BFCA®

Building & Fire Code Academy

Code Enforcement Career Development Program

2014 Building & Fire Code Academy

Building Better With Our Greatest Resource ... Education®

AUTHORIZED IACET PROVIDER

The Building & Fire Code Academy is approved by the Division of Private Business and Vocational Schools of the Illinois Board of Higher Education (IBHE).

CONTINUING EDUCATION AIA

The Building & Fire Code Academy®

Code Enforcement Career Development program

2014 Building & Fire Code Academy

An exclusive innovation of the Building & Fire Code Academy, the Code Enforcement Career Development Program (CECDP) creates knowledgeable building and fire code professionals who easily can step into or enhance employment opportunities in municipal building departments and other code-related professions. The following week-by-week curriculum is subject to change.

Program Highlights

The CECDP provides:

- Essential knowledge of residential and commercial construction codes;
- Skills training and understanding of the application and enforcement of building and fire codes;
- Plan review skills, inspection and code enforcement skills applicable to a variety of code-related professions;
- All course related codebooks and workbooks;
- Qualified instructors with years of experience to guide students through the challenging program and certification testing;
- Monthly evaluation to assess program effectiveness and student progress.

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Instructor explains various code requirements to CECDP students during a field day visit to a construction development.

Program Features

The Code Enforcement Career Development Program is an 12-week curriculum designed to provide qualified candidates with the fundamental knowledge and field experience to obtain or enhance employment opportunities. The program represents a unique and effective approach to educating and preparing qualified candidates to become employed in various code-related professions.

Who Should Attend

The Code Enforcement Career Development Program is an ideal choice for individuals from any occupational background desiring a career change, whether or not they have beginning or advanced skills in construction related fields.

Workers experiencing layoffs resulting from recent economic decline or work shortages in other fields can learn a new skill or build on current knowledge. Former field tradespeople find the CECDP the logical choice for continuation in the construction industry.

The CECDP provides a solid foundation of education and preparation for any number of related professions such as:

- A municipal inspector and plans examiner;
- Working for a developer or design firm;
- An insurance field inspector;
- Employment with a lending institution verifying construction progress and completion; or
- An employee in a corporate safety or construction department.

Orientation, Basic Code Enforcement, Blueprint Reading

Week 1

Students begin with an orientation of the program guidelines, expectations, objectives and successful completion requirements.

Following orientation, basic code enforcement is introduced. Instructors explain the purpose, use and types of codes, municipal code adoption, building department functions and construction standards. The role of the the International Code Council (ICC) is described in addition to the certification process and requirements.

Students examine the scope, provisions and administration of codes along with regulation and performance requirements. Students are taught the difference between a code and standard and how they relate to the building process. Instructors take students through the permit and code enforcement process covering authority, right of entry, stop work orders and variances. Zoning requirements are also discussed.

Students study commercial, industrial, residential and single-family blueprint-reading. Basic components from common symbols and site plans, to code requirements are covered.

Student Ray Gonka learns about electrical panel and circuit code requirements with experienced inspector Joe Siegel.

Course Titles

BCE	Basic Code Enforcement
BPR	Blueprint Reading
FRCR	Fire-Resistive Construction Requirements
IAC	Illinois Accessibility Code
IRC	International Residential Code
IBC	International Building Code
IRC-E	International Residential Code — Electrical
IBC-PR	International Building Code — Plan Review
IRC-M/P	International Residential Code — Mechanical and Plumbing
IPMC	International Property Maintenance Code
BDB	Understanding Building Department Basics
IRC-PR	International Residential Code — Plan Review
IECC	International Energy Conservation Code
IgCC	International Green Construction Code

Understanding the International Zoning Code, Communications, Inspections, and Legal Aspects of Code Administration

Week 2

During week two, students begin working with the International Codes. Students are introduced to the inspection process and procedures for residential footing, foundation, wall and roof systems. Applicable communication skills are covered during the week, including written, verbal, and non-verbal. Students will learn techniques on how to write and interpret inspection reports. Experienced instructors demonstrate proper and effective communication of code requirements with contractors, municipal officials, design professionals and homeowners. Students role play with different situations to understand the importance of good, assertive communication skills.

