

# CONSTRUCTION



## CONSTRUCTION PROGRAM

These courses focus on the technical needs of contractors, estimators, architects, engineers, construction, and government officials as they relate to the design, construction and maintenance of building structures. They are also open to individuals in the field who would like to have a working knowledge of the Uniform Construction Code.

### UNIFORM CONSTRUCTION CODE PROGRAM

The School of Continuing Education, Bergen Community College, has been approved to offer courses in accordance with N.J.A.C. 5:23-5.20 and approved for licensure by the NJ Department of Community Affairs, Trenton, NJ. Information concerning Licensing Requirements and Application Procedures can be obtained by contacting:

**THE STATE DEPARTMENT OF COMMUNITY AFFAIRS**

**Bureau of Construction Code Services**

**Telephone: (609) 984-7834**

To register, call: (201) 447-7488 • [www.bergen.edu/continuinged](http://www.bergen.edu/continuinged)

# CONSTRUCTION

## Steps Toward Licensing

### Administrative Licenses:

1. Sub-Code Official (Administrative)
2. Construction Code Official (Administrative)

### Technical Licenses:

1. RCS - Residential Commercial Structures (Building Inspector licensure)
  2. ICS - Industrial Commercial Structures
  3. HHS - Hazardous High-rise Structures
- Attendance requirements are mandated for each course by the state; however, attendance does not ensure licensing. Prerequisites for all courses will be enforced by the Licensing Bureau, New Jersey State Department of Community Affairs.
  - After successfully completing each of the required courses, please contact Experi Assessments (800) 864-5309, for a candidate guide (a licensing requirement), which will enable you to sit for the state exam.
  - For information on how to apply for your license, contact the New Jersey State Department of Community Affairs, Bureau of Construction Code Services by calling (609) 984-7834.
  - The New Jersey State Department of Community Affairs offers students reimbursement of part of the tuition for qualified applicants.

**Technical level courses must be taken in sequence. Please register early. For more information, please call Ria Bloss at (201) 447-7466.**

### CD 063 Sub-Code Official

15 sessions; \$515

001, Mon./Wed.; February 13-April 9, 2012  
(no class 2/20, 3/19, 3/21)

**Hours:** 6:00-9:00 p.m.

**Location:** TBA

This 45-hour course is divided into three main areas: Administration, Legal Aspects of Code **Enforcement and related Legislation. You must have at least one technical license in order to get the Sub Code license.** Duties include: reviewing construction documents and building plans for sub-code compliance. **Required text:** *UCC Book* - obtained through instructor.

**Instructor:** Anthony Merlino

### CD 062 Construction Official

14 sessions; \$515

001, Mon/Wed.; April 16- May 30, 2012  
(no class 5/28- make-up Tue. 5/29)

**Hours:** 5:45-9:00 p.m.

**Location:** TBA

This 45-hour course is divided into four main areas: Administration, Legal Methods of Code Enforcement, Legislation and Sub-Code. This course reviews the duties of the construction code official. **Required text:** *UCC Book*. Please bring this book to the first class.

**Prerequisite:** Sub Code Official.

**Instructor:** Ron Ferrari

### CD 075 Building Inspector RCS

26 sessions; \$765

001, Tue./Th.; February 16-May 10, 2012

**Hours:** 6:00-9:30 p.m.

**Location:** TBA

This 90-hour course provides students with the fundamental knowledge and educational experience required by the state for licensure under this title. Topics include: structural design and analysis techniques, wood framing construction foundations; materials – materials standards, field identification of requirements, inspection techniques, inspection tools and methods; and other related topics from the International Residential Code. **Required text:** *International Residential Code* (latest edition). New Jersey Edition. Available at [www.iccsafe.org](http://www.iccsafe.org)

**Instructor:** Felix Esposito

### CD 225 Building Inspector ICS

22 sessions; \$695

001, Mon./Wed.; January 23-April 9, 2012  
(no class 2/20)

Field Trip: 4/7/12; 8:30 a.m.-12:00 p.m.

**Hours:** 5:45-9:00 p.m.

**Location:** TBA

This 75-hour course provides students with the fundamental knowledge and educational experience required by the state for licensure under this title. The course covers: building construction and technology, structural systems foundation design, wood and steel frame construction, requirements for the building sub-code; basic fire protection systems, systems design and installation procedures, plan review and other related topics. **Prerequisite:** Successful completion of Building Inspector RCS. **Required text:** *International Building Code 2009, (New Jersey edition) and International Mechanical Code 2009*. Available at [www.iccsafe.org](http://www.iccsafe.org). UCC and IBC books are required by the second class meeting.

