



Education Program Course Descriptions

Monday: October 17, 2016

1980 Is Calling, They Want Their Mentoring Program Back

Session Time: 90 Minutes

Description

Ladies and Gentlemen, please keep your arms and legs inside the ride at all times as we blast past the mentoring methods of yesteryear and flash forward at warp speed into the ideologies of 2016! If you feel like you have landed on another planet, you are not alone! The generational span that is present in today's workforce may have everyone feeling like they are on a mission to Mars. The generational landscape in the workplace today is expansive, but the opportunity to create a successful mentoring program in this environment is not lost in space. In this tactical workshop, participants will be actively building a mentoring program framework specific to their organization based on the philosophies of today's multi-generational needs. Each participant will return to their planet with a prescriptive plan to launch a mentoring program in their organization.

Best Practices: Lessons Learned from the Building Department

Session Time: 90 Minutes

Description

The International Code Council (ICC) Major Jurisdictions Committee and International Accreditation Service (IAS) have partnered to bring you unique and innovative practices from IAS-accredited building departments large and small. During this session, IAS will present an overview of building department best practices in permitting, plan review, inspection, customer service, management and administration, and information technology. These best practices have been identified during the on-site evaluations of building departments and catalogued by IAS since the inception of its Building Department Accreditation Program.

Enhance Your Career: How to Get Involved with an ICC Committee

Session Time: 90 Minutes

Description

This informative session that will provide information, identify benefits and the importance of getting involved with the International Code Council (ICC) through committee participation. Discussions will include: an overview of the ICC process on "call for committees," the different types of committees and when/how to apply. What to expect once appointed to a committee, including the commitment for meeting attendance, participation and completing assigned tasks, will be addressed.

Tuesday: October 18, 2016

2015 IEBC Overview



Session Time: 90 Minutes

Description

This session will provide an overview of the critical concepts of the 2015 *International Existing Building Code*® (IEBC®). It will provide a basis for the correct use of the code, and will also build an understanding of the intent of the code through detailing some of the basic tables.

Special Inspections – Implementing and Managing IBC Chapter 17, Requirements for Building Departments

Session Time: 90 Minutes

Description

Building departments are again facing the challenges that come with an improved economy, as a spike in construction-starts spreads across the nation. To meet this challenge, building jurisdictions faced with implementing IBC Chapter 17 Special Inspection requirements will benefit from this presentation. Part One of the presentation covers the special inspection requirements in IBC Chapter 17, including: what is special inspection, why special inspections are needed, the responsibilities of the different parties involved, the different categories of special inspection, and recommendations on steps for setting up a special inspection program. Part Two of the presentation will show how building departments can use the IAS AC291 accreditation program to manage special inspections in their jurisdictions. This part of the presentation will cover the processes used to evaluate and verify the competence of special inspection agencies and monitor their performance. Establishing a formal process provides evidence that jurisdictions have performed their due diligence to ensure that special inspections are being carried out as required by the IBC. This presentation will show how the International Accreditation Service (IAS) can help jurisdictions implement the program at little or no cost. A question and answer session will be offered at the end of the presentation.

2015 IRC Essentials Highlights

Session Time: 3 Hours

Description

This session examines basic concepts of the 2015 *International Residential Code*® (IRC®). This session will also help the user to correctly locate code requirements and provides a basis for the correct use and application of the code. Additionally, participants will begin to develop a procedure for applying them.

The Five Walls of the IBC

Session Time: 3 Hours

Description

This session is an interactive presentation defining each of the five walls of the *International Building Code*® (IBC®), their opening protective guidelines and specific uses in the structure. This session will examine vertical opening provisions as they apply to elevator shafts, egress and non-egress stair enclosures, atriums and two-story configurations.

Residential Fire Sprinklers for Plumbing Officials



Session Time: 90 Minutes

Description

This course will cover the important aspects of residential fire sprinkler systems for plumbing officials. Connections to potable or standalone water supplies, systems components, operational performance and tests/inspections will be addressed.

2015 IFC Essentials Highlights

Session Time: 3 Hours

Description

This session will provide an introduction to the 2015 *International Fire Code*® (IFC®). It is designed to familiarize and assist participants in locating, describing and applying applicable code requirements to determine compliance or noncompliance. Activities and discussions will further enhance participant learning.

