Cohesion is integral to every successful team. Each team member possesses expertise, which when melded fosters a culture capable of solving the most challenging problems. A great project is realized when team members achieve a state of cohesion, a unity among individual parts interwoven to become whole. This consistency within our distinctive practices connects us, as professionals, to a community that strives to uphold a collective design ethic. Join us for the 2017 AIA Iowa Convention to explore the importance of cohesion within our profession.
There is No Better Time to be an Architect than the Present

Environmental and natural disasters have put us on edge, economic uncertainties have impacted our profession, and digital technologies continue to transform the means and methods within our evolving field. With challenge comes opportunity. Inspired by the idea of unique perspectives and strengths uniting to provide inimitable opportunities to the challenges we as designer’s face is the grounds for this year’s convention.

We seek to recognize the expertise, alternative perspectives, innovative ideas and culture capable of solving the most challenging problems and the projects realized when a state of cohesion is achieved by all participants.

Communicate. Connect. Create. This is the basis of the theme for the 2017 AIA Iowa Convention, Cohesion.

Please join us on September 28–29 in Des Moines!
Speakers.
Speakers

Thursday, September 28, 8:15 a.m. 125 LU HSW

Louise Braverman, FAIA
Louise Braverman Architect, New York, NY

A graduate of the Yale School of Architecture, Louise Braverman established her namesake practice in 1991. Her work has been widely published and recognized by her peers, resulting in her early selection as an Architectural League’s Emerging Voice and elevation to fellowship in the American Institute of Architects. Recently she was invited to present the work of her firm at the 2016, 2014, and 2012 Venice Architecture Biennales. She expressed how Venice amplifies her artistic impulse in her essay for JoAnn Locktov’s 2016 book, Dream of Venice Architecture.

Architecture of Art + Conscience
We practice architecture that optimistically pursues aesthetically inventive solutions that resonate with all segments of society. Ours is an ongoing search for elemental solutions to complex architectural problems, using common means to achieve what we hope are uncommon results. We take the initiative to explore the fusion of aesthetics, sustainability and civic engagement in a broad range of diverse projects, from an art museum in Boticas, Portugal that encourages public participation with art, to an off-the-grid dormitory in the village of Kigutu, Burundi that is re-building itself subsequent to horrific civil strife, to an art museum in Riverdale, New York that facilitates multi-generational engagement. All mission-driven projects are charged to create captivating places that inspire the building of communities.

By attending this keynote address participants will:

- Evaluate aesthetics, sustainability and engagement in a broad range of diverse projects
- Discover diverse architecture of an off the grid dormitory that is re-building itself
- Review facilities that require multi-generational engagement and creativity
- Research mission driven projects with goals to build up proactive communities

Sponsored by Iowa State University, College of Design, Department of Architecture
Tyler Sharp
RDHA, Toronto, Canada

Tyler is Principal and Design Director of RDH Architects (RDHA) where he has overseen the design vision for many of the firm’s most highly recognized projects. Tyler is a graduate of the Dalhousie University School of Architecture, in Halifax, Nova Scotia, Canada. While at Dalhousie, Tyler received the Medjuck Design Scholarship for undergraduate work, a Faculty of Graduate Studies Full Scholarship and a place on the Dean’s List for Outstanding Academic Achievement. Tyler’s thesis work at Dalhousie won the American Institute of Architects (AIA) Thesis Award and placed him on the Royal Architectural Institute of Canada’s (R.A.I.C.) National Honour Roll. Tyler joined RDHA in 2005 to help begin the transformative process that was to follow over the next decade. Tyler’s first project with the firm was the Bloor Gladstone Library, located in downtown Toronto, has received nine major design awards, including an Ontario Association of Architects Design Excellence Award, the Design Exchange Gold Medal, a Chicago Athenaeum International Architecture Award and the 2014 Governor General’s Medal for Architecture. Following this, Tyler led designs for the Hamilton Central Library and Farmers Market; the Waterdown Library and Civic Centre; the First Leaside Financial Headquarters; the Guelph Civic Centre Skating Pavilion; the Lakeview, Port Credit, and Lorne Park Branch Libraries which received a 2012 Governor General’s Medal for Architecture; and most recently, the Springdale Library and Neighbourhood park, the Eglinton Go Station, and the Old Galt Post Office Idea Exchange.

RDHA: History, Practice and Architecture

Tyler Sharp will present a talk which describes the work and evolving history of one of Canada’s oldest architectural practices. The discussion will begin by covering a brief history of RDHA; how the firm has transformed itself over the last decade; and finally discuss the work of this period through a description of ten projects.

