exam.	YES	1131152	\$350
<b>Fitwel</b>	2	Fitwel is a building rating system for commercial interiors and both multi-tenant and single-tenant existing buildings that provides guidelines on how to design and operate healthier buildings. Fitwel addresses health as an interconnected system, with no single dominant category or area of focus, and as such all strategies are voluntary. The course will cover the Fitwel Scorecards, Fitwel Star System and the seven Health Impact Categories.	YES	1131183	\$175
<b>Intro to SITES</b>	2	The Sustainable SITES Initiative is the most comprehensive system for creating sustainable and resilient land development projects. Land is a crucial component of the built environment and can be planned, designed, developed and maintained to protect and enhance the benefits we derive from healthy functioning landscapes. Participants will learn how to create ecologically resilient communities and benefits the environment, property owners, and local and regional communities and economies.	YES	1131182	\$175
<b>Ecodistricts: A New Model of Urban Re-Generation</b>	4	In this workshop you'll discover a framework to transform existing neighborhoods through the lens of Equity, Resilience and Climate Change and a process to create a roadmap and structure for communities to move forward. This hands-on workshop will help you understand how to develop an action plan for how to move communities forward. The EcoDistrict processes a template for bringing together community leaders, developers, architects and planners to envision and create sustainable neighborhoods, working at the district or neighborhood scale. The EcoDistrict Protocol has been successfully used in a number of communities, ranging from new community development projects to existing densely populated neighborhoods, to build a community vision and plan for how to meet that vision. The protocol is not a checklist or a set of targets, but rather a framework for working as a community to define meaningful goals and appropriate actions.  Local EcoDistrict Accredited Professional Jim Newman and founder and former Executive Director of EcoDistricts.org, Rob Bennet will together, present some history, some community experiences, and a lot of information about	YES	1131191	\$350
<b>Ecodistricts: AP Exam Prep Training</b>	8	In this interactive information session intended for building industry professionals, you'll gain insight into EcoDistricts Certified — the world's only comprehensive sustainability management framework. You'll learn how to prepare a community asset map; evaluate metrics around energy, water, resiliency and equity; and determine targets for creating a vibrant community. You'll also learn how to unite stakeholders to develop sustainable neighborhoods, plan district-scale net zero systems, and develop a roadmap for planning goals and development targets. The course can be held virtually or in-person and is a combination of presentation and discussion. Upon completion, you will be eligible to sit for the online Ecodistrict AP exam.	NOT YET	—	—
<b>Intro to Living Building Challenge</b>	2	This training course will provide an overview of the Living Building Challenge - a philosophy, advocacy tool and certification program that addresses development at all scales.	YES	1131180	\$175
<b>The Living Building Challenge</b>	8	With this training course you will learn the basic knowledge of the Living Building Challenge - a philosophy, advocacy tool and certification program that addresses development at all scales. The Living Building Challenge is the built environment's most rigorous performance standard. It calls for the creation of building projects that operate as cleanly, beautifully and efficiently as nature's architecture. To be certified projects must meet a series of ambitious performance requirements, including net zero energy and waste and water, over a minimum of 12 months of continuous occupancy.	YES	1131181	\$699

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<b>Passive House 101: An Introduction to Passive Buildings</b>	2	In this course, we will provide an overview of the Passive House building standard including certification metrics, common design elements, and net-zero potential, as well as the impacts Passive House has on carbon and health. Examples of various building types will be presented and information on funding opportunities will be provided. Get your questions answered on what Passive House is and how to achieve it, and see how it is expanding throughout the state and region. Both standards will be discussed.	YES	1131153	\$175
<b>Passive House 201: Technical Aspects of Design &amp; Construction</b>	2	This session will take a deeper look into common design & construction strategies for achieving the Passive House standard. Concepts will include building envelope & insulation, air tightness, thermal bridging, testing & verification, and mechanical systems. A brief review of Passive House basics will be included, though some familiarity is recommended. Both standards will be discussed.	YES	1131154	\$175
<b>Certified Passive House Consultant Training</b>	24	PHIUS established the CPHC® credential to distinguish accomplished passive house professionals in the marketplace. CPHCs are listed in the PHIUS CPHC database and join a robust community of passive building practitioners across North America. The CPHC exam covers basic building science, the principles of the PHIUS+ 2015 Passive Building Standard, and passive building calculations and design principles. To achieve CPHC certification, candidates must:	YES	1134101	\$2,100
<b>Introduction to the Passive House Standard</b>	4	Passive House goals and methodology change the way architects and builders think and work, making the architectural design itself a driver of climate, health, and social solutions. This is a 6-hour course that dives into the basic principles, history, certification, and the new frontiers of Passive House design as it continues to challenge and change industry expectations. All theory is then illustrated through several case studies outlining specific Passive House principles. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1135251	\$350
<b>Certified Passive House Designer/Consultant (CPHD/C)</b>	35	This training program is for building professionals working on residential, institutional, and commercial projects. It dives into what makes Passive House buildings tick and builds a foundation of knowledge and skill to integrate PHI building design standards into any building project. This course is specifically designed to teach the international Passive House Standard (PHI) to American professionals in the U.S. construction industry using IP units, and is required prior to taking the CPHD/C professional certification exam. In this course, you'll explore the Passive House principles and how they relate to, and build off of, each other. This course is offered in-person or virtual. It is a combo of lecture, discussion and problem solving. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1135246	\$2,495
<b>Introduction to Passive House Trades</b>	4	The Introduction to Passive House Trades will broadly cover the following topics: Passive House basics, review typical construction types, windows and installation, air barriers and insulation and new, innovative PH products. It is crucial when working on Passive House buildings to properly install components, understand how to correctly implement design details and assess and plan for the current and future performance of the building. This live online course is accompanied by mini video tutorials for various PH product installations, plus incorporates actual building of Passive House details relevant to the US construction industry. It is intended for building industry professionals. NOT AVAILABLE FOR GENERAL GRANTS	YES	1135247	\$350
<b>Certified Passive House Tradesperson (CPHT)</b>	23	The CPHT training ensures participants are equipped with the necessary framework and interdisciplinary skills to effectively convey the international Passive House (PH) standard. After passing the exam, CPHTs are given membership and are listed in the database on the International Passive House Institute (PHI) website for 5 years. This course teaches practical Passive House building strategies with theory – that incorporates actual building of Passive House details relevant to the US construction industry. This course has 10 units and is an in-person training with an integrated workshop. It is intended for building industry professionals. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1135881	\$2,900



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<b>Passive House Retrofits: Part 1</b>	4	In this course, participants will see how retrofitting existing buildings using the Passive House Institute EnerPHit standards breathes sustainable life into old buildings. You will learn about the EnerPHit standards and process and look at the Passive House standard from the perspective of retrofitting existing structures. We will review case studies of past retrofits, focusing on their airtightness, insulation, thermal bridge reductions, high-performance windows, and ventilation. This specialized course intended for building industry professionals is an introduction to Passive House retrofits and is part one of a retrofit series coming soon. The course can be held virtually or in-person and is a combination of presentation and discussion. NOT AVAILABLE FOR GENERAL GRANTS	YES	1135742	\$400
<b>Passive House Windows</b>	4	In this course intended for building industry professionals, topics covered include Passive House principles of high-performance windows, the effect of windows on comfort, the history of fenestration, and the characteristics of Passive House windows. You will learn how to design and install high-performance windows for Passive House buildings, review window calculations for a Passive House building, calculate the relationship between windows and thermal bridges, and check energy balances. This is a specialty course within The Passive House Network's educational offerings that consists of 4 courses that can be taken individually or as a bundled course. It can be held virtually or in-person and is a combination of presentation and discussion. NOT AVAILABLE FOR GENERAL GRANTS	YES	1135745	\$400
<b>Passive House Deep Dive</b>	16	This advanced level course is a deep dive into the PHUIS+ climate-specific building standard. It is intended for people with extensive building science experience. The course investigates real projects and solutions. Attendees will learn new technical strategies and details. They will also learn how to evaluate their projects in THERM and WUFI® Passive to ensure compliance with the PHUIS+ standard. WUFI. This course is intended for building industry professionals. This will be a live, in-person training and is a combination of presentation, discussion and project based group learning.	YES	1135244	\$1,400
<b>Envision Sustainability</b>	6	Envision is a resource for professionals involved in planning, designing, building, and maintaining civil infrastructure. It is a rating system for sustainable infrastructure. Envision provides guidelines on sustainable practices and serves not only as a planning and design tool, but also as a means of evaluating infrastructure projects once complete. It is a flexible resource that facilitates the development and maintenance of sustainable infrastructure.	NOT YET	—	—
<b>Green Professional Training (GPRO): Fundamentals of Building Green</b>	4	This training presents the basic issues applicable to citizens and most construction and building operator trades. They will then take a course of 6 – 8 class hours in their field listed below. This is followed shortly by an exam, and if they pass, they become a GPRO Certificate Holder. This certificate will demonstrate that an individual understands green buildings as it applies to one's trade and will enhance that person's ability to compete for and participate in green jobs.	YES	1131178	\$350
<b>Green Professional Training (GPRO): Operations and Maintenance Essentials</b>	12	With this GPRO training, you will learn how to use building metrics to improve performance, improve the building envelope for a healthier building, reduce water use, employ strategies for more efficient and cost-effective heating and cooling systems, manage lighting to minimize energy use while maintaining lighting quality, maintain indoor air quality for tenant comfort, reduce waste, and understand the new NYC energy auditing and retro-commissioning requirements	NOT YET	—	\$850
<b>Green Professional Training (GPRO): Construction Management</b>	10	With this GPRO training, you will learn the construction manager's role in the pre- construction phase of a project, integrating green building systems into the construction schedule, creating and using tools to implement energy efficiency strategies, communicating sustainable construction processes to subcontractors and trades, construction activity pollution prevention, construction indoor air quality, construction waste management, critical actions to ensure success during the submittals, rough-in, and fit-out phases, and implementing a post-occupancy review and assessment process.	NOT YET	—	—