The week concludes with the examination of the Legal Aspects of Code Administration, studying terminology, concepts and the principles of legal issues that affect construction and code officials in the administration of their duties. Instructors address the distinction between local, state and federal law, and the impact that each has on the establishment and enforcement of model codes. Major law concepts for code inspectors and other construction-related professionals, such as Administrative, Constitutional and Property law, Liability, Intentional and Negligent Wrong-doing and Immunities are also discussed.

Understanding the International Residential Code

2014 Building & Fire Code Academy

Week 3

The International Residential Code (IRC) deals specifically with code requirements for single-family homes and townhouses. Instructors prepare students for study of this series of the code by explaining its purpose, use and defining code terminology.

This session of the program focuses on the application of the IRC in conjunction with plan review. Students learn the concepts of plan review and proper submittal of construction documents. Instructors cover areas such as building planning, room area, building materials, ceiling heights, insulation, basement remodeling in habitable spaces, safety glazing, skylights, garages, attics, floor surfaces, emergency escapes, stairways, guards, post systems, dwelling unit separations, smoke alarms, flame spread and smoke density.

Utilizing a well-illustrated workbook with examples of common code situations, students learn practical, problem-solving solutions. Study of the IRC in plan review also includes hazardous locations, wall construction, loadbearing, masonry, fireplaces and chimneys. Instructors emphasize intent and rationale when working with difficult or unusual building situations and assist students in identifying alternatives which satisfy the overall intent of the code.

The workbook illustrates code requirements for proper installation of mechanical and plumbing systems. Instructors discuss code requirements for furnaces, combustion air, gas piping and proper installation of different types of appliances.

Instructors review requirements for drain, waste, vent and water systems and also describe installation of various types of equipment, including sinks, water closets, dishwashers and specialized appliances, such as spas.

Electrical systems and wiring are explained as students learn requirements for proper application of the code for plan review and field inspections. Employing practical examples, instructors provide basic requirements for electrical systems including electric service, grounding, circuit requirements, receptacle locations and general information on appliances.

Students perform service calculations, size feeders and service conductors, learn about overcurrent protection requirements and solve conduit-fill and box-fill problems.

International Residential Code — Plan Review, Field Trip and Independent Study

Week 4

Week 4 includes a two-day study of the plan review segment of the International Residential Code. The instructor utilizes plans for various single-family homes and townhomes to illustrate the steps in performing reviews for the building chapters of the International Residential Code. Instruction incorporates application of the code, building planning, room areas, heights, stairways, foundations, and construction of floors, walls and roofs. The students move into the field for a first-hand look at both residential and commercial construction on Thursday. Students are provided time to study independently for upcoming certification tests.

Retired Building Commissioner and past model code organization president Tom Rettenbacher addresses students as guest speaker.

Building Department Basics, the International Property Maintenance Code, and Test Prep

Week 5

Week five begins with students learning the basics of a municipal building department. Building Department Basics (BDB) is based on the permit processes performed in many building departments. Students examine the different functions required prior to permit issuance and learn about plan submittal and coordination of inspections. Students learn the political and administrative structure of municipal government relative to community development. The various types of projects and responsibilities of the counter person are explained in addition to regulations including zoning, planning, building codes and local ordinances.

Students are encouraged and recommended to take certification tests during the program. The tests reinforce what has been taught and learned, and helps direct and focus the student's efforts for the second half of the program."

Don Plass, BFCA Administrator

The latter part of the week is devoted to the International Property Maintenance Code, essential to code enforcement personnel. Development and implementation of a good property maintenance program reflects the municipality's commitment to quality of construction and also represents an ongoing commitment to community development. Understanding the International Property Maintenance Code explains the philosophy, attitudes, and values surrounding property values and maintenance.

The illustrated workbook utilizes drawings, problems and photographs to demonstrate how code requirements support community preservation. Inspection principles and techniques are provided to communicate the intent and rationale at the forefront of property maintenance. Minimum requirements for plumbing and mechanical systems, in addition to fire safety requirements, are also illustrated. Instructors outline concepts and procedures for the administration of property maintenance programs based on the experience and results of well-defined and well-managed communities.