By attending this keynote address participants will:

- Review the how the firm acts like an emerging design studio, while their 97-year legacy provides a solid backbone of technical and managerial experience.
- Discover the firm’s a wide-ranging body of work, encompassing corporate headquarters, industrial facilities, academic buildings, transportation facilities, recreation centers, libraries, secure buildings and interiors.
- Investigate award winning pieces of architecture that transform communities through design.
- Explore almost one hundred years of firm transitions and design work that continue to provide great vision for Canadian architecture.
Speakers

Friday, September 29, 8:30 a 1.25 LU HSW

Corey Martin
Hacker Architects, Portland, OR

As an Oregon native, Corey is strongly influenced by the unique relationship between the natural and built environment of the Pacific Northwest. Before joining Hacker in 2011, Corey co-founded PATH Architecture where he spearheaded the design, development, and construction of innovative, highly sustainable, and award-winning single-family residences and mixed-use buildings, as well as a series of high-profile projects for University of Oregon. At Hacker, Corey has worked on projects such as Portland Community College’s Cascade Campus Master Plan, Student Center, and Academic Building; a headquarters office building for Downstream; a new Unitarian church in Bend; and the Black Butte Ranch Main Lodge Area Redevelopment.

The Work of Hacker Architects
Hacker has already successfully transitioned from its founding leadership to a new generation of leaders. Our transition continues to evolve and “break open” as we strive to be more inclusive in our design process and equitable in our firm culture. We are redefining what makes our work meaningful, and searching for new ways to integrate meaning into every aspect of what we do. This presentation will explore how we draw from the landscape when we design; outline our efforts to create a more collaborative environment for the communication and exploration of ideas; and explain why we believe these concepts are intimately linked to and dependent upon one another.

By attending this keynote address participants will:

- Review the firm culture of Hacker Architects and how they support a more inclusive design process
- Research Hacker Architect’s commitment to Sustainability and how they work to enhance and serve the environment around them.
- Explore the intimately linked connection between concepts and execution and how collaboration leads to helping the environment.
- Discover how Hacker Architects transitioned its founding principals into a new generation of leaders
Todd Walker, FAIA
archimania, Memphis, TN

Friday, September 29, 3:30 p.m. 1.25 LU HSW

Todd is a 1987 graduate of Mississippi State University’s School of Architecture with studies at the University of London’s Bartlett School of Architecture and Planning. Todd is founding partner of archimania, a Memphis-based, award winning architecture firm known for its modern and innovative design solutions. Since the inception of the firm in 1995, progressive, sustainable, and contextual design has remained at the core of its work. As Principal-in-Charge of Design, Todd offers clients fresh perspectives, new approaches, and creative design solutions for their projects. He is involved in every project from start to finish, and believes that no project is without an opportunity to create a better architecture, regardless of size or budget.

Culture and Contrast
Talk will include thoughts and examples of how Archimania’s work relates to the urban and agrarian history of the Memphis area and the region. Focusing on how the culture in Memphis and the surrounding area has influenced the work of the firm regarding the culture and context. On the other hand, it will describe how the office culture and collaboration within influences the work and how a project’s type, context, and client’s constraints inspire the firm from project to project while further creating diversity. Todd will share project/client stories of what he refers to as the good, the bad, and the ugly. Many diverse project examples and scales will be shown.

By attending this keynote address participants will:

- Review examples of how Archimania’s work relates to the urban and agrarian history of the Memphis area
- Discover how a project’s type, context, and client’s constraints inspire the firm from project to project while further creating diversity
- Research how to create diversity as it relates to scale, craft, and materiality
- Review of designs which explore and deploy local influences that create healthy, connected places for occupation.
Lunch Program: Shannon Kraus, FAIA
HKS Architects

Dining Hall, Lower Level
Thursday Lunch, September 28
11:45 a.m.

Spending countless hours drawing as a young boy and a lot of time walking jobsites with his dad, a hospital HVAC contractor, architecture caught his attention at an early age. Later, after working in architecture for several years and receiving an MBA, Shannon felt a pull toward healthcare architecture. "I enjoy healthcare architecture because I want to create environments that shape better experiences for patients and staff, ultimately having a positive effect on outcomes," Shannon explains. "I am committed to helping our clients realize their vision and believe that when you really listen and understand their needs, it results in better design solutions," he added. With a focus on smart design, Shannon’s project approach provides innovative solutions that balance lean operations with cutting-edge healing environments. Using this philosophy, he has been an integral part of the design and planning of over 20 million square feet of healthcare projects around the globe during his 20 years of experience in healthcare planning.

Cocktail Party
Hosted by Convention Exhibitors

Exhibit Hall, Upper Level
Thursday, September 28
5:00–6:30 p.m.

Design professionals! With the first day of the convention wrapping up, head back to the Main Exhibit Hall to enjoy a complimentary beer (or two), tasty treats, or a drink from the cash bar with fellow peers, allied members, and exhibitors. Take a walk through the 160 exhibits showcasing the latest products available-- there is something that will appeal to designers in any practice! Don’t forget the door prize drawing taking place at the projection stage-- you must be present to win!
IAF Walking Tour at the AIA Fall Convention

The Hub Spot
215 Water Street, Des Moines
Wednesday, September 27
6:00 p

Join the Iowa Architectural Foundation the evening before the AIA Iowa Convention begins for a special architectural walking tour. The tour will feature the "City Beautiful" architecture of Des Moines' Civic Center Historic District along the riverfront. The tour will conclude with a social at a downtown restaurant/bar for hors d'oeuvres and drinks. Tickets will be: $30 per person; $10 for AIA Iowa Student Affiliate members. This event is open to the public.