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<b>GPRO: Electrical Systems</b>	10	With this GPRO training you will learn the important sustainability issues for electricians, economic opportunities for the electrical industry, the role of electrical systems within the "whole-building" approach, the key differences between green and conventional electrical products and work practices, improving efficiencies in lighting and HVAC, new technologies for distributed generation, using benchmarking and other tools to maintain building performance, the electrician's role in the building commissioning process, retrofitting existing buildings with energy-efficient technologies, and green building issues for electricians.	NOT YET	—	—
<b>GPRO: Plumbing</b>	10	With this GPRO training you will learn the important sustainability issues for plumbers, the economic advantages of adopting water-efficient technologies, key differences between green and conventional plumbing products and work practices, improving water distribution systems, alternative water supply technologies, how to interpret Energy Guide and water use rating systems, maintenance issues on common green fixtures, appliances, and systems, retrofitting existing buildings with water-efficient technologies, the plumber's role in the building commissioning process, as well as green building issues for plumbers.	NOT YET	—	—
<b>GPRO: Mechanical</b>	10	With this GPRO training you will learn how to make HVAC equipment as efficient as possible, while providing the same levels of comfort to occupants. The course gives experienced construction professionals the critical tools needed to transition from conventional practices to sustainable practices. Mechanical training will cover sustainability requirements and LEED affect mechanical trade work, critical indoor air quality assurance practices, new technologies and approaches for reducing energy use in HVAC systems, how to achieve high efficiency with mechanical insulation and HVAC controls, as well as the mechanical trades' role in testing and balancing, commissioning, and maintenance, important practices for retrofitting HVAC systems in existing buildings	NOT YET	—	—
<b>Bird Safe Design</b>	2	This class reviews the science that explains bird collisions, how to recognize hazards to birds in the built environment and shows a range of solutions and buildings that illustrate those solutions. Case studies will explore many of the currently available strategies for reducing bird mortality and how bird-friendly design can add value to strategies often deployed to control heat and light or promote security. We review the use of the LEED credit and important features of legislation concerned with bird-friendly design. Techniques now in use for evaluating the relative threat level to birds of different materials are described, along with typical results.	YES	1131195	\$175
<b>Erosion Control, Part 1: An Introduction</b>	3	Through this course you will learn the basics about erosion, sedimentation and their respective control measures, relating how LEED v4 acts as a tool to encourage the implementation of an erosion and sedimentation control plan before starting earthwork of a project, causes of erosion and subsequent problems for humans and the environment, and the preliminary studies and analysis of active and passive forces of the site before designing solutions. This training is meant for LEED professionals, architects, engineers, designers, contractors, consultants, investors, developers.	NOT YET	—	—
<b>Erosion Control, Part 2: The Tropics</b>	3	This course aims to explain the fundamentals of erosion control in a tropical setting, and how LEED v4 can have an impact on its development. Erosion problems in the tropics are described, and the appropriate erosion and sedimentation control (ESC) practices related to LEED certification are explained in detail. Technical drawings and examples are shown to facilitate comprehension of the proper implementation of ESC best practices, along with their functions, required materials and maintenance procedures. Two case studies of erosion and sediment control practices in Panama guide the technical implementation process of slope and soil stabilization. Participants should have a basic knowledge of ESC practices as requirements for the LEED v4 Sustainable Sites Prerequisite: Construction Activity Pollution Prevention, which is covered in the course "Erosion Control Part 1: An Introduction" in this series	NOT YET	—	—
<b>Buildings and Carbon</b>	4	This course will focus on climate impacts associated with carbon emissions from the built environment. It will emphasize the importance of goal setting and taking actions to manage building related carbon emissions throughout the building's life cycle.	YES	1131156	\$350



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<b>Introduction to Energy Analysis: Understanding Key Energy Modeling Concepts</b>	2	Research highlights the benefit of running a whole building energy analysis in a wide array of areas including reducing costs, improving a project's marketability, and fighting climate change. In this presentation, we will learn what an energy analysis is, methods of calculating and iterating designs through energy modeling, key metrics and inputs to optimize for maximum efficiency, and more. By calculating the energy a building consumes annually, architects can better pinpoint areas to leverage for the best outcome. We will also discuss the decision-making power that early-stage energy analysis can make, while also showcasing savings in construction and operational costs, carbon emissions, and occupant experience.	YES	1135314	\$175
<b>Introduction to Daylight and Glare Analysis: Utilizing Passive Strategies for High Performance Building Design</b>	2	Daylight Modeling is the practice of using 3D simulation software to predict the pattern of natural light used to illuminate the inside a building. Designing for optimal daylight quantity is a critical part of managing your occupant's health, happiness, and productivity. In this presentation, we will cover the concepts of 3D analysis, climate, and daylight (sDA and ASE) and the financial and social benefits of their achieving daylight targets.	YES	1135315	\$175
<b>Reducing Embodied Carbon: A Primer for Architects, Engineers, and Construction Professionals</b>	2	In construction, the issue of climate change is an impending dilemma. Buildings contribute to over 40% of the total carbon emissions in the United States. This session will walk you through integrating carbon studies for your design through all phases of a building's life cycle. We will also discuss the workflow for calculating and reducing embodied carbon, operational carbon, and various other methods which can be used to reach net-zero carbon status.	YES	1135316	\$175
<b>Incentives for Energy Efficiency</b>	3	The incentive market can get complicated with the utility, state, federal and regional programs. Taking this course can help your team stay up to date with the newest programs and what synergies you can apply to your building or project. Paperwork timelines, reports, codes and other barriers will be overviewed in the session to provide a framework to plan your future project from.	NOT YET	—	—
<b>High Performance Building Assemblies</b>	6	Why high-performance assemblies? And why now? Today we demand better thermal performance from our building assemblies than ever. But higher performance comes at a price: Designers and builders must pay attention to hundreds of hidden components. Things like corner joints. Window flashing. Hundreds of beads of sealant and runs of tape. Poorly designed, specified, or installed details in these areas can burden building owners with moisture and mold problems... façades falling to pieces... and drafty interiors that send tenants packing — sometimes, even suing.	NOT YET	—	—
<b>High Performance Building Assemblies Lab Only</b>	2	This takes each of the principles covered in the course content and implements the principles in benchtop/plan set to work.	NOT YET	—	—
<b>High Performance MEP System Design</b>	4	This course provides a conceptual overview of the different MEP systems with an emphasis on mechanical. We will look into different considerations when designing with MEP systems including; energy source, cost efficiency, longevity, sizing/modulation, location, infrastructure requirements, current regulations, considerations, designing with carbon as a priority, and electrification. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136953	\$350



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<b>Building Science Fundamentals</b>	16	Building Science Fundamentals is a seminar that teaches the basic knowledge needed to design and build durable, energy-efficient, affordable, and healthy buildings. This is an interactive sessions with where questions are encouraged. The course will discuss building science principles (such as the control of heat, air, and moisture and IAQ) and show you how to apply them to low-energy enclosure design, advanced HVAC systems, forensic investigations, and the repair and retrofit of existing buildings. Building Science Fundamentals has been attended by thousands of builders, architects, engineers, building science consultants, building code officials, facility managers, building product manufacturers, and government officials. Upon completion of the seminar, members of the American Institute of Architects (AIA) will receive 16 LU/HSW posted directly to the AIA Provider website. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1131731	\$595
<b>Renovation and Rehabilitation</b>	8	Renovation and Rehabilitation is a seminar that provides a highly interactive discussion. You have a house, you have a mess, and you want to fix it. How do you keep the rain out of it? How do you make it energy efficient, not violate the building code and not irritate your contractor and the owner? How do you not screw up the historic significance if there is any? What about apartments? What about frame houses? How do you deal with brick and masonry basement foundations from the inside? What are sacrificial mortars and renderings? Should I worry about freeze-thaw damage when I insulate on the interior? How do I insulate on the exterior of a mass wall assembly? More questions - and more answers. Upon completion of the seminar, members of the American Institute of Architects (AIA) will receive 8 LU/HSW posted directly to the AIA Provider website. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1131733	\$295
<b>Performance Tracking and Continuous Improvement (AIA 2030 also)</b>	4	The only way that a design firm can continuously improve performance across its portfolio (and remain competitive) is to track, measure and learn from past work. Firms that do this deliver more value and better quality projects to their clients. As one owner once said, "If you don't improve, you're selling us your old mistakes". The AIA 2030 Commitment program embodies this philosophy, but even if you are not an AIA 2030 Signatory firm, you can incorporate the same strategies to raise the bar of your work, differentiate yourself in a competitive marketplace and provide more value to your clients. There are two elements to explore if you are a Signatory: the use of the 2030's DDx (Design Data Exchange) web portal to track and analyze data and the organizational approach to embedding performance as a priority in project teams, as well as in your firm's culture and management. Regardless of your familiarity or participation in the 2030 program, this session will give you the tools, strategies and approaches to seamlessly build feedback loops and continuous improvement into your practice and leverage it for business development.	YES	1131192 (Part 1) 1131193 (Part 2)	—
<b>AIA 2030: Raising the Bar (B) Applied</b>	4	This session builds on the prior workshop and dives deeper into different elements, including benchmarking and goal setting, governance and structure for managing the program, and strategies for feedback loops and continuous improvement. Special attention is directed towards managing any changes that had to happen in practice or project execution. Exercises help participants understand where they are experiencing challenges and learn ways to overcome them. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136161	\$350
<b>Zero Carbon BootCamp: Becoming a Zero Hero Firm (prior name: Getting to zero /Becoming a Zero Carbon Capable Firm</b>	8	Are you a zero carbon capable design or construction firm? If not, you will quickly lose your competitive edge as more property owners are now demanding net zero energy or drastic carbon reductions. This session is a practical approach to rebooting your company, from assessing your current situation to setting pragmatic goals for the future and understanding what skills, tools or processes you need to put in place in order to achieve success. In this course, you will hear lessons learned from working with companies all over the US and will leave with strategies, frameworks and templates that you can implement immediately to differentiate yourself in an increasingly challenging market. This course can be held virtually or in-person.	YES	1135311	\$699
<b>POE</b>	4	Post occupancy assessments are the key to unlocking more value for both your client and your firm. For clients, so much happens after turnover that can impact operations and ultimately, performance so being able to conduct POEs can help your client achieve the best outcomes. For your firm, learning from your work is the only way to improve and not repeat mistakes and you can't learn if you don't look! This course takes you through the process from how to prepare (sometimes even before your project starts), different aspects of what makes great content for conducting an evaluation and how to leverage that data afterwards, including in marketing and business development. It does not matter if your clients are asking for POEs, this course will also show you how to build the demand and monetize the service.	NOT YET	—	—
<b>Designing for Future: Resilient Design</b>	4	The resilience of a building determines the psychological health of its inhabitants as well as how efficiently assets are utilized. In this course, participants will learn about the factors that need to be considered when planning a project, leverage industry frameworks to define design parameters, and redesign aspects of the project delivery process to ensure that key collaboration points optimize multi-disciplinary input. They will understand how to assess resilience in existing property as well as the scope of loss prevention techniques, such as floor barrier testing. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	—