**Instructor:** Ron Ferrari

## CONSTRUCTION

### **CD 290 Building Inspector HHS**

20 sessions; \$600

001, Mon./Wed.; February 13-April 18, 2012

**Hours:** 6:15-9:15 p.m.

**Location:** CLC

This 60-hour course provides students with the fundamental knowledge and educational experience required by the state for licensure under this title. Topics are: structural systems; design and analysis; fire protection and safety systems; special use of occupancy; advanced mechanical systems; design principles for heating, ventilating and air conditioning systems; energy conservation and other related topics. **Prerequisite:** Building Inspector RCS and Building Inspector ICS

**Instructor:** Thomas Cohen

### **CD 065 Plumbing Inspector ICS**

20 sessions; \$950

001, Sat.; January 21-June 23, 2012

**Hours:** 9:00 a.m.-3:00 p.m.

**Location:** TBA

This 120-hour course is designed to provide students with the fundamental knowledge and educational experience required by the state for licensure under this title. **Required text:** UCC Book

**Instructor:** Lenny Falato

### **CD 066 Electrical Inspector ICS**

20 sessions; \$515

001, Mon./Wed.; September 19-December 10, 2012  
(no class 9/24, 9/26, 11/21)

**Hours:** 6:00-9:00 p.m.

**Location:** TBA

This 60-hour course covers system designs, electrical service design and sizing branch circuits, plan review and field inspection. Also systematic plans analysis, material requirements, installation methods, basic inspection, report writing, violation notices, and recordkeeping. Uniform Construction Code organization and content, electrical sub code and other related topics.

**Instructor:** Norman Finkel

### **CD 228 Electrical Inspector HHS**

15 sessions; \$515

001, Mon./Wed.; February 27-April 23, 2012  
(no class 3/19,3/21)

**Hours:** 6:00-9:00 p.m.

**Location:** TBA

This 45-hour course covers: system design, electrical service design and sizing, branch circuit and feeder design, appliance and motor circuits, plan review and field inspection, systematic plans analysis, material requirements, installation methods, basic inspection, report writing, violation notices, inspection and recordkeeping, Uniform Construction Code organization and content, electrical subcode and other related topics.

**Prerequisite:** Electrical Inspector ICS

**Instructor:** Norman Finkel

### **CD 496 Fire Protection ICS**

40 sessions; \$999

001, Tue./Th.; February 7-June 28, 2012

**Hours:** 6:00-9:00 p.m.

**Location:** TBA

This 120-hour program is designed to prepare the students to obtain the licensing in the Fire Protection discipline of the NJ UCC. Course work includes the building use groups, types of construction, height and area, fire protection systems and means of egress. Students will learn when the building codes require such systems and equipment in new renovated structures along with the standards for systems installations and acceptance testing, course textbook information is provided the first day of class.

**Instructor:** David T. Phelan

### **CD 229 Elevator Inspector HHS**

15 sessions \$950

001, Sat. & every other Wed., Feb.15-May 12, 2012

**Hours:** Sat.: 9:00 a.m.-3:00 p.m. &  
Wed.: 6:00-9:00 p.m.

**Location:** TBA

This 90 hour course is designed to provide Elevator Inspectors with the fundamental knowledge and educational experience required by the state for licensure under this title. Topics include: testing and inspections on escalators, elevators, lifts and hoisting equipment and all related construction. **Prerequisite:** Seven years related experience.

**Instructor:** William R. Sheehan/William Madden



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## REQUIRED UCC BOOK

A copy of the Uniform Construction Code is needed for the referenced courses. The State of New Jersey Uniform Construction Code Book will no longer be shipped from or stocked at the Department of Community Affairs. Payment will be made to the Department but books will be sent directly from West Publishing. Delivery time is approximately four weeks.