Design Award Celebration

The Tea Room
713 Walnut St., Des Moines, IA 50309
Thursday, September 28
7:00 p

Located in the heart of downtown Des Moines, head just south of the Iowa Events Center to Walnut Street and join us in honoring the winners of the annual awards contest at the newly restored Tea Room. An evening of conversation and refreshments with colleagues is the perfect night cap to round out the first day of convention. This event will recognize the exceptional design of Iowa architects from the past year. Be sure to purchase your tickets during online registration.

Feed Your Future: Emerging Professionals Breakfast

Lower Concourse
Friday, September 29
7:45-8:15 a

An event created specifically with emerging professionals in mind, come mingle with the Board of Directors, Committee Chairs, and peers to discuss how AIA Iowa can be the stepping stone to a successful career. While you are here, take the opportunity to sign up for the EP Mentorship Program, whether you are new or returning to the program. Come Feed Your Future at the EP Breakfast and continue growing as a part of our Mentorship Program.
Masonry Institute
Architectural Design Awards
Lecture Hall, Lower Level
Friday, September 29
8:15 a

The Masonry Institute of Iowa’s Architectural Design Awards celebrates Masonry and Architectural Design Excellence in Iowa. Entries are judged by a panel of architects from outside of Iowa focusing on the excellence of each individual project, including creative use of masonry, structural and architectural design, proper masonry installation details, technical innovations and their influence on design selection, and suitability of design to its environment.

Sponsored by the Masonry Institute of Iowa

ARE Study Sessions
4.0 to 5.0
IMEG
2882 106th St., Des Moines, IA
Saturday, September 30, 2017
8:00 a–5:00 p

AIA Iowa, Iowa Architectural Experience Program Committee, and IMEG (formerly KJWW Engineering) are co-sponsoring 2 study sessions to assist ARE candidates in preparing for licensing exams covering MEPT and Structural Systems in both the ARE 4.0 and 5.0 divisions. The morning study session will cover mechanical, electrical, lighting, and plumbing systems while the afternoon session will cover structural building systems. While the content for all candidates is the same, we recommend the ARE 4.0 candidates attend the session per their respective division and the ARE 5.0 candidates attend both sessions. All are welcome for either or both sessions as each will provide study material, sample questions, and practice problems in preparation for these examinations. Choose to attend in-person or via web during registration. Cost of attendance is $5 per session. Snacks will be provided for in-person attendees.

Presented and sponsored by IMEG and AIA Iowa Architectural Experience Program Committee.
Workshops.
Preparing for the Oncoming Age Wave

Preparing environments for the oncoming age wave demographic requires an understanding of those for whom the environments are intended as well as the efficiency of staff providing care for them. It then requires the cohesive and collaborative input of a variety of professionals infused with common sense and a passion to provide all society with appropriate places to live, work and play that celebrate our diversity in a way that creates better overall human connections. This presentation will explore how the physical, intellectual, cognitive and spiritual needs of those on the crest of the age wave are informing all design, from city curb cuts to skilled nursing rooms. And, as importantly, how good design for this demographic is good design for us all.

By attending this workshop participants will be able to:

1. Learn how the aging population is profoundly affecting designers’ approaches to all areas of the environment.
2. Learn how diverse collaborative teams work toward successful solutions for environments for aging that benefit all society.
3. Explore trends in contemporary environments for aging design that are consumer driven.
4. Understand those elements in the aging process that inform how environments for aging are conceived.

Presented by: Jeffrey Anderzhon, FAIA Eppstein Uhen Architects and Ric D’Amico, AIA Iowa Professional Affiliate TS Fox Inc.

Designing & Detailing High-Performing Masonry RainScreen Walls

Thin clad open-jointed rainscreen walls are becoming popular building enclosures to fulfill contemporary architectural design parameters. This program investigates the building science and evolution of high-performing masonry wall concepts from mass walls to pressured and non-pressurized cavity walls. Attendees will learn how challenging problems of water, air, vapor, and energy control concepts are integrated for successful and innovative exterior wall solutions. Attendees will learn how masonry rainscreens can be achieved with traditional anchored veneers or light-gauged sub-frame systems to support thin lightweight masonry units such as natural stone, terra cotta, brick, porcelain stone, calcium silicate, glass-fiber reinforced concrete, and high-pressure laminates. Learn how cohesive design of rainscreen wall assemblies and insights into construction guidelines and installation techniques can enhance project durability and energy control.

By attending this workshop participants will be able to:

1. Learn the evolution and types of masonry rainscreen walls.
2. Understand building enclosures as an assembly of cohesive parts.
3. Discover how high-performing masonry rainscreen walls control water, air, vapor, and energy.
4. Realize how masons work within construction guidelines to achieve durable and sustainable projects.