The week finishes with a day of preparation for students to successfully challenge one of the national certification inspector exams. The class focuses on test-taking strategies as well as exam preparation. Code knowledge will be reinforced, keywords to the questions identified, correct code sections located, and application of questions will be examined to determine correct answers. The day will include a series of short quizzes to evaluate each student's test-taking skills and knowledge.

In the Field: Real Experience

B&F Construction Code Services, Inc., inspector Steve Lorhmann works with CECDP student Jesse Vasquez in the field explaining a common code violation.

Week 6

This is when students gain valuable knowledge and experience by accompanying actual building inspectors into the field. From the municipal building office to the job site, students watch and learn how to identify construction code deficiencies, complete inspection reports, communicate and interact with municipal officials, homeowners and contractors.

Understanding the Illinois Accessibility Code and the International Swimming Pool and Spa Code

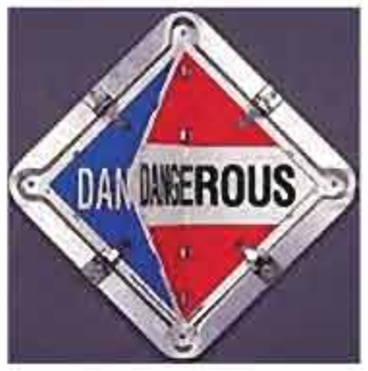
Week 7

Now at a little more than the halfway mark, week seven has students examining the Illinois Accessibility Code (IAC). The unique format of the class uses the codes to demonstrate and clarify requirements. The workbook illustrates applicable situations and photos illustrate applications. During this two-day class, sections of the Illinois Accessibility Code will be covered including administration, definitions and application of the code in new buildings, existing buildings and during building renovation.

During the study of the International Swimming Pool and Spa Code, students will be taught how to interpret ANSI/APSP-7 in the design and performance criteria of circulating systems, including components and devices to protect against entrapment, and updates on fencing and barrier requirements. Covered topics include diving, sanitizing equipment, general design, pumps, filters, suction fittings, lighting and decks. Specifications for design equipment installation signage, accessibility for Aquatic Recreation Facilities and the rehabilitation of public pools for aquatic play are also reviewed. Criteria for the design manufacturing and testing of on-ground storable pools for residential use are also explained.

The week concludes with time for independent study and/or certification testing.

Understanding the International Building Code, Hazardous Material Awareness and Small Project Plan Review



In week eight, students concentrate on commercial buildings and code administration beginning with Understanding the International Building Code, which benefits students in gaining valuable skills and insight for plan review, inspection and code application during the design process. It provides comprehensive instruction on the use, application, intent and rationale of the code and utilizes in-class problem-solving exercises.

Week 8

The course emphasizes significant chapters of the code. On day one of the building code course, definitions, use groups, construction types and requirements, height and area, mixed use, mezzanines and unlimited area are studied. Day two covers egress and fire protection, and day three looks at fire-resistive construction, special uses and accessibility requirements.

Later in the week, students will learn about hazardous material at the first responder level. The course covers authorities and regulations, physical and chemical terms, common and typical hazardous materials, health effects, hazardous material recognition, the DOT Emergency Response Guidebook, and the new Globally Harmonized System (GHS) which replaces the MSDS reports.

The week wraps up with an overview of small project plan review. Small project submittals, reviews, procedures, checklists, and follow-up are covered. Typical projects covered include decks, sheds, porches, concrete flat work, driveways, lawn irrigation systems and patio covers. The relationship between submittal, review, inspection and compliance will be discussed.

Second Week Internship

Week 9

Students take their classroom skills into the field for the second week of internship. By this time, many students have taken, passed and become certified in at least one area and are able to demonstrate a fundamental and working knowledge of building construction codes.

Students now accompany experienced inspectors, shadowing them from the municipal building office to the job site, identifying code compliance deficiencies seasoned professionals call out on a daily basis. Students learn how to fill out inspection reports and other documents and how to interact with municipal officials, contractors, commercial builders and homeowners.

This experience is paramount to the profession of code enforcement. Students return to the classroom and discuss new career contacts with an appreciation of the importance of creating safe, code-compliant buildings.