2015 IBC Essentials Highlights

Session Time: 3 Hours

Description

This seminar will provide an introduction to the 2015 *International Building Code*® (IBC®). It is designed to familiarize and assist participants in locating, describing and applying applicable code requirements to determine compliance or noncompliance. Activities and discussions will further enhance participant learning.

The Latest in ICC 500 Storm Shelter and FEMA Safe Room Requirements

Session Time: 90 Minutes

Description

The 2015 *International Building Code*® (IBC®) requires storm shelters in the 250-mph tornado design wind speed zone for certain schools and first responder facilities. A storm shelter constructed in accordance with ICC 500 or a safe room constructed in accordance with FEMA criteria can provide occupants life safety protection from tornadoes, hurricanes, and extreme windstorms. FEMA recently updated its safe room guidance based on years of post-damage assessments and lessons learned from safe rooms directly impacted by tornadoes. *FEMA P-361, Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms (2015)* contains important design and construction criteria and builds on ICC 500. *FEMA P-320, Taking Shelter from the Storm:*

Building a Safe Room for Your Home or Small Business (2014) includes prescriptive safe room designs that can be used for a home or small business. This presentation will summarize ICC 500 and the guidance in FEMA's safe room publications.

Emergency Communication Strategies for Building

Session Time: 90 Minutes

Description

Nearly every occupancy requires a fire alarm or some method of emergency communication system to notify building occupants of a fire or other emergency. Some buildings contain multiple communication and notification systems. However, given the technology of today, there is no reason why a single system cannot achieve the goals of multiple systems. The paradigm shift from fire alarm systems to emergency communication systems is happening. This allows the code required fire alarm systems to be utilized to achieve notification and emergency communication for a variety of events, as well as other communication needs for the building. Understanding how to design for and achieve voice intelligibility of the emergency communication systems is of utmost importance. This presentation will define an emergency communication system, discuss the design process for these systems, and will also discuss notification alert tones such as low frequency for sleeping areas and voice intelligibility.

Disasters and the Disaster Response Inspector

Session Time: 3 Hours

Description

Before and after a disaster, all too often an affected community is left on its own to struggle with preparing to respond to the event and then assessing and dealing with its damage. The first part of this presentation outlines free and readily available resources that will enable a community to quickly map out its damage-prone areas. It provides a simple low-cost method for communities to quickly and easily evaluate their vulnerability based on natural disaster characteristics for purposes of pre-planning a disaster response. The second part of this presentation highlights the International Code Council's *When Disaster Strikes Institute*. This institute is aimed at training qualified professionals that can be relied upon to assist with performing Post-Disaster Building Assessments. It also discusses the National Incident Management System (NIMS) credentialing process, whereby properly trained and qualified Structure Condition Evaluators can be prequalified and rostered. By having access to a properly trained pool of individuals, building officials are better able to jump start recovery.

Marijuana and the Building Code

Session Time: 3 Hours

Description

With more and more states legalizing the use of marijuana, code officials are faced with the unique operations of these facilities. This seminar will discuss the occupancy classification of both grow facilities and dispensaries. Security, ventilation, lighting, CO generation and other related topics will also be discussed.

Fundamental Building Accessibility Principles in Action: A Case Study

Session Time: 3 Hours

Description

This session presents the case study of a \$13 million commercial building project, illustrating select, fundamental design concepts based on accessibility regulations of the International Code Council (ICC) and the Federal standards. Specifics of the 2010 Department of Justice (DOJ) *2010 ADA Standards for Accessible Design* and the *International Building Code*® (IBC®) are applied to extensive alterations and new additions of two multi-story, existing buildings that originally were separated by open space and later connected. Prominent harmonization and key dissimilarities between the 2010 Standards and the IBC are analyzed. The differences in the scope and purpose of the two regulations is a critical turning point in early, misguided design decisions. Architectural principles such as the effect of firewalls on accessible routes; circulation paths; the 20% path of travel provisions; facilities vs. buildings; accessible entrances; and the overall impact on non-altered buildings are examples of the discrimination lessons learned in this project.

This is a highly advanced curriculum intended exclusively for professionals who have direct, extensive and ongoing experience in design, enforcement or education of accessibility requirements. This program is recommended for persons with an understanding and background in applying the 2010 Standards and/or the International Building Code® (IBC®) from 2009 forward to current editions.