Presented by: Pat Conway, International Masonry Institute
Liability Insurance for A/Es: Certificates of Insurance, Coverage Basics and Risk Management Strategies

This presentation provides a great overview of insurance including professional liability, general liability, workers compensation, employers’ liability, automobile liability, excess and umbrella coverages. Additionally, this course includes key information about certificates of insurance, and the difference between claims made and occurrence type policies. This course will empower the attendees with risk management information.

By attending this workshop participants be able to:
- Understand the basics regarding certificates of insurance and what they do, what they don’t do and when you need one.
- Learn the difference between professional liability and commercial general liability insurance, including occurrence versus claims-made reporting of claims.
- Identify the major types of other insurance needed by design professionals including worker’s compensation, employers’ liability, automobile liability, excess insurance and umbrella coverage.
- Discover risk management tools for preventing and lessening losses regardless of your insurance policy limits.

Presented by: Nick Maletta, Holmes Murphy & Associates, AIA Iowa Allied Member

How Buildings Change: The Importance of Monitoring & Managing Building Energy Usage

The importance of predictive analysis during the design process to set building energy goals and evaluate energy-efficiency strategies is long established; however, this is just the beginning. The way buildings are operated—whether in response to “occupant comfort,” actual environmental conditions, or ease of operation—can significantly impact their actual energy usage. While there are various services focused on existing buildings, we will show that energy models created during building design and updated with operational conditions continue to provide valuable information for owner-operators about how their buildings use energy and where additional savings can be realized. Post-occupancy energy methodology for collecting, evaluating energy usage data and projecting additional savings will be reviewed along with lessons learned.

By attending this workshop participants will be able to:
- Develop long-term client relationship opportunities through ongoing energy performance analysis.
- Review options available to discern and address ongoing energy performance issues.
- Recognize how energy models created during design stages relate to the meter data of an occupied building.
- Examine how differences between assumed and actual building operations impact energy usage and determine steps to be addressed for resolution.

Presented by: Karl Kaufman, AIA & John Sidey, The Weidt Group, AIA Iowa Allied Member
Why the AEC Industry Must Adapt

1 LU HSW

Few things are as poised to be technologically disruptive to the AEC industry as the ever-expanding Internet of Things, or IoT – the connection of all things (devices, machinery, etc.) to the Internet. This presentation will discuss the technology road map of our “adapt or cease to be relevant” world. The AEC industry has stumbled through a decade of convergence – the merging of various technology systems into one IT infrastructure – with tepid recognition of the concurrent need for fundamental business model changes. As a result, the industry mostly has clung to the same design processes and client engagement methodologies that have been used for decades. This has reinforced the traditional technology silos within the AEC industry – long after the technologies themselves had broken through those silos. With the IoT building upon technology convergence in ever more disruptive ways, the risk of losing relevance has become greater than ever for the industry.

By attending this workshop participants will be able to: Understand the rise of the Technology Utility and how it will forever change the relationship between the A/E industry and IT. Learn why the role of technology in our design processes is being forced to change. Understand strategies for successful implementation of technology in facilities. Learn about the challenges the Technology Utility presents and how to overcome them.

Presented by: Jeff Carpenter and Andy Thielen, IMEG Corp

Enhancing Energy Efficiency in Historic Buildings

1 LU HSW

Historic Buildings make up much of our built environment and represent a significant segment of the design and construction work completed in Iowa each year. Historic Buildings have traditionally received special consideration when it comes to code based energy efficiency, but Historic Preservation and energy performance are not mutually exclusive. This workshop will review recent adaptive reuse projects that have successfully met the Secretary of the Interior’s standards for Rehabilitation and have outperformed the model energy code.

By attending this workshop participants will be able to: Become familiar with the Secretary of Interior’s Guidelines for Preservation and gain an understanding of the importance of character-defining features when determining adaptive re-use treatments. Attendees will be introduced to the Existing Building Code for Historic Buildings along with ASHRARE’s “Energy Guidelines for Historical Buildings.” Through the review of recently completed case studies, attendees will become familiar with analysis methods by which to balance Preservation and sustainability objectives. Attendees will understand how eligibility for the National Register of Historic Places is determined.

Presented by: Steve King, AIA, State Historic Preservation Office
Computation as a Catalyst to Gender Parity in Architectural Practice

Architecture has yet to acknowledge that its gender equity problem also extends to those who engage with technology, and this lack of acknowledgment exacerbates existing gender disparities. This presentation examines the gender gap in architectural technology and computational design and proposes an agenda towards greater equality in academia and practice. The workshop will conclude with an overview of three initiatives in design education that reduce gender-based barriers for women within the field of architecture.

By attending this workshop participants will be able to: Summarize the history of women in architecture and the present state of gender equity within the profession. Describe the present state of gender equity with respect to technology in design and discuss three reasons why this is a problem for the architecture. Identify two ways that more equitable representation in computational design can empower women's leadership in architecture. Describe three initiatives in design education that reduce gender-based barriers for women within the field of architecture.