International Building Code Plan Review and Fire-Resistive Construction Requirements

Week 10

Students begin week ten with the International Building Code Plan Review, a class which provides practical experience utilizing the instructor to guide students through an actual plan review. Specially developed blueprints of commercial buildings are used for this class. The drawings include intentional errors and omissions to demonstrate the process of identifying code violations and oversights commonly found in construction documents.

Students are taught to determine the use group, construction type, height and area calculations, fire-rated assemblies, means of egress, interior environment and accessibility. Students learn how to apply the code to difficult situations and how to know when conditions meet the intent of the code.

Also part of this week is an introduction to Fire-Resistive Construction Requirements. This class provides a comprehensive and detailed explanation of fire-resistive requirements as specified in model building codes and demonstrates how to use Underwriters Laboratories (UL) Fire Resistance Directories. The course details requirements for fire walls, separation assemblies, and shaft enclosures.

Students determine requirements to protect specific use groups, fire areas and multi-story buildings, and locate specified designs in the UL Fire Resistance Directory for walls, floors and roofs. Students also learn about UL's testing and certification process for fire-resistive assemblies and gain valuable experience by actually using examples from the UL Fire Resistance Directory.

Environmental and Sustainability

Week 11

During week eleven, students will study the effects of two common chemical elements (lead and radon), which are naturally found in our environment. Federal and state statutes relating to these elements will be reviewed. Storm water drainage and how it contributes to water pollution will be discussed. Building science and how it relates to the indoor environment will be addressed, along with the study of the International Energy Conservation Code. The Illinois Energy Conservation Code, with its special amendments, will also be studied. The week concludes with an overview of the International Green Construction Code and how it relates to other green building standards.

Job Search, Special Events, Interview Skills, Graduation

Week 12

During week twelve, the final week of the Code Enforcement Career Development Program, students learn how to look for job openings and work on their resumes. Job search skills are reviewed and reinforced for students to use in mock interviews later in the week.

Prior to finishing up any remaining final tests or practice quizzes, students attend a one-day Inspecting and Managing Special Events course. The basics of building, electrical, plumbing, health, mechanical, fire and site safety as it relates to special events occurring within a jurisdiction will be addressed. This course will cover inspection and code requirements, including state requirements, for events such as farmers markets, carnivals, fairs, concerts, bike races, fun runs, fireworks shows, parades and similar events.

The program culminates in an awards ceremony and a special graduation breakfast.

CECDP Prerequisites, Enrollment and Cost

Enrollment in the Code Enforcement Career Development Program begins with an interested individual completing the enclosed application for consideration of admittance. The Building & Fire Code Academy desires the success of every student and will admit only those meeting the established prerequisites and demonstrating a sincere desire and commitment to achieve the goals of the program.

Program Prerequisites

Applicants must be a high school graduate or possess a General Educational Development (GED) certificate and be able to demonstrate reading comprehension and basic mathematical skills.

Enrollment

1. Upon receipt of your completed application, you will be sent a full packet explaining the CECDP goals, outlines, documents requirements and program policies and procedures.
2. Complete and submit the application.
3.. Upon receipt of your application, you will be scheduled for an interview with the program training supervisor. During the interview process, your previous experience, objectives and current level of preparedness will be assessed and you will be sent a registration packet.
4. Upon acceptance as a student, you will be assigned a student number and course start date.

Cost

The cost of the 12-week Code Enforcement Development Program includes all the necessary code books, workbooks, practice exams, and necessary field internship experiencel Call the Building & Fire Code Academy at (800) 488-7057 or (847) 428-2951 to register today!

Setting Conducive to Learning

The Building & Fire Code Academy® provides students with a comfortable, climate-controlled, modern environment suitable to the learning process.

The Building & Fire Code Academy provides students with hot, nutritious, appetizing meals catered daily by the area's finest establishments. Continental breakfasts include fresh danishes, coffee and tea. Lunch menus include a wide variety of main courses, an assortment of pasta, potato and rice dishes with plenty of hot vegetables, salads and desserts.

Routine breaks are scheduled throughout the class day giving students the opportunity to relax in the spacious dining area with music and refreshments.

Housing Accommodations

Distance-based students can spend their 12-week stay in living accommodations within walking distance of the Building & Fire Code Academy. Please contact the Academy for a current list of local hotels that offer BFCA students a corporate rate.