Overview of the 2015 IgCC Plus Water Efficiency Provisions (IgCC and IPC)



Session Time: 90 Minutes

Description

This session will provide a general overview of the International Green Construction Code (IgCC), which is first model green code for traditional and high-performance commercial buildings and residential buildings more than three stories high. The IgCC provides guidance for safe and sustainable building design and construction, including energy and water efficiency, site impact, building waste and materials. This code is useable, enforceable and adoptable and there are jurisdictions that have already adopted public versions of the code.

This session will also provide a focus on the water efficiency provisions of the IgCC and Chapter 13 of the International Plumbing Code. It will cover water efficient fixtures, appliances, and use of non-potable water to reduce the use of potable water.

Flammable Refrigerants: The Evolving Impact on Codes



Session Time: 90 Minutes

Description

This course will introduce students to the contemporary environmental and public safety issues associated with the federal regulations mandating replacement of Global Warming Potential (GWP) refrigerant gases. The regulations will affect current building, fire and mechanical codes that may need to be modified to adapt to the new refrigerant chemistry.

Alternate Means and Materials for Code Compliance

Session Time: 90 Minutes

Description

Understanding how to determine whether new materials and systems meet Code is critical to advancing innovation in the building industry. As such, it is incumbent on code officials to understand how new materials and systems fit within code requirements. The primary mechanism for approval of innovative materials and systems is through their evaluation as Alternate Materials and Methods, which states the following.

“The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. The code official shall be permitted to approve an alternative material, design or method of construction where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code.”

This presentation will provide basics of material and system code evaluation. It will describe the role of evaluation service agencies and the process of obtaining a code evaluation report. The presentation will also describe how these reports are used in field approvals of new products and systems.

Vapor Permeability of Materials & Assemblies – Determining the When and Where of Vapor Retarders

Session Time: 90 Minutes

Description

Code provisions on the use and placement of vapor retarders are becoming more detailed and can be confusing. Additionally, building assembly components such as water-resistive barriers, air barriers and sheathings are available as either vapor retarding or vapor permeable products. In 2015, the concept of using hygrothermal modeling to determine the use and placement of vapor retarders was introduced into the *International Building Code*® (IBC®). This presentation will review changes to the vapor retarder requirements in the IBC and the *International Residential Code*® (IRC®) from 2009 to 2015. It will introduce hygrothermal modeling and provide guidance on the key considerations when conducting or reviewing a hygrothermal analysis.

Electrical Residential Installation, 2015 IRC

Session Time: 3 Hours

Description

Particularly helpful and valuable for inspectors, contractors, electricians, and students, this seminar assists attendees in learning to make more accurate, thorough, and safe installations and inspections of one- and two-family dwellings. The related changes of the 2015 IRC will be explained in detail as they relate to dwelling units. The seminar is based on a comprehensive book of the same name that explains in clear, concise language the installation, design, and inspections of electrical systems in dwellings.

Help Me, Help You: Getting What We Need at the Permit Counter



Kansas City

ICC Chapters

Session Time: 3 Hours

Description

Whose job is it to make sure everything needed in a set of plans is actually submitted at the time of permit application and plan submittal? When the plan reviewer opens a set of plans only to find that they don't have enough information to do the review, who does that fall back on? The applicant, that's who. But, is the applicant being provided with the facts they need? This session will look at how to determine if plans are submitted with enough information to get reviewed. It will also address techniques to help applicants at the front counter to submit plans with complete information.

Health Care Facilities Provisions of the 2014 National Electrical Code



Kansas City

ICC Chapters

Session Time: 3 Hours

Description

This course will provide an in-depth overview of Article 517 of the 2014 *National Electric Code*® (NEC®) and related articles as they pertain to the electrical provisions for health care facilities. We will discuss the provisions relating to health care facility general electrical requirements, definitions, wiring and protection, as well as essential electrical systems, inhalation anesthetizing locations, X-ray installations, communication, signaling, fire alarm, and isolated power systems. While we will address NFPA 99-2015 requirements, instructions will focus on the requirements of NEC® Article 517.