Presented by: Shelby Doyle, AIA, Leslie Forehand, Nicholas Senske, Iowa State University

High Performance Building Envelope

This session is designed to increase knowledge of the application and use of air barriers in the building envelopes of commercial and multi-family residential buildings. Researchers, architects, and code writers have shown that attention to specific details in both new and retrofitted envelopes result in better performing buildings with better comfort and long durability as well as lower energy consumption. Air leakage through the building envelope is silent, invisible, and cunning. It causes numerous building envelope problems including wetting of cavity materials, spalling of masonry, premature corrosion of metals, blistering of paint, icicles, staining of contraction. Continuity is important but strength is even more important. In buildings, the air barrier system must be designed, and specified on plans. It has specific performance criteria and specific material requirements.

By attending this workshop participants will be able to: Determine how better building envelope can reduce energy demand on heating and cooling and reduce energy. The significance of each part of the building envelope (the top, bottom, vertical shafts and the walls) relative to the efficient operation. What problems can occur with the lack of compartmentalization and/or decoupling between floors in buildings over 3 stories. Discover the materials and methodology used in air sealing commercial and low to high rise multi-family buildings.

Presenter: Steven Tratt, Canam Building Envelope Spec.
**Design Phase Mapping: Aligning Goals and Defining Deliverables**

The typical design deliverable process of SD, DD, and CD does not hold up when speed and efficiency are required within Design-Build or IPD project execution. Expectations are typically out of alignment and the design process quickly diviles into a reactive race to meet deliverable deadlines. By implementing pull-style process planning at project inception you will be able to align goals and milestones between all parties involved. This presentation will focus on the Design Phase Mapping process, the value of a facilitator, and why it’s a positive disruption to the typical design process most designers have worked within for years.

By attending this workshop participants will be able to:
- Establish design phase communication planning techniques.
- Strategies for structuring design services contracts to include the collaborative management process.
- Utilize pull-planning principals for design phase document production.
- Define tracking tools for construction document deliverables management.

**Thermally Decoupling Laboratory Ventilation Loads: Strategies to Dramatically Decrease Outside Air and Energy Consumed by Laboratories**

Instructional and Research Laboratories are spaces design specifically to maintain a safe environment for the manipulation of hazardous materials. As such this space type is traditionally a large consumer of energy due to ventilation rates, high miscellaneous equipment loads and code requirements. Many opportunities are available to reduce the cooling and heating load for laboratory buildings. Energy savings of 40% to 70% better than ASHRAE 90.1 can be achieved with correct design approach. This presentation will identify how and when to implement strategies to drive ventilation loads entering the building to a bare minimum by thermally decoupling the ventilation loads from laboratory space loads. The Microbiology Research Facility at the University of Minnesota is presented as a case study for the evaluation and implementation of various thermal decoupling approaches.

By attending this workshop participants will be able to:
- Identify what laboratory types and characteristics are good candidate for thermal decoupling strategies and the pros and cons for each of the thermal decoupling approaches.
- How to work with the Lab Planner to configure the laboratory optimizing the operational safety, ventilation effectiveness, and thermal performance.
- Identify additional opportunities to super-charge heat recovery systems when thermally decoupled ventilation systems are employed. The additional performance enhancements to the campus utilities systems the thermal decoupling must offer. Examine calculations to identify energy savings versus initial capital cost for thermally decoupled systems.

**Presented by:** Chase Prepula, AIA, Brad Thomason, AIA & Megan Conrad, Ryan Companies

**Presented by:** Lee Tapper, MEP Associates, AIA Iowa Allied Member
Implementing Cost Effective Strategies for Building Operations in the Design Phase

This course will provide insight on the architect’s ability to influence the post-construction and operations phase of building facilities. The presenters will provide case studies with metric and measure demonstrating effective design elements that positively influence building operations and efficiency, as well as how to identify those elements and incorporate them into initial building design. Further advice on what to offer during architect selection and contract negotiations to ensure success in operations & efficiency will be discussed.

By attending this workshop participants will be able to: Identify components of process and design in building systems that will reduce cost from a building operations standpoint for the life of the facility. Explore the opportunity of open-ended contracts and service during architect selection and/or contract negotiation with owners that provides the service of architect and project team members revisiting the facility post-construction to review building efficiency and performance. Include members from the owner/operations team in initial design to set clear expectations and goals for building operations and begin continuity through design to operations. Understand factors that enhance building occupant comfort and maximize user productivity while not sacrificing building operation efficiency.

Presented by: Matt Brown, AIA Formation Group, Tate Walker, AIA OPN Architects, Dale Drent, Baker Group
Workshops

Session 3: Friday, Sept. 29, 11:15a–12:15p

Specifications (They're More Than a Monitor Stand)
1 LU HSW

We’ll explore some of the basic principles of specification organization, language, procedures, general requirements and roles and responsibilities. This session is appropriate for anyone who would like a better understanding of specifications and their role in the project delivery process as well as basic procedures to avoid conflicts and improve document coordination. By attending this workshop participants will be able to: Understand the basic architecture of a construction specification and some principles of specification writing and language. Recognize some of the most common areas of conflict between drawings and specifications and how to avoid them. Learn some basic procedures that can be used to improve drawing and project manual coordination. Be able to better assist in the process of product selection and project manual preparation.