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Sustainable Acoustics</b>	2	Acoustics is a critical component in providing a comfortable listening environment for users and is recognized by several building rating systems for sustainability and health including LEED, WELL, Fitwel, and Passive House. We will overview of acoustic principles and various ways in which sustainable design can be applied to acoustics to extend green design concepts. We will discuss the ABCs of architectural acoustics and the importance of proper acoustic design to the comfort and wellness of occupants across different types of building uses. We will discuss design strategies to help achieve the acoustics requirements of various building rating systems throughout the design and construction process. We will discuss synergies of acoustical design with other green building strategies – such as environmentally friendly materials, smarter use of energy, water and material resources and improved indoor environmental conditions – and potential tradeoffs.	YES	1131194	\$175
<b>Intro to Designing a Net Zero Building</b>	2	Participants will learn the components of Zero Net. It may seem out of reach, but firms are turning these hurdles into opportunities. Join us as we examine case studies, detailing integrated systems and creative solutions that make ZNE a reality.	YES	1131177	\$175
<b>Energy Codes</b>	2	This course introduces current energy trends, required codes, and sustainability rating systems across the U.S. and the role of ENERGY STAR Portfolio Manager. You will hear from a sustainability expert at Green Building Services about current energy performance reporting trends including federal and municipal codes and guidelines. Through this training you will learn how to identify current energy regulations and energy performance reporting trends across the United States that impact the general welfare of the community, how to describe the role of Energy Star Portfolio Manager and how to implement this energy tracking and benchmarking tool into your property or project to promote all feasible means of energy conservation.	YES	1131197	\$175
<b>Sustainable Lighting Design 1</b>	2	What makes for a good luminous environment? How does the quality of a luminous environment impact humans and ecosystems? This session introduces methods for designing lighting using core principles of perception and lighting to create lasting, energy efficient environments that equitably support people's biological and psychological needs, bring us joy, and minimize harm to other humans and non-humans. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135285	\$175
<b>Sustainable Lighting Design 2</b>	2	Lighting, as the first major use of electricity, has contributed considerably to global warming through high energy use, as well as requiring toxic materials to produce effective illumination. As new technologies have drastically reduced power requirements, new considerations have emerged, including the reduction of light pollution, responsible material use, and impacts on wildlife. Participants will learn about technological developments, critical sustainable design considerations, and methods for responsibly specifying lighting hardware. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1137182	\$175
<b>Circadian Lighting</b>	2	Since we spend around 90% of our time indoors, our lighting design, for both electric luminaires and strategic use of daylighting, is of paramount importance for our health. Participants will learn the various properties of light that are important to consider for human health, and how these can be applied. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135282	\$175
<b>Lighting: Daylighting</b>	2	In this course, participants will achieve a basic understanding of daylighting design process. They will recognize the key metrics of digital daylighting analysis, including annual simulations and glare analysis, as well as understand the basics of IES LM-83 and how it has set the standard criteria for various sustainable rating systems. Additionally, participants will utilize daylighting design strategies for architectural practice and cite examples from case studies. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135283	\$175



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Intro to Healthy Materials</b>	2	This workshop will highlight the trends and tools available to find and select healthier products. Participants will learn the key product categories and how to research and find products that are better for the environment and building occupants. The workshop will highlight the trends and the tools available to find and select healthier products, including: <ul style="list-style-type: none"> <li>- Health product declarations (HPDs)</li> <li>- Declare labels</li> <li>- C2C certification</li> <li>- Low-emitting materials</li> </ul>	YES	1131157	\$175
<b>Healthy Materials</b>	6	In this course, participants will learn which Materials and Resources (MR) credits in LEED v4 your project can easily achieve, and what you need to know to get them. The MR credits in LEED v4 move us away from single-attribute product selection, and toward having a richer set of data to make more robust product selections using multiple attributes. The following will be covered: <ul style="list-style-type: none"> <li>- Product transparency and LEED</li> <li>- Health Product Declarations and Cradle to Cradle</li> <li>- Environmental Product Declarations</li> <li>- Sourcing of Raw Materials</li> <li>- Low-emitting materials, occupant health, and LEED</li> <li>- All About VOCs: content and emissions We'll look at the things to watch out for in key product categories, and how you can identify preferable alternatives.</li> </ul>	YES	1131773	\$525
<b>Healthy Materials Lab Only</b>	4	This course requires students to roll up their sleeves and dive into Healthy Materials by applying concepts they learned in the Healthy Materials courses to their own work. At the conclusion of the course participants will be able to: <ul style="list-style-type: none"> <li>- Describe potential pathways that healthy materials follow from the selection process into projects</li> <li>- Explain how an integrated design approach can improve the material selection process</li> <li>- Explain strategies that designers can use to get products into specifications</li> <li>- Describe the challenges posed by value engineering and the impacts of regrettable substitutions</li> </ul>	YES	1131169	\$350
<b>Life Cycle Assessment &amp; Environmental Product Declarations: What You Need to Know</b>	4	Through this course you will learn the promise and pitfalls of LCA and EPDs, compare how the Living Building Challenge, Living Product Challenge, LEED and Green Globes address them and examine related advocacy opportunities, how to outline the history of political debate that surrounds Life Cycle Assessment (LCA) of building materials and emerging trends of environmental product declarations within the green building industry, and how to explain how various green building and product certifications are driving increased transparency about environmental impacts of building materials with a particular focus on LEED®, the Living Building Challenge and the Living Product Challenge.	YES	1131196	\$350
<b>Water Mapping for the Built Environment</b>	4	In this course, attendees will (1) learn about the key drivers for water conservation and efficiency, and be able to differentiate between water conservation and efficiency; (2) learn about the regulatory aspects of water efficiency and conservation specifically in Massachusetts including the Massachusetts Water Conservation Standards, and (3) be able to analyze building use schedules, develop design flows, and estimate actual flows to develop a preliminary water balance which includes estimation of consumptive and non-consumptive water uses and potable and non-potable water demands. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135291	\$350
<b>Facilities Management for Architects</b>	4	This course will explain facilities management for architects. You will learn about facilities awareness training for business managers and administrators with a focus on energy conservation, capital planning, and operational budget. You will discover how sound facilities management practices can have a positive impact on your budget's bottom line. You will also learn how to educate owner's on state of the art facilities controls, equipment, and technology.	NOT YET	—	—
Construction Business	12	The Construction Business Bootcamp will help you assess where your company is today, create a vision for the future, and take action to make your business more efficient, productive, and profitable. The course is designed for employees of small businesses who are looking for a solid grounding in the basics of running a successful construction business. We welcome employees from start-up businesses as well as folks who've been in the construction industry for a long time and are looking to improve on their business systems. This course is presented online as well as in person. Each session is paired with a homework assignment to help you apply what you are learning to your own business and develop your vision and action plan. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1135317	\$1,800