The Building & Fire Code Academy Leaders, History and Accreditations

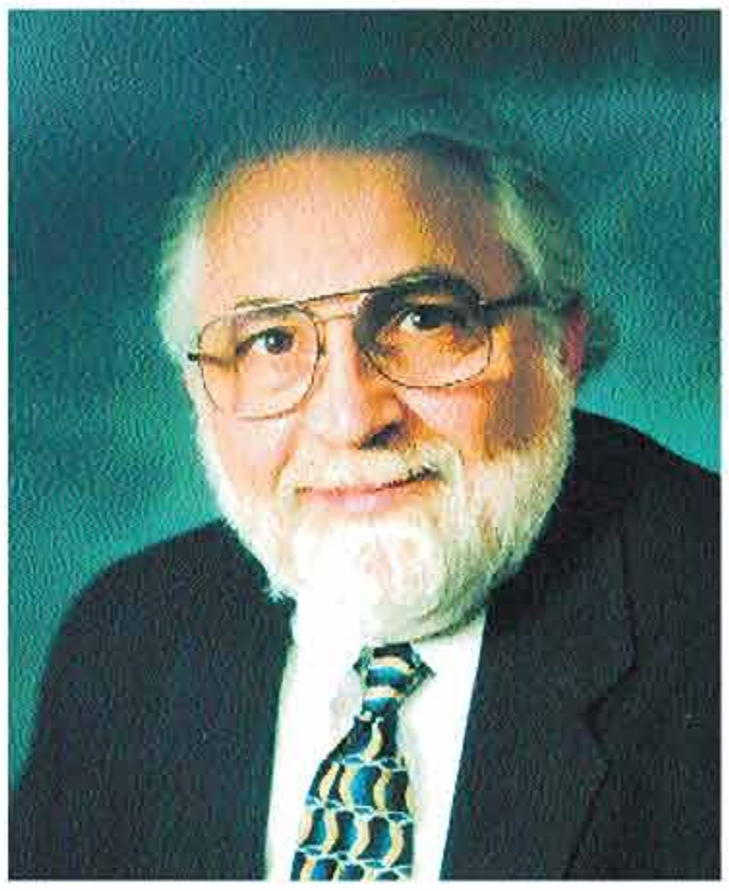
President and Chief Managing Employee of the Building & Fire Code Academy, B & F Technical Code Services, Inc.® and the Illinois Institutional Fire Training Corporation, Richard A. Piccolo brings over 30 years of knowledge, experience and enthusiasm to the CECDP.

A Vietnam war veteran, Mr. Piccolo began his civilian career as a firefighter with the Elk Grove Village Fire Department in 1971 where he utilized his knowledge to conduct community education programs and fire protection code enforcement.

During his 18 years as a firefighter, lieutenant and public educator, Mr. Piccolo also became involved in other construction disciplines by conducting building plan review and mastering model codes and standards, understanding the positive impact of code compliance. Among his many achievements, Mr. Piccolo holds a degree in Fire Science and has earned the top certification in his field as an International Code Council Master Code Professional. He holds certificates in building, mechanical, electrical, plumbing and fire protection codes.

Recognized nationwide for his contributions to building code en-forcement, he has served and continues to serve in many distinguished leadership positions within the construction industry and related associations and has been honored with many awards for extraordinary industry service. He is currently chairman of the Codes & Standards Committee for the Illinois Fire Inspectors Association and a member of the Illinois Building Commission subcommittee. As past president of the Illinois Council of Code Administrators, Mr. Piccolo continues to participate in code organizations nationwide. He has authored numerous training courses taught nationwide. He also served for 8 years as an adjunct faculty member at William Rainey Harper College in Palatine, Ill., where he taught building code and fire science courses. He also is an appointed court-certified expert in building and construction codes.