Presented by: Jill Goedken, AIA, Speccetera

Technology Forward: Achieving Beyond-Code Energy Savings
1 LU HSW

Energy efficiency continues to be a key driver for new construction. Iowa has a history of energy code changes in the last 15 years, and the ever more stringent energy codes may imply increasing efforts will be needed to go beyond them. However, over this period commercial buildings have continued to average 30% savings relative to the energy code. Comparisons of the top energy-saving strategies relative to the different codes in Iowa over the last 15 years will be provided. We will show how efficiency strategies selected by teams and implemented in commercial buildings have evolved as the energy codes have become more stringent. We will also provide a look forward to design strategies and technology that can be implemented to help building teams continue to be more efficient with future energy codes. Case studies will be used to illustrate both strategies implemented and those left on the table and how these selections have evolved over time.

By attending this workshop participants will be able to: Examine how energy codes have changed the perception and availability of energy-efficient technology. Identify opportunities to prepare for new trends in meeting progressively higher energy code requirements. Understand the energy impact of future energy codes and what types of design strategies and technologies may be available. Recognize how analysis can be utilized to evaluate design strategies and technology options.

Presented by: Jacob Serfling & Jason Steinbock, The Weidt Group, AIA Iowa Allied Member
The Standard of Care for Design Professionals: Case Law Update

Design professionals such as architects have a duty to perform their services in accordance with the prevailing standard of care. What is the standard of care? Who decides if the standard of care has been met or not? Who is entitled to bring a claim asserting breach of the applicable standard of care? This course will answer these questions and others related to the standard of care by presenting case law decisions that have addressed claims against design professionals.

By attending this workshop participants will be able to: Understand the elements of the standard of care. Understand how a contract may alter the standard of care. Understand what parties may be able to assert a claim for breach of the standard of care. Understand the legal process in determining if the standard of care has been met.

Presented by: Martin Kenworthy, Kenworthy Law, P.C.

How to Convert a Campus to Geothermal - Ball State University's Road to Decreasing Energy Footprint

In the summer of 2009 Ball State University started the design of the largest geothermal project in the nation. The system supplies 152 MMBH of heat and 10,000 tons of chiller capacity to the entire campus. The project includes 3,363 bores, two District Energy Stations, upgrading the existing CHW distribution system, new hot water distribution system, and building conversions from steam to hot water heating. Phase 1 of the project has been operational since November of 2011, phase 2 will be complete in August of 2017. In addition, Ball State eliminated the use of coal on campus in March of 2015. The project has achieved significant energy savings and reduced the campus carbon footprint while providing a reliable system for the future.

By attending this workshop participants will be able to: Design considerations and challenges when designing a geothermal system on a campus scale. Understanding the impact of campus thermal load characteristics on the thermal performance of the heat pumps and the correct sizing of the bore field. Campus utilities and building conversion considerations. Understand the impacts the project has had on campus and to the industry as a whole.

Presented by: Michael Luster, MEP Associates, AIA Iowa Allied Member
The Restorative Impact of Perceived Open Space

Exploring the impact of deep plan buildings on human performance. We analyze the role circadian light and perceived open space play in shaping cognitive function, as well as how our psycho-physiology changes in interior environments. We discuss a new approach that proposes the restorative value of perceived open space in its two essential orientations: perceived zenith and perceived horizon line. In contrast to how we perceive these spatial reference frames outside, in enclosed interiors where such reference frames are often not visible, we can stage architectural cues to alter our perception of interior space. Restoring these fundamental spatial reference frames through a valid multi-sensory illusion restores a range of wellness benefits normally associated with interiors applying biophilic design principles.

By attending this workshop participants will be able to: Discuss how and why isolating the qualities of light—intensity and color temperature—from their natural medium, the sky, has a profound effect on perception: light loses its spatial attributes as an organic connection to nature. Define the role intrinsically photosensitive Retinal Ganglion Cells (ipRGCs) play in regulating circadian function and why the environmental context in which our physiology detects circadian light—in open, natural space—may play a fundamental role in generating a restorative effect. Describe how our sensorimotor system and our memory share the same wetware (neural pathways) to perceive and map out our environment, making our memory a neural repository of spatial reference frames. Summarize the malleable nature of human perception and how multi-sensory illusions can be designed in architectural settings, transforming how our physiology experiences the built environment.

Presented by: David Navarrete, Sky Factory
Flyover Manifesto I: Iowa and Its Architecture
1 LU

In an area of the country that is often overlooked or regarded as simply agricultural, great design has taken root. There’s a willingness throughout to let function, construction, materials, and space speak for themselves—plainly but elegantly—and to see what can be coaxed from these basic design elements. Iowans have unassumingly created an environment where a genuine appreciation for good design and urban architecture can flourish. This course provides an overview of Iowa’s history as it impacts building design and the design community.