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Lead Carpenter Training</b>	6	Lead Carpenter Training is for current and aspiring Leads who are looking to build their management and leadership skills. In four (4) hour and a half long sessions, we will explore what it means to be a Lead Carpenter- the job description, how to set a project up for success, and how to lead a team. We'll also provide a portfolio of sample documents to support your process. This training is geared towards current and aspiring lead carpenters, site leads, and site supervisors in the construction trades. Our focus is on residential custom construction, although the concepts apply to many types of construction. Delivery will be via Zoom or in-person workshops with presentation and small group discussion. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1135459	\$720
<b>Performance Tracking - 2030: Part 2</b>	2	The Architecture 2030 Challenge requires tracking your portfolio of projects in the Design Data Exchange (DDx). In this class participants will understand how DDx works for tracking their own portfolio of projects and what free resources are available from AIA. They will learn how to leverage the nationwide data in DDx for marketing and evaluate different modules of organizational approaches to institutionalize carbon reduction in your process. They will also define new or shifted approaches to optimize collaboration within the design to reach 2030 goals. Part 2 goes into more depth.	YES	1131193	\$175
<b>Fundamentals of Pre-Construction and Project Management</b>	9	This interactive virtual training is targeted at emerging project managers and estimators. Over the course of six weekly sessions, participants will learn the fundamentals of good pre-construction and project management practice. The sessions will be virtual and live, combining presentation with hands-on exercises and group discussion. Participants will be provided with assignments between sessions, tools, and templates. NOT AVAILABLE FOR GENERAL GRANTS	YES	1135951	\$900
<b>High-Performance Building for Carpenters</b>	24	This course teaches carpenters how to apply fundamental building skills to high-performance construction projects. Topics focus on the four layers of a high-performance house: water, air, vapor, and thermal. Throughout the 8-week course, students will learn high-performance essentials through building science lessons and hands-on practice with mock-up assemblies. The multi-faceted learning approach provides carpenters with a holistic understanding of high-performance construction from building science to install. Through classroom concepts, hands-on training, and project management overview, this class is ideal for any carpenter who wants to excel in at high-performance construction. There is an additional \$580 fee for course materials. NOT AVAILABLE FOR GENERAL GRANTS.	YES	1137031	\$3,000
<b>Energy Modeling with eQuest</b>	12	Building Energy Modeling is a versatile, multipurpose tool that is used in new building and retrofit design, green certification, qualification for tax credits and utility incentives. The importance of creating energy models for a building is growing as we focus on building energy efficiency as a key strategy to fight climate change and global heating.	YES	1131170	\$699
<b>Energy Modeling with Energy Plus: Part 1</b>	8	EnergyPlus for Practitioners Part 1 of this workshop focuses on the needs of the energy modeling practitioner in order to get you up to speed and highly productive with EnergyPlus as quickly as possible. We cover the fundamentals of EnergyPlus such as geometry and internal loads while rapidly ramping up to advanced topics such as HVAC systems and controls.	YES	1131171	\$699
<b>Energy Modeling with Energy Plus: Part 2</b>	8	EnergyPlus for Practitioners In part 2 of this workshop we guide you through the complexities of the EnergyPlus syntax, input/output files, documentation, and essential software tools including the Euclid extension for SketchUp. Most importantly, we teach you how to use the available resources to teach yourself going forward. Demonstrations and hands-on exercises are used extensively throughout. By the end of the workshop, you should be comfortable with creating, running, and debugging EnergyPlus models.	YES	1131173	\$699

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Energy Modeling with Energy Plus: Part 3</b>	8	<p>In Part 3 of this workshop we tailor topics towards students' interests. Topics include:</p> <ul style="list-style-type: none"> <li>-Specific technologies or strategies (e.g., radiant heating and cooling, VRF systems, natural ventilation, etc.) that are anticipated to be critical for your upcoming projects.</li> <li>-Software tools and techniques that we use ourselves to work more efficiently with EnergyPlus.</li> <li>-Introduction to the full OpenStudio application and how to map EnergyPlus concepts to the OpenStudio interface.</li> <li>-We have developed our training materials from scratch over a period of several years based on our extensive experience using EnergyPlus to model real-world projects and helping others to do the same. This workshop should be a prerequisite for anyone planning to work with EnergyPlus regardless of what user interface you choose.</li> </ul>	YES	1131174	\$699
<b>Designing with Energy Models</b>	3	At the end of this course, participants will be able to identify design factors that affect energy performance, daylight quality, and occupant comfort. Participants will also be able to apply integrated thinking to make informed aesthetic design decisions while also being able to explain how the design decisions are interrelated in feedback loops. Lastly, you will have an understanding of how climate and program affect energy models. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135292	\$265
<b>Tools for Building Life-Cycle Assessment Course (Part A)</b>	4	Life-cycle assessment (LCA) is a critical methodology that can be used by building designers to evaluate the climate impact of their projects. Building design professionals are invited to join this course to learn an overview of LCA and how it is used within the design workflow. Through direct instruction in the LCA tool, Tally, participants will begin to understand the basics of conducting an LCA for a building. Also, through live demonstration, participants will be introduced to the Embodied Carbon in Construction Calculator (EC3) Tool, a free and open-source database of environmental product declarations (EPDs). To reinforce the introduction of both tools, participants will have the opportunity to complete a practice exercise at home.	YES	1135248	\$350.00
<b>Tools for Building Life-Cycle Assessment Course (Part B)</b>	4	Building design professionals are invited to join Part II of this course to expand on the concepts and tools introduced in Part I. Through in-tool demonstration, participants will learn advanced features of the LCA tool, Tally, and the specification and procurement tool, EC3. Participants will learn how to interpret LCA results and use the output to meet LEED credit requirements. During this session, participants will learn how these tools can inform design decisions and project specifications to achieve a reduction in the embodied carbon of their buildings. Participants will also be introduced to carbon baselines and benchmarks, and how they may be used in the design process.	YES	1135249	\$350.00
<b>Honeybee</b>	24	<p>This course covers the essential workflows with Honeybee. This course will cover the following:</p> <ul style="list-style-type: none"> <li>- Prepare geometry for energy simulation</li> <li>- Customize Energy Plus materials and constructions</li> <li>- Visualize and edit zone properties, including loads and schedules</li> <li>- Run an energy simulation</li> <li>- Assess adaptive thermal comfort from energy model results</li> </ul>	YES	1131362	\$1,800
<b>Ladybug</b>	8	<p>This course covers the essential workflows with Ladybug. This course will cover the following:</p> <ul style="list-style-type: none"> <li>- Import and visualize weather data</li> <li>- Calculate outdoor thermal comfort</li> <li>- Draw interactive diagrams and apply conditional statements</li> <li>- Run radiation and solar access analysis</li> <li>- Generate customized result visualizations</li> </ul>	YES	1131363	\$699
<b>Climate Studio</b>	4	Advanced daylighting and energy modeling plug-in for Rhino and Grasshopper. Allows users to carry out a series of environmental performance evaluations of individual buildings and urban landscapes including: Radiation Maps, Photorealistic Renderings, Climate-Based Daylighting Metrics, Annual and Individual Time Step Glare Analysis, LEED and CHPS Daylighting Compliance, and Single Thermal Zone Energy and Load Calculations. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	—

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Revit: Energy Analysis</b>	6	Learn how to interface plug-in energy software to explore energy efficient buildings Manipulate topography using site coordinate tools. Create advanced massing studies to iterate sustainable energy test scenarios course.	NOT YET	—	—
<b>Bluebeam Portfolio Overview</b>	6	The workshop covers the following: <ul style="list-style-type: none"> <li>- Introduction to the Revu Interface</li> <li>- Document Access and Navigation</li> <li>- Basic Document Editing and Comparison</li> <li>- Markup Tools and Markup List</li> </ul>	NOT YET	—	—
<b>Revit: Schedules</b>	3	This workshop will explore how to create schedules in Revit to extract data from the model. Will create schedules for sheet lists, doors, windows, and spaces. Topics Include: <ul style="list-style-type: none"> <li>- How to extract data from BIM to other software for processing</li> <li>- How to organize data in BIM for use in construction documents</li> <li>- How to manage and edit data in BIM</li> <li>- How to display and print data attached to elements in BIM</li> </ul>	NOT YET	—	—
<b>Revit: When to Model vs. When to Draft</b>	3	In this workshop we will look at the two different approaches to creating documents. Model based vs. 2D drafting. We will look at each approach as it applies to plans, elevations, sections, and design details. <ul style="list-style-type: none"> <li>- Understand pros/cons of 3D modeling approach</li> <li>- Understand pros/cons of 2D drafting approach</li> <li>- Understand how to use both 2D and 3D within the same project</li> <li>- Understand time requirements for each approach</li> </ul>	NOT YET	—	—
<b>Revit: Modeling Stairs</b>	3	In this workshop we will explore how to create 3D models of stairs. We'll review all the features of the tool as we explore creating both egress and ornamental stairs. We will also touch on how to add railings to stairs. <ul style="list-style-type: none"> <li>- How to create stair models for construction documents</li> <li>- How to create stair models to communicate design intent</li> <li>- How to define stair modeling systems to conform with building codes</li> <li>- How to define railing components and attach to stairs</li> </ul>	NOT YET	—	—
<b>Revit: Modeling Health</b>	3	In this workshop we will explore the best practices for reviving and maintaining Revit's database to help ensure smooth operation. Topics include purging, auditing, compacting, reviewing warnings, creating new central files, and identifying and removing unnecessary items from the model.	NOT YET	—	—
<b>Revit Warnings (in any language)</b>	2	Revit warnings in any language can be a problem and failure to manage the warnings in your Revit project could result in decreased performance or incorrect schedule data. Richard Taylor of Ideate Software will show us several tools and strategies to manage and fix warnings. This session is targeted for Revit users of all skill levels.	NOT YET	—	—

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Python Coding</b>	4	In this course students will learn the basics of python (and ironpython) languages including: syntax, available packages, example scripts, as well as invaluable resources to assist in long term learning process. Students will also be introduced to Revit API and will understand how they can use python scripts to control objects and data within revit. Students will also be introduced to Rhino API, RhinoCommon, and grasshopper and how they can use python to control objects and data within Rhino + Grasshopper. There will also be some intermediate scripting will be demonstrated, which expands functionality beyond the built-in function of Rhino, Revit, and Grasshopper.	NOT YET	—	—
<b>Intro to Rhino</b>	8	Rhino is among the most influential software programs to emerge in the community of academic and professional architectural practice. The relative strength of Rhino lies in its close command-line relationship with the AutoCAD interface widely in use in the architectural and design industry. Students will learn how to construct digital models that range from relatively simple to complex. The mathematical concepts of lofting, sweeping, cutting, splitting, and Boolean operations will be addressed as well as methods of curve construction such as sicing, sectioning, and continuous contours.	NOT YET	—	—
<b>Rhino: Grasshopper</b>	16	This course will familiarize students with the concept of parametric design, broadly defined and understood as formal investigations based on descriptive 3D modeling. The course will introduce this specialized technique using Grasshopper, a module within the Rhino modeling software, as the prime arena for these investigations. Grasshopper features an innovative interface described as a graphical algorithmic editor, one of the few of its kind in use for 3D modeling, which exposes the process and allows an explicit graphics workflow for the exploration of new ideas. The recent emergence of computational design environments has transcended architecture into various fields of science with keen philosophical implications. After this course, students will know the interface, build upon its concepts, and develop an understanding of how to process complex instructions not limited to modeling a geometric form, but to derive a solution with user-definable parameters.	NOT YET	—	—
<b>Bluebeam Advance</b>	4	Focuses on advanced features and workflows relevant to supporting AEC professionals. Concepts include stamp creation, OCR, form fields, hyperlinking automation, document set management, and a deep dive into studio.	NOT YET	—	—
<b>Revit: Dynamo</b>	12	Dynamo requires no knowledge of programming or scripting, but still allows designers to build form generators from the simple to the awe-inspiring. This course will enable students to model using algorithmic sets and maintain editing capabilities on finished models. Students will be able to understand the workflow and achieve results all natively created in Revit. <ul style="list-style-type: none"> <li>- Getting comfortable with the Interface</li> <li>- Wave creation</li> <li>- Magnetic simulator</li> <li>- Bridge Building</li> <li>- Solar design = mechanized</li> </ul>	NOT YET	—	—
<b>Revit: How to Optimize Revit on Projects</b>	6	Attendees will learn how to use the basic software package for work-sharing and collaboration as a foundation skill to improving productivity with 3D models. Learn to use visibility/graphics setting and view templates. Effectively manipulate model data for inventories, cost estimating, energy optimization.	NOT YET	—	—
<b>3DS Max Training</b>	4	This Course introduces you to the essentials of 3ds Max Design covering several topics that are indispensable for enhancing architecture. Topics include: <ul style="list-style-type: none"> <li>- Introducing 3DS Max design objects</li> <li>- Creating shapes and splines</li> <li>- Editing meshes and creating complex objects</li> <li>- Working with external design data</li> <li>- Creating aec objects</li> </ul>	NOT YET	—	—