The Environmental Court: A Judicial Response to Code Violations

Session Time: 90 Minutes

Description

This session will describe a judicial response to code violations in a jurisdiction. The Environmental Division of the Franklin County Municipal Court was established by the State Legislature to oversee the adjudication of all housing, building, health, zoning, and licensing cases within Central Ohio's capitol county. The judge of the Environmental Division has exclusive jurisdiction to hear all cases against property owners and contractors who face criminal or civil sanctions for violating local codes; in addition to having authority to hear appeals of zoning and building orders and decisions. This judicial approach to code compliance has resulted in some unique sentencing strategies and experiences that could be helpful to other code enforcement agencies.

Common Errors in the Design and Construction of Fire Resistive Assemblies

Session Time: 90 Minutes

Description

The design and construction of fire resistive assemblies require a coordination of the structural and architectural design to provide the minimum life safety requirements of the building code. We have found both design and construction defects in these assemblies, creating life safety risks for the occupants. This presentation will focus on the issues commonly present in residential buildings from townhomes to high-rise condominiums.

IECC Residential & Multi-Family Real World Applications

Session Time: 3 Hours

Description

Inspections come to the classroom by way of pictures and videos as we look at not just what the code says, but how it's applied in the real world. This course will look at why things like blower door testing, duct testing, air barriers and mechanical ventilation made their way into the *International Energy Conservation Code*® (IECC®). Building science principles will be discussed. The IBC classifies multi-family construction as an R-2 Occupancy. This leads many designers and code officials to believe that it is a "commercial" occupancy for purposes of energy code compliance, when in fact, most are actually residential per the IECC. This course will look at the difference between the commercial and residential provisions of the IECC for R-2 occupancies, as well as common issues that come up in compliance, such as meeting blower door testing requirements, equipment sizing, and ventilation.

Best Practices for Permitting Solar PV Systems

Session Time: 90 Minutes

Description

This seminar is designed to provide code officials, plan reviewers, solar installers, and design professionals with an overview of permitting practices for solar photovoltaic (PV) systems in jurisdictions throughout the U.S., and will provide resources for best practices in permitting of these systems. The type and location of code provisions impacting solar PV installations in the 2015 I-Codes and International Solar Energy Provisions (ISEP) will be introduced.

Shared Building Department Services

Session Time: 90 Minutes

Description

Smaller cities may struggle with providing quality and timely building department services due to limited resources. A shared building department approach provides a way for smaller municipalities to join together to share the cost of some or all of these services, maximize building department efficiencies, prepare budgets, and hire/retain the best resources to service citizens and the building community. This session will explain how this approach works, how to plan and implement shared building department services and how doing so can help to increase buying power, improve services, and save money.

ICC Journey to Leadership in Code Administration

Session Time: 3 Hours

Description

If you aspire to become a leader in the code profession, this seminar is for you! More than 80 percent of the existing code officials are planning on retiring in the next 15 years, with more than 30 percent in the next 5 years. It is imperative that future leaders of the code profession are developed. Being promoted to a higher level of responsibility in the code profession means you must move beyond technical expertise and develop and utilize leadership skills. This session will allow participants to begin the thought process for developing their personal “leadership journey” for growth in the code profession. Participants will have the opportunity to hear from and interact with leaders in this industry. Past Presidents, Board Members and other leaders within the membership of ICC will lead and present this session. They will share their personal leadership journey, including what made them successful and lessons learned.

Resume Writing and Project List/Portfolio Development Session

Session Time: 3 Hours

Description

The International Code Council will be offering a unique resume writing and project list development session. Hosted by Sequence Staffing (www.sequencestaffing.com), this will be an opportunity for participants to learn from experts experienced in the development and writing of thousands of resume and supporting career materials for professionals at all levels.

Just as you often have only a limited time to make a positive personal impression, the professional presentation you create with your resume and other brand materials is often the difference between landing an interview and getting job or being passed over for an opportunity.

That’s why it’s so critically important to write a resume that is designed to emerge from those black hole databases and “catch the eye.” Your resume needs to be written in such a way that it pops up and catches the attention of the employer, hiring manager or recruiter.

Based on Sequence's groundbreaking VITAE Exercise (www.vitaeexercise.com) this hands-on interactive session will be focused on teaching secrets from professional experts who have marketed thousands of candidates and transformed the way resumes are written nowadays. They will share their expertise on how to write powerfully effective resumes and project lists that will get you noticed and help you take your career to the next level. It will also discuss the development of your project list or professional portfolio.