By attending this workshop participants will be able to: Describe the inhabitation of Iowa and how its inhabitants created an environment that would encourage good design. Demonstrate the impact of Iowa’s tension between conservatism and progressivism on building design and appreciation. Describe the effect of major events and design periods on Iowa’s architecture and design. List and analyze examples of great architecture in Iowa and the international and local architects that influenced design.

Panel Presentation: Tom Leslie, AIA, Iowa State University

Code Requirements for Health Care Occupancies
1 LU HSW

The purpose of this course is to explain minimum state and federal code requirements and standards that will provide reasonable degree of safety in healthcare building design.

By attending this workshop participants will be able to: To provide better understanding regarding healthcare occupancy classifications. To sufficiently educate attendees on codes and standards that pertain to healthcare occupancies. To identify the most significant differences between the Life Safety Code (NFPA 101) 2000 and the Life Safety Code (NFPA 101) 2012. To help architects and designers better understand how to resolve Life Safety Code deficiencies.

Presented by: Ljerka Vasiljevic, Iowa Department of Public Safety
Site Selection: Using Smart Data to Predict Site Conditions with Increased Confidence

This presentation will discuss state-of-practice and state-of-the-art in data management as it relates to geotechnical data. Methods for collection and management of typical geotechnical data and combining this with public domain data will be shown to increase confidence of predicted geotechnical conditions and the formation of smart exploration programs to confirm expected conditions. This enhanced method of data use and its effects on selection of site exploration/characterization methods will also be discussed.

By attending this workshop participants will be able to:
- Identify an overview of Geotechnical Site Characterization and various foundation systems.
- Explain data Mining public domain data and predicting soil conditions prior to site exploration.
- Define site exploration methods and innovative site exploration methods.
- Use innovative communication tools to explain the facts of the geotechnical information to bring all stakeholders into the conversation.

Presented by: Jeff Magner, Terracon, AIA Iowa Allied Member

Building Energy Research with the 2009 Iowa State University’s Solar Decathlon Home: Lessons Learned for Sustainable Design in Iowa

The Interlock House, Iowa State University’s entry into the 2009 US DOE Solar Decathlon has been designed as a net-zero solar powered home and served for the past five years as NSF EPSCoR funded community laboratory for energy efficiency research. The building operates as activity center of Iowa’s Honey Creek Resort State Park. Over hundred sensor points can be analyzed remotely. In addition a mobile data acquisition systems allow for staged measurements. While we set out to verify design predictions, the house has provided the infrastructure for scientific advances and this presentation will report on the multiple projects conducted in the house over the past five years and report impacts on design decisions for future solar powered and naturally ventilated residential construction in the Iowa climate.

By attending this workshop participants will be able to:
- Differentiate between basic design strategies for natural ventilation in Iowa and understand the research outcome of Interlock House measurements for use of Computational Fluid dynamics for natural ventilation design strategies for Iowa.
- Understand the interrelationship of multiple comfort parameters in energy efficiency design in order to improve design predictions for net zero buildings in the future.
- Use visual materials developed for the Interlock House to communicate energy efficiency and net-zero design strategies to clients using basic energy modeling techniques.
- Understand the design challenges for net-zero energy residences in the Midwestern climate based on building operation and user behavior and be able to start developing seasonal climate-based operation strategies for their clients.

Presented by: Ulrike Passe, Int. Assoc. AIA, Iowa State University
Architect as Facilitator: A Case Study in Cohesion
1 LU HSW

Architects are leaders in the design process, but the value added through facilitation of relationships outside of traditional A/E/C contractual commitments can be the difference in a successful project. Utilizing Johnston CSD New High School as a case study, we will review roles the architect plays with a focus on the facilitation process and the resulting relationship/resource benefits. Project energy concerns will be used to demonstrate the interconnections and synergies of these relationships from the perspective of various stakeholders. The value added to the design process and overall project by engaging outside resources will also be reviewed.

By attending this workshop participants will be able to: Understand how construction documents and deliverables inform the relationships and roles during the design process to ensure goals are achieved. Identify characteristics of the facilitation process and relationships/resources benefiting project objectives. Recognize the value collaborative early energy analysis contributes to client decision-making and goals. Review a range of energy-efficiency options and their impacts on various stages of design and energy outcomes.

Presented by: Thomas Wollan, AIA, frk architects + engineers, Andrew Venzke, Alvine Engineering, AIA Iowa Allied Member & Jeanne Huntsman, AIA, The Weidt Group, AIA Iowa Allied Member

Vegetated Roof System Assembly Design
1 LU HSW

This course is a discussion about the complexities of vegetated roofing systems. This presentation walks through the typical components of a functional green roof system and provides the procedures on how to improve the quality of vegetated roofing system designs by focusing on detailing and performance.

By attending this workshop participants will be able to: Understand the design parameters for vegetated roof assemblies. Identify typical layers of a functional vegetated roof, and understand their use and importance to the entire assembly. Achieve the long term performance benefits from properly designing, specifying, and detailing the component layers of a vegetated roof assembly. Avoid common sources of failure in vegetated roof design.