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>vRay for 3DS Max/Rhino Training</b>	4	By the end of this course you should have an understanding and practicing the ability to create virtual environments that illustrate design intent to stakeholders. You should be able to use rendering engine technology, the instructor will explain differences between the Vray RT Rendering Engine and the Vray Next functionality throughout the course. You will learn about lighting and environment and how the environment effects the exposure and the way lighting is managed and controlled to create realistic rendering. Lastly, you will learn about Global illumination, the process of each rendering algorithm tracking light emitted from objects in the scene and how bounced light illuminates realistically will be explored.	NOT YET	—	—
<b>Enscape</b>	8	In this course participants will get an introduction to Enscape along with an overview of UI and settings. You will also learn the best practices for lighting, materials, and graphics. How to create renderings, animations, panoramas and live presentations along with the best practices for Multi-Model VR Exploration will also be covered. There will be a Q&A discussion to tailor the class for customer specific needs and workflows.	NOT YET	—	—
<b>Newforma: Project Center &amp; Info Exchange</b>	4	This course will provide an introduction to Nerforma: Project Center and Info Exchange. Participants will learn how to navigate project files, search, view and markup files. You will learn how to add contacts to the Info Exchange website to share documents as well as how to send and receive file transfers. You will also be able to manage folder and documents with Info Exchange x, add external contacts and distribution lists, annotate collaboration documents, and compare document version with Viewer and Compare tools. This course will be held in a group lecture format with be supplemented with instructor over the shoulder staff desktop application on actual project work.	NOT YET	—	—
<b>Newforma: for Construction Administration</b>	4	This course will provide an introduction to Newforma for Construction Administration. In this course participants will learn how to optimize and configure workflow, link contract management items to related documents, create log and track electronic submittals efficiently, how to receive, process and electronically stamp submittals and will learn techniques to group and track related items together. This class will be held in a group lecture format with be supplemented with instructor over the shoulder staff desktop application on actual project work.	NOT YET	—	—
<b>Sketchup: How to Optimize SketchUp on Projects</b>	6	Working with groups and components to isolate and organize geometry. Creating, editing, organizing and combining components. Modeling techniques to improve speed and accuracy. Employing enhanced presentation techniques for SketchUp models.	NOT YET	—	—
<b>Adobe Programs Productivity</b>	6	Skills for effectively building documents including proposals and marketing materials. Assemble text, images, and artwork into a digital layout. Techniques for working efficiently and collaboratively.	NOT YET	—	—
<b>Tableau*</b>	16	This course will give an overview of Tableau. At the end of this course, you will be able to connect to your data, edit and save a data source, understand Tableau terminology, use the Tableau interface/paradigm to effectively create powerful visualizations, and create basic calculations including basic arithmetic calculations, custom aggregations and ratios, date math, and quick table calculations.	NOT YET	—	—

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Powerpoint Basics for Designers and Staff</b>	4	This course will provide basics to Powerpoint for designers and staff. By the end of the course you should be able to create more effective presentations with PowerPoint, optimize the use of text and images and format and organize slides to get your message across.	NOT YET	—	—
<b>Optimally Using PowerPoint</b>	6	This will be adapted for 2 different skill levels – Beginner and Intermediate/Advanced. How to create more effective presentations with PowerPoint, optimizing the use of text and images. Formatting and organizing PowerPoint slides to get your message across. Working with graphics, tables and charts. Design, audio & video: Adding multimedia and SmartArt presentations. Animation, tables, and sharing	NOT YET	—	—
<b>Maximizing Use of Excel</b>	6	This will be adapted for 2 different skill levels – Beginner and Intermediate/Advanced. Participants will learn how to use advanced formulae and functions. Creating and manipulating charts for optimal effect. Becoming familiar with smart formatting tips, using more advanced formulas and functions (including Vlookup and HLookup). Creating Pivot Tables and its more advanced features to analyze data.	NOT YET	—	—
<b>Excel Basics for Designers and Staff</b>	4	<ul style="list-style-type: none"> <li>- Using formulae and functions</li> <li>- Creating and manipulating charts</li> <li>- Becoming familiar with formatting</li> </ul>	NOT YET	—	—
<b>Advanced Excel</b>	6	<ul style="list-style-type: none"> <li>- Using more advanced formulas and functions (including Vlookup and HLookup)</li> <li>- Organizing options – paste link, conditional formatting, conditional formulas</li> <li>- Creating Pivot Tables and its more advanced features to analyse data</li> </ul>	NOT YET	—	—
<b>Outlook</b>	6	This course will be an introduction to Outlook. You will learn how to optimally use emails, text, and images. You will be able to add signatures to emails efficiently and maximize recipient effect. You will learn about setting notifications and alarms and how to use calendar meetings and to-do lists as time savers. You will be able to set up signatures and templates to save time and send automatic replies while out of office. You will learn how to add attachments and hyperlinks to email appropriately and design Outlook personal stationery for personalization. Overall by the end of this course you will be a master of using Outlook productively.	NOT YET	—	—

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Office Tips and Tricks</b>	3	This course will be focused on learning the tips and tricks inside Office programs. You will learn shortcuts, how to set up signatures and templates, organize content for optimal use, save and reuse email content, and how to use calendar meetings and to-do lists.	NOT YET	—	—
<b>Deltek Vision: Part 1</b>	6	In this two part course you will learn all about Deltek Vision, this is part 1. The course will be split into two sections, the first being 2 hours will be all about project set up. This part will show students how to add and edit client info, add and edit project info, add phases, reimbursements, and consultants, enter timesheets, and manage employee activity. The second section will be 4 hours all about project management and reports. This will show you an overview of the dashboard, project management reports, and how to manage marketing information.	NOT YET	—	—
<b>Deltek Vision: Part 2</b>	6	In this two part course you will learn all about Deltek Vision, this is part 2. The course will be split into two sections, the first being 2 hours will be all about project set up. This part will show students how to add and edit client info, add and edit project info, add phases, reimbursements, and consultants, enter timesheets, and manage employee activity. The second section will be 4 hours all about project management and reports. This will show you an overview of the dashboard, project management reports, and how to manage marketing information.	NOT YET	—	—
<b>Designing for the Future: Resilient Design and Operations</b>	4	To prepare for risks from climate change, buildings and communities must be designed to proactively manage and withstand these conditions. Designing for resiliency is made up of three key elements: engaging your client effectively to help them understand their vulnerabilities and target areas for critical investment, understanding how to design for passive survivability or disaster and learning how to engage with your team to optimize critical collaboration points. This session will use existing resilient design frameworks and exercises so that participants can apply concepts to real world projects. This course is intended for building designers, owners and operators. It can be held virtually or in-person as combo of lecture and discussion.	YES	1134431	—
<b>Motivation &amp; Managing Change</b>	4	Institutionalizing sustainability across a company requires a strategic process of engaging all stakeholders across an organization. This workshop addresses the skills needed to make effective change, as well as the organizational approach needed to achieve implementation of sustainability initiatives. Change management programs include communications and marketing, accountability, and incentives, as well as metrics to evaluate ongoing success. Participants will understand how to overcome barriers to change, encourage engagement through a sense of urgency, and build coalitions of support. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	\$350
<b>Preparing for Change: Understanding Your Baseline and Setting Goals</b>	4	In this course, participants will develop an understanding of their current situation, the challenges and barriers they face, and the cultural and systemic dynamics that influence how they do business. Then, they will deconstruct their workflow to identify critical changes they can make to achieve their business objectives. The instructor uses this highly interactive format to introduce participants to core educational principles related to change management and organizational effectiveness. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136081	\$350
<b>Preparing for Change Advanced: Setting SMART Goals, Priorities and Strategies</b>	4	"Preparing for Change: Understanding Your Baseline and Setting Goals" is a prerequisite for this course. In this session intended for building industry professionals, we build on the first session's output and the basic education that participants received. Participants will now have an opportunity to apply these concepts to their own context, by taking the desired changes they identified, developing specific SMART goals (SMART=specific, measurable, achievable, results oriented, time-bound), and prioritizing them. This session will take participants through conducting stakeholder analysis, barrier assessment, and interest-based inquiry. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136082	\$350