"I don't know of anything more rewarding than to have the opportunity to provide the service of life safety. I think we achieve that goal everyday through ensuring safe structures for building occupants through code enforcement."
— Richard A. Piccolo, President



Richard A. Piccolo
President

History, Accreditations and Instructors

Building & Fire Code Academy (BFCA) is an Illinois Board of Higher Education (IBHE) approved vocational school [formerly Illinois State Board of Education (ISBE)]. Established in 2001 as an Academy offering continuing education and consulting services to those in the building, fire and code enforcement industry, the Academy became an official Illinois State Board of Education (ISBE) approved vocational school in January, 2006. Offering both individual continuing education courses and complete career programs to a variety of people at all experience levels in the construction and code industry, the mission of BFCA is to provide comprehensive and practical education in the administration, application, and enforcement of building and fire codes.

To validate the quality of BFCA training, BFCA has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, BFCA has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, BFCA is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard. In addition, BFCA is an American Institute of Architects/Continuing Education System (AIA/CES) Registered Provider. Students completing courses receive Continuing Education Units (CEUs), contact hours and/or state credit where applicable. All courses qualify for Health, Safety and Welfare (HSW) credit.

All Building & Fire Code Academy instructors are approved by the IBHE as highly qualified and experts in the individual areas they instruct.

Program Schedule*

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	Labor Day	AM: Orientation PM: Program Overview	BCE	BCE	BPR
2	AM: BCE Test PM: BPR Test	IZC	AM: Video Tape Inspections PM: Video/Worksheets & Quiz	Assertive Communication	LA
3	IRC	IRC	IRC	IRC-M	IRC-E
4	IRC -P	Practice Worksheets IRC Practice Test/Finals	IRC-PR	IRC-PR	Field Trip Day
5	BDB	BDB	IPMC	IPMC	National Certification Test Prep (IPMC)
6	INTERNSHIP WEEK #1				
7	Columbus Day	IAC	IAC	Swimming Pool and Spa Code	Test Day
8	IBC - Day 1	IBC - Day 2	IBC - Day 3	Haz Mat Awareness	Small Project Plan Review
9	INTERNSHIP WEEK #2				
10	AM: Intern Reports PM: Computer Skills	IBC-PR	IBC-PR	FRCR	Test Day
11	Environmental Day: Lead, Radon, Storm Drainage	Veterans Day	Building Science/ Energy Code	Energy Code	Green Construction Code
12	Career Planning and Resume Writing	Inspecting and Managing Special Events	Final Tests: IBC and/or Property Maintenance	Mock Interviews	Graduation Breakfast

BCE	Basic Code Enforcement
BDB	Building Department Basics
BPR	Building Trades Print Reading
FRCR	Fire-Resistive Construction Requirements
IAC	Illinois Accessibility Code
IBC	International Building Code
IBC-PR	International Building Code - Plan Review
IFC	International Fire Code
IPMC	International Property Maintenance Code
IRC	International Residential Code
IRC-E	International Residential Code - Electrical
IRC-M	International Residential Code - Mechanical
IRC-P	International Residential Code - Plumbing
IRC-PR	International Residential Code - Plan Review
IZC	International Zoning Code
LA	Understanding the Legal Aspects of Code Administration

*Schedule Subject to Change

Real-World Successes

Derrick Johnson of Illinois thought his employment prospects were limited until he discovered and successfully completed the Code Enforcement Career Development Program. "I was very excited about it when I first heard about it," he says. Employed as a building inspector in a suburban Chicago municipality, Johnson now has embarked on a rewarding career in the code enforcement profession.

Location

Sessions are offered
two times annually at the

Building & Fire Code Academy
2420 Vantage Drive
Elgin, IL 60124

2014 Sessions

January - April
September - November

Class Times

8:15 a.m. to 4:00 p.m.
Monday through Friday

Many municipalities, design firms, insurance companies and contractors and other code-related profession are now seeking candidates with a minimum of one International Code Council (ICC) certification.

The Code Enforcement Career Development Program endeavors to position its graduates so their credentials and training stand out from others.

While open to all applicants meeting enrollment requirements from any background, the Building & Fire Code Academy, in cooperation with the Disability Management Network, credits Carol Barnes for her vision in addressing the needs of displaced injured workers by providing an effective and rewarding source for job retraining.

If you require assistance, the Disability Management Network now has offices in Rockford and Oak Brook, Illinois and offers worker's compensation clients the opportunity to re-enter the workforce with new skills in a well-respected and satisfying career.

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