Presented by: John Breidenbach, Tremco Inc., AIA Iowa Allied Member
Tentative Schedule

Wednesday September 27

12-8 p  Exhibit Hall Set-up

Thursday September 28

7:00 a  Registration Opens
   Exhibit Hall Open / Continental Breakfast

8:00  Welcome

8:15  Louise Braverman, FAIA
   Keynote Speaker (1.25 LU HSW)

9:30  Exhibit Hall Open / Refreshments

10:45  Workshop Session 1: 1 LU or LU HSW
   1. Preparing for the Oncoming Age Wave
   2. Designing & Detailing High-Performing Masonry RainScreen Walls
   3. Liability Insurance for A/E: Certificates of Insurance, Coverage Basics and Risk Management Strategies
   5. Why the AEC Industry Must Adapt
   6. Enhancing Energy Efficiency in Historic Buildings

11:45  Lunch (with Exhibitors)
   Shannon Kraus, FAIA
   HSK Architects

1:15 p  Workshop Session 2: 1 LU or LU HSW
   7. Computation as a Catalyst to Gender Parity in Architectural Practice
   8. High Performance Building Envelope
   9. Design Phase Mapping: Aligning Goals and Defining Deliverables
   10. Thermally Decoupling Laboratory Ventilation Loads: Strategies to Dramatically Decrease Outside Air and Energy Consumed by Laboratories
   11. Achieving Project Goals: Indian Creek Nature Center's Amazing Space
   12. Implementing Cost Effective Strategies for Building Operations in the Design Phase

2:15  Exhibit Hall Open / Refreshments

3:45  Tyler Sharp, Keynote Speaker (1.25 LU HSW)

5:00  Cocktail Party / Exhibit Hall Open

7:00  Awards Celebration
Tentative Schedule

Friday September 29

7:45 a  Registration Opens
   Feed Your Future: Emerging Professionals Breakfast
   Exhibit Hall Open / Continental Breakfast Inside
8:15  Masonry Institute Architectural Awards
8:30  Corey Martin, Keynote Speaker (1.25 LU HSW)
9:45  Exhibit Hall Open / Refreshments
10:45 Door Prize Drawing, Exhibit Hall
11:15 Workshop Session 3: 1 LU or LU HSW
   13. Specifications (They’re More Than a Monitor stand)
   15. The Standard of Care for Design Professionals—Case Law Update
   16. How to Convert a Campus to Geothermal—Ball State University’s Road to Decreasing Energy Footprint
   17. Prairie Trail—Fifteen Years Later
   18. The Restorative Impact of Perceived Open Space
11:30 Exhibitor Booth Teardown
12:15 p  AIA Iowa Lunch
1:00  AIA Iowa Business Meeting and Legislative Forum
2:00  Break
2:15 Workshop Session 4: 1 LU or LU HSW
   19. Flyover Manifesto I—Iowa and Its Architecture
   20. Code Requirements for Health Care Occupancies
   21. Site Selection: Using Smart Data to Predict Site Conditions with Increased Confidence
   22. Building Energy Research with the 2009 Iowa State University’s Solar Decathlon Home: Lessons Learned for Sustainable Design in Iowa
   23. Architect as Facilitator: A Case Study in Cohesion
   24. Vegetated Roof System Assembly Design
3:15  Break/Refreshments
3:30  Todd Walker, FAIA, Keynote Speaker (1.25 LU HSW)

Saturday September 30

8:00 a  ARE® Study Sessions
Hotel
A group of rooms have been reserved at Hyatt Place Hotel, located at 418 6th Ave in downtown Des Moines. The single/double per room rate is $142 a night. You may check in by 3 p.m. and check out by 12 p.m. To qualify for the AIA Iowa group room block, you must make a reservation by September 4 and indicate that you would like to be included in the AIA - American Institute of Architects Block room block. After this date, rooms are on an availability basis only. To make your reservation, call the reservation desk at 800.634.3839 or 515.724.5404 or visit hyatt.com.

Continuing Education
AIA Iowa is registered with the American Institute of Architects Continuing Education System and is committed to developing quality-learning activities in accordance with AIA/CES criteria. Participants in the 2017 AIA Iowa Convention will receive one learning unit (1 LU or LU/HSW) for each hour of programming. The number of LU’s available for each workshop and keynote session is listed with each description.

Registration
Registration details and pricing is available online at aiaiowaevents.org. Onsite registration is an additional $50.

Pella AXP Sponsorship
Pella recognizes the importance of the future of the architectural profession and our emerging professionals by graciously funding the Pella AXP Sponsorship at the 2017 AIA Iowa Convention. This program celebrates AIA Iowa Associate members (those enrolled in the Architectural Experience Program (AXP)) by providing funding for them to attend the convention at a reduced rate. AIA Iowa Associate members may sign up for this program by entering a discount code during convention registration that will be emailed to those eligible for the discount.

Register today at aiaiowa.org