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Managing Change: Establishing Fundamental Principles and Approaches</b>	4	"Preparing for Change: Understanding Your Baseline and Setting Goals" is a prerequisite for this course. This session follows what happens once an organization has established goals for what they want to achieve in the future. In these next steps, participants will learn how to assess capacity for change, understand the dynamics of past change efforts, and gain a deeper exposure to the frameworks, strategies, and case studies used to implement change successfully. This information can guide an organization in developing their approach to rolling out any new initiative. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136083	\$350
<b>Managing Change Advanced: Developing Specific Implementation Strategies, Metrics and Feedback Loops to Track Progress</b>	4	Prerequisite courses for this session: "Managing Change: Establishing Fundamental Principles and Approaches" and "Preparing for Change Advanced: Setting SMART Goals, Priorities and Strategies". Building on Managing Change, this session allows participants to apply the principles of change management that they have learned to their goals. This interactive exercise builds a deeper understanding of how to manage change effort to reduce resistance and grow buy-in. Participants also learn how to develop metrics and feedback loops for ongoing management, and how to manage encountered challenges. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136084	\$350
<b>Building Highly Effective Teams</b>	4	Project staff comes together to solve problems, design projects – but that doesn't make them truly a "team". A high functioning team can thrive when trust is built and conditions are created that are conducive to success. This workshop focuses on practical ways to structure project interactions for success as well as help people understand how to contribute most effectively given their own personal strengths and challenges. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	\$350
<b>Negotiation and Communication Skills</b>	10	Participants learn critical communication skills such as active listening and interest- based communications and fundamental negotiation skills that will help them in all aspects of their personal and professional life. These skills are necessary to overcome resistance for sustainability initiatives in particular.	NOT YET	—	\$875
<b>Negotiation Skills for Stressful Times (A) Intro</b>	7	<p>Do you encounter resistance to your ideas or feel overwhelmed dealing with conflict? Do you need to get clients, team members or others on the same page but find it challenging at times? Do you run into barriers, getting push-back about sustainability strategies? Are these challenging times forcing you to re-negotiate terms in contracts with clients, landlords or vendors? This interactive workshop will help with all of those situations and more.</p> <p>People in organizations negotiate all the time with their customers, prospects, partners, and coworkers to build relationships and achieve their desired outcomes. This workshop helps them build skills and strategies for maximizing the value developed through negotiating while building stronger relationships with the other parties involved. The session focuses on developing skills and to gain insights about customer needs and using those insights to create value for both parties</p> <p>It covers the following five topic areas:</p> <ul style="list-style-type: none"> <li>- Competitive negotiations (capturing more value and getting better outcomes)</li> <li>- Influencing skills (persuade others to do what you need them to do)</li> <li>- Negotiating styles (understanding different approaches to negotiation)</li> <li>- Collaborative negotiations (focusing on outcomes and relationships)</li> <li>- Communication (drawing out the other party's needs and communicating your ideas)</li> <li>- Preparation (doing the right homework prior to the negotiation)</li> </ul> <p>The workshop is experiential interactive, and fun, focusing on providing relevant skills that the sellers can use immediately in their work. It is delivered in three segments of roughly 2.5 hours each in a virtual format. An optional, additional 2 hour session can be scheduled a few weeks after so participants can have time to apply their learning and come back to get coaching on challenges they faced.</p> <p>Each of the three sessions covers different topic areas and can be run separately, as follows:</p> <p>Session 1: Competitive Negotiations            Session 2: Influencing Skills and Negotiating Styles            Session 3: Collaborative Negotiations, Communication Skills, and Preparation</p>	NOT YET	—	—



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Negotiation Skills for Stressful Times (B) Applied</b>	3	This session gives participants from the previous workshop an opportunity to report back on their experiences trying to put all the new communication and negotiation skills in action, and a deeper dive into the concepts to better understand how to overcome the challenges they faced so that they can be more successful. We will use specific examples of their experiences in between the workshops as material for applied learning.	NOT YET	—	—
<b>Communication Skills for Persuasion and Influence</b>	4	Many people start talking before their first birthday, so how come communication can be so difficult when we have so much experience? How can you evaluate the effectiveness of your communication style? How can you convince someone to do something? Sometimes the issue is between you and your team, and other times it is with a client or vendor. This workshop will help you build core communication skills to overcome resistance, strengthen your ability to influence others, and manage your emotions so they don't get in the way of communicating effectively. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136165	\$350
<b>Leadership Effectiveness, Especially in Times of Crisis (A) Intro</b>	8	Regardless of your current role, developing leadership effectiveness is critical for professional development. Possessing these skills help teams collaborate meaningfully to achieve more and can allow those who are not in leadership roles yet to help colleagues who are struggling. This workshop helps building industry professionals develop skills to inspire through vision, define objectives, get people moving toward common objectives, empower their teams, deal with conflict, and create a strong team culture. Participants develop a heightened self-awareness of their leadership style and learn how to adapt to the needs of people in their teams. This course can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136166	\$699
<b>Leadership Effectiveness, Especially in Times of Crisis (B) Applied</b>	2	This session gives participants from the previous workshop an opportunity to report back on their experiences working with teams and putting their skills in action. We revisit concepts from the prior workshops and take a deeper dive to better understand how to overcome the challenges they faced so that they can be more successful. We will use specific examples of their experiences in between the workshops as material for applied learning.	YES	1136917	\$175
<b>Leadership Skills &amp; Styles</b>	8	In this course, participants develop a heightened self-awareness of their particular leadership style as well as develop new skills. Most sustainability leaders come from technical backgrounds with no support for these skills and project Managers also receive little management or leadership training. This workshop helps managers at all levels develop strong skills to define objectives, get their people moving together toward common objectives, develop and empower their teams, deal with conflicts, and create a team culture. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136919	\$699
<b>Talking with Clients about Resilience</b>	8	Resilience is a complicated topic spanning physical assets, operational functions as well as the psychological needs of the occupants and community. Clients can be resistant to engaging around any one of these topics and the building design alone has a host of its own issues that trigger concerns about cost and operation. This workshop combines the two critical aspects needed to overcome the inherent challenges; first the best ways to frame issues of analysis, design and construction and second the communication strategies that will be most likely to get buy-in and engage clients productively. This is an 8 hour workshop which can be delivered in multiple sessions.	YES	1131155	\$699
<b>Building Owners Toolkit (A) Intro: Getting the Most from Your Design Teams</b>	4	Are you working with design teams who can meet the rising demands for net zero energy, carbon reduction, and resilience? Many owners and developers are not satisfied with the level of expertise of their teams. How do you determine who the capable firms are, ensure your process supports agile decision making, and know that your organization follows 'best practices'? What expectations should you put in RFPs? How do you weigh first cost against longer-term value? In addition to answering these questions and more, we will discuss resources and strategies that can be put to use immediately. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136131	\$350



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Building Owners Toolkit (B) Applied: Getting the Most from Your Design Teams</b>	4	This course builds on the previous one and participants reconvene to share back what they have done to implement items from the first workshop. We dive deeper into specific items including (but not limited to) RFP language, contracts, project roadmaps, quality control items, communication and change management approaches, internal standards and protocols and other implementation elements. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	—
<b>Strategic Thinking in Turbulent Times (A) Intro</b>	4	Strategic thinking is the ability to plan at varying scale and time frames and while it is a valuable skill for everyone in an organization, it becomes increasingly essential in leadership roles. In this course intended for building industry professionals, participants will learn how to guide the direction of teams and come up with solutions to key business problems, or help them to be promoted more quickly and add value to current work if they are not yet leaders. They will also learn how to prioritize time to consider strategy, gather data, learn from the past, create a vision for the future, and implement strategic thinking within a team. This course can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	—
<b>Strategic Thinking in Turbulent Times (B) Applied</b>	2	In this session, participants from the first workshop reconvene and use their skills to reexamine content in the context of their experiences. We will take a deeper dive into the original material's concepts, using exercises to help participants understand where they ran into problems, what challenges they had, and individual strategies to overcome them and be more successful. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	NOT YET	—	—
<b>Sustainability Strategic Planning (for 2030 program, creating your firm's SAP)</b>	4	Does your organization have goals for sustainability or a plan to achieve sustainability outcomes over time? This workshop can help you regardless of your current state. If your company is an architecture firm who is or wants to be a signatory of the AIA 2030 Commitment, this workshop can help develop a sustainability action plan. Additionally, models for sustainability leadership will be addressed to help firms determine their own approach. Lastly, you will learn how to create an effective plan and implementation roadmap as well as how to get buy-in and overcome organizational silos. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136143	\$350
<b>Conflict Management</b>	3	Conflict is a normal part of human interaction, and yet conflict in organizations creates challenges for employees and managers alike and can undermine success. This workshop helps organizations, teams and leaders build skills and strategies for managing conflict effectively. The session looks at how conflict arises, how it escalates, and how people respond to it. It helps people manage their own responses to conflict, de-escalate conflict situations, uncover the interests driving conflict behavior, and move from conflict to resolution. The workshop is experiential interactive, and fun, focusing on providing relevant skills that the people can use immediately in their work.	NOT YET	—	—
<b>Building Highly Effective Teams in Challenging Times (A) Intro</b>	4	Most teams are brought together under challenging circumstances that may cause anxiety and stress. They struggle on a daily basis with unclear goals, mixed messages, and hidden conflicts. These dynamics lead to invisible losses in companies due to a lack of efficiency and poor decision making. Teams can thrive when trust is built and conditions are created that are conducive to success. This workshop focuses on ways to structure project interactions to maximize collaboration and help people understand how to contribute most effectively to set teams up for success. Participants will have the opportunity to apply concepts through exercises. The course is intended for building industry professionals and can be held virtually or in-person.	YES	1136167	\$350
<b>Building Highly Effective Teams in Challenging Times (B) Applied</b>	2	This session gives participants from the previous workshop an opportunity to report back on their experiences leading or participating in teams and putting their skills in action. We revisit concepts from the prior workshops and take a deeper dive to better understand how to overcome the challenges they faced so that they can be more successful. We will use specific examples of their experiences in between the workshops as material for applied learning.	NOT YET	—	—