This session offers the unique opportunity to look at your own resume and assess the fundamentals of the document as well as interact with other session participants. Whether you are seeking or job or simply looking to keep your professional materials fresh this is the session for you.

This session is coupled with the ICC Resume Clinic in the Vendor / Convention Hall. In addition to attending this session, you can sign up for a one on one resume critique and feedback. All participants should bring their current resume and project list with them.

Pre-Conference Tour:

World War I Museum Architectural & Pick Wick Building Historical Renovation Project

World War I Museum – Architectural Tour

Come tour the unique architecture and learn the historical significance of the National WWI Museum. The Liberty Memorial Monument was a dynamic addition to Kansas City's cultural offerings. Over time the physical structure of the monument deteriorated, and it was closed in 1994 due to safety concerns. In 1998, plans took shape to restore the Liberty Memorial and to expand the site by building this museum to better showcase the WWI related objects and documents dating back to the 1920s. In 2004, the construction of the new 80,000 square foot museum was built underneath the original Liberty Memorial. The Liberty Memorial has been designated a National Historic Landmark, recognizing the monument as a nationally significant historic property. Participants will experience an architectural tour designed specifically for those interested in the unique architecture of the building. A Building Code expert will be available for Code related questions.

Lunch:

Jack Stack Barbecue

Pick Wick Building – Historical Renovation Project

Distance from Kansas City Convention Center: 5 minute bus ride

The historic Pickwick complex is a grand reminder of downtown Kansas City's pre-war era. A group of vacant buildings completed in 1930 and unified by their "streamline Gothic" design, covers three quarters of the entire city block. The buildings include what once was an 11-story hotel, interstate bus terminal, parking garage and six-story office building. These buildings are currently being renovated to include apartments, retail space, and an office complex. Participants will tour this \$65 million dollar historical renovation project and engage in a discussion about the Code challenges it presented, including how the 1927 Kansas City Building Code had to be referenced for portions of the renovations.

Tour: Kaufman Center for the Performing Arts

What began as a sketch on a napkin has become an architectural icon and home for the performing arts in Kansas City. The Kauffman Center for the Performing Arts has changed Kansas City's skyline, as well as the experiences of artists and audiences throughout the region. This performing arts center has acoustical quality among the best in the world. You will participate in a guided tour presenting an historic overview and highlighting its architectural accomplishments. A Building Code expert will be available to address Code related questions and comments.

Tour: Underground Building Complex: Hunt Midwest SubTropolis

Hunt Midwest SubTropolis is an office complex that is 150 feet below Kansas City; built in a 270 million-year-old limestone deposit. It is the world's largest underground business complex, with over 6,000,000 square feet of industrial space for lease. Available space is added each year as active mining continues. Participants will have the opportunity to learn more about provisions in the Building Code for underground buildings and tour this unique facility. This experience will begin with a classroom educational component and then the group will go to the SubTropolis for the onsite tour.

Tour: Harley Davidson "Behind the Scenes" Experience

Harley-Davidson, the iconic American motorcycle manufacturer, has a 358,000-square-foot manufacturing facility in Kansas City, Missouri that was built in 1998. Kansas City employees produce several varieties of motorcycles. This benchmarking tour experience has been custom designed for The International Code Council. Participants will get a "behind the scenes" look at how the Harley-Davidson manufacturing facility utilizes the I-Codes to help ensure building safety, fire prevention, and public safety. Participants will tour the factory floor and have the opportunity to engage in a question and answer session. A Codes expert who reviewed and approved original plans and construction of this facility, as well as a more recent renovation, will be one of the guides and will be available to answer Code related questions.

Tour: Kansas City Union Station

What began as a sketch on a napkin has become an architectural icon and home for the performing arts in Kansas City. The Kauffman Center for the Performing Arts has changed Kansas City's skyline, as well as the experiences of artists and audiences throughout the region. This performing arts center has acoustical quality among the best in the world. Participants will experience a guided tour presenting an historic overview and highlighting its architectural accomplishments. A building code expert who worked on the plan review/inspection of the Kaufman Center during construction will guide the tour along with Kaufman Center staff and be available to address code related questions.