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Stakeholder Management: Navigating Complexity and Being Strategic in Challenging Situations</b>	3	Getting things done in an organization involves navigating and managing a large and complex set of internal and external stakeholders. To manage stakeholders effectively, you need to first identify who the stakeholders are, assess their impact on your objectives, communicate with them effectively, and influence their behavior. This course provides strategic frameworks, concrete tools, and practical skills to help you identify, engage with, and manage the stakeholders that impact your work. The class can be held virtually or in-person and is experiential, interactive, and fun, combining theory with activities and discussion to give you relevant, immediately applicable take-a-ways. This course is intended for building industry professionals.	YES	1135312	\$263
<b>Effective Meeting Facilitation</b>	4	In this 4-hour course instructed by the Sustainable Performance Institute, you will learn the techniques needed to foster full team participation and engagement and understand what makes a meeting effective. You will also learn how to prepare for an effective team meeting, incorporate strategies for handling meeting challenges, and develop goals and desired outcomes. This course is intended for building industry professionals. It can be held virtually or in-person and includes instructor presentation as well as application to work situations.	YES	1135313	\$350
<b>Coaching Strategies</b>	8	Learn supervisory and manager strategies in order to grow into project leadership roles such as Project Management. Understand the benefits of coaching to the individual and the firm learn messaging and delivery techniques for coaching staff. Learn and practice coaching frameworks. How to effectively deliver feedback in a constructive manner to inspire higher performance. How to seek out and receive feedback to apply to future situations to increase performance objectives. Learn and practice techniques to provide feedback objectively and interactively. Includes instructor presentation and modeling, peer coaching and feedback.	NOT YET	—	\$699
<b>Design Charrettes: A Tool to Manage Cost, Optimize Synthesis, and Achieve Excellence</b>	4	The demands for high performance, net zero, resilient design are growing. A key element to meeting these demands in the collaborative design process is the design "charrette" or workshop. Unfortunately, they often are underutilized and don't fulfill their full potential. This course is designed for owners, designers, and employees within the built environment industry who want to unlock the potential of their projects. Participants will leave with the strategies, templates, and guiding principles needed to use charrettes as a means of building effective teams, controlling costs, and coordinating strategies to keep projects on track. This course can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136162	\$350
<b>Leveraging Sustainability in Marketing and Biz</b>	4	Whether a firm is a sustainability superstar or not, now is the time to employ this focus to expand services and scope with clients. Many firms either need to leverage their notable accomplishments to tell a compelling story or learn how to position themselves where they want to be. Through a combination of presentation and discussion, this workshop teaches building industry professionals about strategies that can be employed to build a new direction. Those who are advanced in sustainability will learn how to better articulate their value proposition, and those who are less experienced will learn how to craft compelling narratives and make their firm more competitive using market information. This course can be held virtually or in-person.	YES	1136164	\$350
<b>IDP Integrative Design Process: Establishing Corporate Methodology Part 1</b>	4	Integrative design is shorthand for a group process that is optimized for input, collaboration, and synthesis. It differs from traditional project delivery in that it fosters deep team engagement and optimizes multi-disciplinary problem solving. In this session, participants will learn about the elements that should be built into project delivery to achieve the desired outcomes of synthesis and systems optimization. Additionally, participants draw upon their personal experiences in group exercises to learn strategies to incorporate into their work. In the next session, implementation strategies that result in maximum buy-in will be addressed. This course is intended for building industry professionals. It can be held virtually or in-person.	YES	1136085	\$350

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>IDP Integrative Design Process: Managing Change to be Consistent Part 2</b>	4	How do you know if every team is following integrative design approaches? How do you know if you're doing it right? This course focuses on changes that are needed to institutionalize integrative design in the project delivery process. There are cultural, managerial, and resource shifts that typically occur over time. You also need to align consultants with your process and sometimes convince clients to reallocate some of the existing budget towards earlier in design. This session focuses on the aspects of deploying this process across a firm and with various stakeholders that are involved in a project. It is intended for building industry professionals, can be held virtually or in-person, and is a combination of presentation and discussion.	NOT YET	—	\$350
<b>Bringing your firm into the future - management structures to transform practice and embed innovation</b>	—	Why isn't learning from our work (and continuously improving) "business as usual", as is standard practice in technology companies? What would firm management look like if we valued our staff (and treated them) as our prime assets, the way startups do? Why are architecture firms notorious for not allowing time to "sharpen the saw" and focus on organizational excellence or continuous improvement? Integrative design and lean project management have the potential to mimic agile development; benefitting from fast iterations and innovation, but don't – what could we achieve if it did? ...and the "whys" go on... it's true that some firms have risen to these challenges! 27 firms even met the AIA 2030 Commitment to reduce portfolio-wide energy by 70%. There are many exemplary projects that prove what IS possible; we can achieve really audacious goals! But we are nowhere near the capability we need to secure the future of humanity on this planet. Owners are demanding increasingly high performance and firms won't be competitive if they can't pivot, transform and adopt the habits and disciplines of startup culture. This session offers new insights and strategies from other industries to help participants translate key behaviors into practical strategies and immediate actions to address firm culture, process, systems and performance.	NOT YET	—	—
<b>Culture Evolution in Practice: Embedding Sustainability in Your Firm's DNA</b>	—	When a firm's leadership commits to sustainability or resilient design, that is just the starting point. Almost every firm focuses on education and training to build technical capacity internally; they acquire new tools or resources to support their design approach and they often develop a marketing plan. One thing that seems to get less attention is a focus on culture - how this commitment manifests in tangible ways in daily practice, operations and mindsets. How strong, healthy and resilient is your company's culture, as a baseline? Do people feel valued, cared for, empowered and proud of the company and the work they do? Is there a shared vision and understanding of sustainability and how it fits into your practice? How can you use a focus on culture to support your sustainability efforts while at the same time repairing or improving fundamental aspects of your firm culture that may not have been very strong to begin with? This workshop focuses on specific strategies and immediately actionable tactics to strengthen culture in general and embed the commitment to sustainability into the "DNA" of your practice.	NOT YET	—	—
<b>Hiring the Best Sustainability Director for Your Firm</b>	4	There are varying reasons why firms decide to create a new role of Sustainability Director or Corporate Sustainability Officer. Regardless of the motivation, it is important to understand that this role evolves with a firm's transformation over time, and that there are different models of sustainability governance. This workshop helps participants identify questions to ask themselves, how a firm and this role can evolve over time, what expectations to set, and more. Participants will learn what skills and knowledge to be looking for in a candidate, given their firm's culture and style. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136087	\$350
<b>Sustainability Director - Building Your Superpowers</b>	—	More often than not, Sustainability Directors (SD) are passionate, committed, knowledgeable architects who have demonstrated a clear proficiency in design. That "toolkit" may be necessary, but it is insufficient for them to be successful. Becoming an SD may or may not require deep technical expertise, but for any firm between 10 and 10,000 employees, it absolutely requires it's own toolkit that includes various aspects of communication, strategic thinking and change management. Many SD's become frustrated when they realize that the firm's commitment doesn't translate into buy-in across the firm and that the technical expertise they have doesn't result in every project leveraging the knowledge consistently. Sometimes, firms have expectations when they create the title that aren't realistic or effective - but you can still overcome those kinds of issues. Whether you are currently a SD now or want to be one, this workshop will help you understand how to address different kinds of barriers differently, learn what new skills you need and how to compensate for certain things if some of those skills don't come naturally to you.	NOT YET	—	—
<b>Creating Internal Standards for Material Health</b>	4	Initiatives like the AIA Materials Pledge, Carbon Leadership Forum, Mindful Materials, BuildingGreen, and more are emerging at an unprecedented rate. Still, firms struggle to figure out what to do about the impacts of building materials on public and environmental health. Specifically, many firms still need to determine their own priorities to plan for a consistent approach at the project level. Adopting an internally-driven standard for material health can take many forms. Through a combination of presentation and discussion, this session teaches building industry professionals about the methodology for creating this standard, how to set priorities, how get buy-in across teams, and more. This course can be held virtually or in-person.	YES	1136171	\$350

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<b>Creating Internal Standards for Design Excellence</b>	4	The most successful firms illustrate a common theme: rather than being reactive, they recognize that design excellence includes an internally driven commitment to best practices. The Framework for Design Excellence and other resources define the landscape of best practices, but the bigger challenge is integrating this into project delivery methodology. This workshop can be held virtually or in-person and helps building industry professionals understand the methodology and strategies available to either leap into a paradigm shift or slowly pilot towards an internal standard. Through a combination of presentation and discussion, participants learn how to achieve an internal standard that is adopted consistently across their project teams.	YES	1136172	\$350
<b>Designing for Deconstruction: The Other Carbon Strategy</b>	—	The focus and dialogue around decarbonizing buildings has gotten more traction and momentum in the past year than almost any other aspect of sustainability over decades. Every day, more building owners and developers are making commitments, but the solutions are not yet perfect and the path to achieve them can seem very mysterious and even daunting. There are courses on how to conduct a life cycle assessment (LCA) or Whole Building LCA but another strategy is to develop standard design details that make disassembly and deconstruction possible or easier. There are many evolving, moving pieces in the industry from emerging policies in local governments to general contractors who have developed deconstruction capacity to an exploding market of reuse vendors that all support building deconstruction. This session helps you understand the key components of designing for deconstruction, shows examples from an ever-increasing library of these details and also shows you what other activities (with your product reps, clients and others) will help you be successful with this effort.	NOT YET	—	—
<b>How to Attract and Retain Emerging Talent</b>	—	The dominant conversation amongs firm leaders during this pandemic has been about hiring and retaining talent. Leading consulting groups like McKinsey have published many reports showing that emerging talent prioritizes firms that have strong values and a commitment to sustainability and equity. They are not satisfied by a mission statement or handful of certified or prize winning projects, they want to see evidence of a firm walking the talk and living its values. They want to see how a firm's projects consistently make efforts to incorporate healthy, high performance and do not see sustainability as a separate, add-on but rather an integral facet of design excellence. They also want to work in firms that have a positive and healthy culture where management of teams and workload is thoughtfully administered with an intention to reduce the chaos of staffing changes and improve work/life balance. deep culture/management	NOT YET	—	—
<b>Giving and Receiving Feedback</b>	—	Giving and receiving feedback is a daily occurance, both internally amongst staff and externally with clients and consultants. There are ways to frame and deliver constructive feedback that minimize triggering people's natural tendency for defensiveness, anger, hurt and frustration but we don't learn them in school! This session shares the approaches for both giving and receiving feedback as well as models for how to incorporate this practice into your existing workflow so you can use every interaction as a way to model this behavior, teach it and reinforce it consistently so that feedback delivers the value that is intended without deteriorating morale.	NOT YET	—	—
<b>Facilitating Effective Meetings</b>	4	In this two-part series, participants will learn how to design and facilitate conversations that are effective, inclusive, and results-driven. Topics to be covered include matching the meeting design to the purpose, managing derailers, learning how to lead from any chair, and learning how to ensure that decisions and actions stick. Participants will learn techniques needed to foster complete team engagement as well as handle meeting challenges. The course will include instructor presentation as well as applications to work situations. It is intended for building industry professionals, can be held virtually or in-person, and is a combination of presentation and discussion.	YES	1135302	\$350
<b>The Art of Feedback: Giving and Receiving</b>	3	This course will show you how to properly give and recieve feedback. You will learn tips for giving and recieving feedback, a checklist for deterring feedback readiness, guidelines for having tough conversations, and a frame for making formal and informal requests.	NOT YET	—	—



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Leadership</b>	3	In this leadership course, you will gain the ability to clearly articulate and define individual and organizational values along with the ability to identify, understand, and resolve value-based disagreements. You will have increased trust and fulfillment between team members. You will also have a clear vision of organizational key differentiators.	NOT YET	—	—
<b>The Art of Networking</b>	3	In this course, The Art of Networking, you will gain confidence in developing relationships. You will learn how to introduce yourself in a memorable way and be able to create connections and deepen conversations. You will be able to understand the five styles of listening and the value of non-verbal communication.	NOT YET	—	—
<b>Mentoring Across Your Organization</b>	3	The course, Mentoring Across Your Organization, provides an understanding of individual behavior styles and appreciation of these behavioral styles. You will also gain ideas for integrating individual behavior strengths for optimal performance and tips designed to enhance communication and collaboration across the organization.	NOT YET	—	—
<b>Presentation Skills</b>	4	As architects, we regularly present to clients, consultants, local jurisdictions and our own peers. Conveying ideas clearly and meaningfully is essential to the job. This 6-hour course offers attendees the opportunity to develop and practice their skills in presentations, as well as apply what they learn directly to upcoming business contexts.	NOT YET	—	—
<b>Effective Communication</b>	4	What makes for a successful client relationship? How can managers foster team engagement to reach project goals together? This course teaches the importance of relationship building for professional success in the field of architecture. It additionally also covers networking with colleagues, skills in influencing including persuasive listening and assessing client needs, and strategies to grow a leadership role within the profession of building and design. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136918	\$350
<b>Effective Hiring</b>	6	Instructional Methods: This interactive session will feature a combination of brief presentations, group design, exercises, and facilitated, full-group discussions. The intent is for participants to deepen their knowledge and understanding of inclusivity and implicit bias in the broader employment market at this moment in time, within their organization, and in their own individual work. Improve employee engagement and performance by maximizing inclusion and minimizing implicit bias in the hiring process.	NOT YET	—	\$525
<b>Quality Control Strategies</b>	6	This course is all about quality control strategies. Participants will learn to clarify how, when, and where: do the team members understand the scope of their tasks, when tasks are required and the level of quality is required for the task. You will also learn how to keep team members up to date on project issues, hold weekly meetings to monitor program, and to update the team. You will be able to stress that each team member is required to self-check their own work prior to submitting the work to be reviewed by others. You will be able to make sure that consultants have an internal quality control program and are using it for the project. Lastly, you will be able to participate in the in-house quality review program, schedule the project reviews with adequate review time, and follow up to make sure all comments have been addressed.	NOT YET	—	—

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Risk Management*</b>	6	The workshop will cover the following: - Focused on Practice Leadership. - Provide a detailed look at ways to manage risk, when and how different levels of risk may or may not be acceptable, how to evaluate potential projects and agreements for the level of risk. - Attendees will develop a better understanding of how to evaluate, manage and balance risk within the practice.	NOT YET	—	—
<b>Overview of Key Contractual Issues*</b>	4	This course will be focused on Project Managers and will go over an overview of key contractual issues. It will provide an overview of common contractual terms and conditions and their advantages and disadvantages. Attendees will develop a better understanding of typical terms and conditions, which ones can be problematic, and how common contractual language applies in the context of project management.	NOT YET	—	—
<b>Relationship Management</b>	3	In this course, building industry professionals will learn how to identify different employee and client types and how to work and communicate optimally with each personality type. They will gain practice dealing with difficult people, including how to resolve issues and use their understanding of these different personality and interaction types in various scenarios to build and maintain relationships. This training is highly interactive and includes a variety of practical exercises and activities. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1136916	\$265
<b>Lean Construction</b>	8	Lean Construction extends from the objectives of a Lean production system— maximize value and minimize waste— to specific techniques, and applies them in a new project delivery process. Lean thinking encourages a constant reflection to determine if every expenditure of resource is employed to generate value and demands a mindset of continuous improvement. Leaders must create an environment where experimentation is encouraged, if the goal is to improve continuously. Training in this course will focus on improving efficiency, increase communication, reduce waste and create reliable flow. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135286	\$699
<b>Lean for Business Process</b>	16	Working in project teams on process improvement projects to understand how to begin applying Lean administrative in the workplace. The focus will be on identifying the eight wastes, learning about the importance of creating standardized work and processes and how to do this across areas or teams where there is variation in results. This includes understanding what makes a perfect or poor process and how to analyse and address differences in work time to complete activities, the sequencing of activities and the quality of results.	NOT YET	—	—
<b>Business Writing for Action</b>	6	This course, Business writing for action, will show you how the value of active voice, the five steps for effective business writing, using strong subject lines as forecast, how to create clear, short sentences and paragraphs and headlines, and the importance of using clear language, precise words, bulleting, and formatting.	NOT YET	—	—
<b>Using 3M Virtual Attention Software (VAS) in Design</b>	4	This course reviews 3M VAS (Visual Attention Software), the AI software now available as a plug-in for Adobe Photoshop and Illustrator that predicts how people will take in a scene, building or interior, at-first-glance. Attendees will learn how to use the software in all aspects of design, as well as the limitations of the software. Additionally, they will gain familiarity with biometric terms used to describe the human subliminal visual experience, as well as learn how to use VAS to improve design outcomes. This course is intended for building industry professionals. It can be held virtually or in-person and is a combination of presentation and discussion.	YES	1135469	\$350



# TRAINING CATALOGUE

Last Updated: June 2022

Course Name	Hours	Course Description	Express Program Approved?	Express ID#	Express Cost / Person
<b>Neuro-Psychology of Architecture</b>	8	This course reviews key ideas in neuroscience and psychology that help us understand how architecture impacts people and how it can be used to improve design outcomes and promote community health. Participants will understand how unconscious behaviors direct the human experience of the built environment. They will also gain familiarity with biometric tools, like eye tracking, facial expression analysis, and galvanic skin response, and learn how evolutionary history pre-sets the human response to external stimuli and how we're hardwired to look for them, even in building facades. This course is intended for building industry professionals. This can be a live or in-person training and is a combination of presentation and discussion.	YES	1135470	\$700
<b>Implicit Bias: Part 1</b>	3	Instructional Methods: This interactive session will feature a combination of brief presentations, group design, exercises, and facilitated, full-group discussions. The intent is for participants to deepen their knowledge and understanding of inclusivity and implicit bias in the broader employment market at this moment in time, within their organization, and in their own individual work. The Focus of this workshop is to improve overall employee engagement and performance by maximizing inclusion and minimizing implicit bias in the workplace. Part 1 provides an overview.	YES	1131364	\$265.0
<b>Implicit Bias: Part 2</b>	3	Instructional Methods: This interactive session will feature a combination of brief presentations, group design, exercises, and facilitated, full-group discussions. The intent is for participants to deepen their knowledge and understanding of inclusivity and implicit bias in the broader employment market at this moment in time, within their organization, and in their own individual work. The Focus of this workshop is to improve overall employee engagement and performance by maximizing inclusion and minimizing implicit bias in the workplace. Part 2 goes into more depth.	YES	1131365	\$265.0
<b>AIA 2030 Superstar series</b>	—	27 firms successfully met the 70% reduction target in 2019. These are their stories and lessons learned. (THIS IS AN AIAU COURSE ONLY - NOT FOR GENERAL WF GRANT)	NOT YET	—	—
<b>Aligning Project Delivery Methodology with Sustainability Goals (including AIA 2030)</b>	8	Project delivery is the life-blood of every firm. Most firms who have made a commitment to sustainability start off strong, but then hit a point where they plateau or stall. Most of the time, this is caused in part because they have done many things but neglected to "re-design" the way they delivery projects so that this process aligns with the goals they want to achieve. Whether your firm is in the AIA 2030 Commitment program or not, if you are serious about improving your practice and institutionalizing design excellence in your firm's DNA, this workshop will help you fast-track that process, clarify where your barriers are and what actions you can take immediately to best align your day-to-day activities with your goals. This will also include issues addressing your firms culture, relationships with consultants and other aspects of firm operations that support success on projects.	NOT YET	—	—