**Make the check payable to:  
Treasurer, State of New Jersey,  
Department of Community Affairs,  
P.O. Box 802, Trenton, N.J. 08625  
ATTENTION: Cecilia Heredia,  
(609) 984-0040**

### CD 486 Electrical Licensing Exam Prep Course

10 sessions; \$400

001, Th.; February 9-April 19, 2012

**Hours:** 6:30-9:30 p.m.

**Location:** TBA

This 30-hour course covers all topics included in the licensing exam. Among those topics are the National Electrical Code (NEC) requirements and business and legal requirements forelectrical exam. **Required Text** (not included): *NJ Electrical Contractors Reference Manual, 8th ed., NEC2008, NFPA72*

**Instructor:** Constantinos Papademas B.E., M.E.E.E., P.E., Electrical Inspector, Sub-Code Official and is on the NJ Board of Examiners of Electrical Contractors



## Certificate in Electronic Technology

This new Electronics Technician Certificate Program will prepare the student for positions ranging from Electronic Equipment Testers to Repair Technicians. This 200-hour program is offered in 4 different modules. All four modules are needed to obtain a certificate. Related topics include: Digital Essentials, Advanced Digital Applications, Microprocessor Theory, Audio Visual Essentials, Understanding Technical Diagrams and Schematics, Introduction to Test Equipment, Power Supplies & Signal Amplifiers. Upon successful completion of this program, participants will have required essential knowledge and skills that will help them understand, test, maintain and troubleshoot electronic assemblies they encounter in Production & Service roles at companies involved with electronic products. This course may be completed in one semester. Students who successfully complete the Electronics Technician Program, with an 80 or above average, will have the opportunity to interview with Crestron Electronics, Inc. **Tuition: \$2,500 or \$625 each course.**

**Instructor:** Constantinos Papademas B.E., M.E.E.E., P.E., Electrical Inspector, Sub-Code Official and is on the NJ Board of Examiners of Electrical Contractors

### CD 008 Introduction to Electricity & Electronics

8 sessions

001, Mon.-Th.; March 12-March 22, 2012

**Hours:** 8:00 a.m.-3:00 p.m.

**Location:** TBA

### CD 009 Analog Systems

8 sessions

001, Mon.-Th.; March 26-April 5, 2012

**Hours:** 8:00 a.m.-2:00 p.m.

**Location:** TBA

**Prerequisite:** CD 008

### CD 010 Understanding Digital Circuits

8 sessions

001, Mon.-Th.; April 9-April 19, 2012

**Hours:** 8:00 a.m.-2:00 p.m.

**Location:** TBA

**Prerequisite:** CD 009

### CD 011 Understanding Computer Technology

9 sessions

001, Mon.-Th.; April 23- May 3, 2012

**Hours:** 8:00 a.m.-2:00 p.m.

**Location:** TBA

**Prerequisite:** CD 010

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# CONSTRUCTION

## Certificate in Construction Management

This 155-hour certificate program was designed to provide practical information to those individuals who currently work, or would like to work, in the construction industry. The employment outlook for this career is good as construction activity in the region is expected to increase in response to the demand for new residential and commercial structures and the increase in demand for renovations of existing structures. The nine (9) course certificate program covers the following:

- Building and Construction – materials, methods and tools involved in construction
- Design – techniques, tools and principles involved in production of technical plans, blueprints and drawings
- Project management – planning, scheduling and estimating
- Construction companies – organization, leadership and decision-making
- Contract law – insurance, bonding, liability and dispute resolution

Courses will be offered throughout the year, but not every course will be offered each semester. Basic to Advanced Blueprint Reading (CD 405) is offered each semester and must be taken before you complete the program. To obtain the certificate of completion, students must successfully complete the following courses:

- Construction Project Management
- Construction Industry Organization
- Smart Home Construction and Sustainability
- Project Scheduling for Construction
- Negotiating Construction Contracts
- Construction Estimating
- Basic to Advanced Blueprint Reading
- Construction Contract Law
- Modular Construction Industry

Courses may be taken individually or in any order as part of the certificate program. A minimum 80 percent attendance, assignments, and class participation are requirements for successful completion of each course. For more information on this program, please contact Ria Bloss at (201) 447-7466 or at [rbloss@bergen.edu](mailto:rbloss@bergen.edu).

### CD 458 Modular Construction

5 sessions; \$199

Offered in Fall, 2012

Location: TBA

Course content includes an in-depth discussion of alternative construction methodologies starting with the historical background, evolution and trends, features and benefits of modulars, and an in-depth study of commercial and residential buildings. Information will also be included on new LEED certified buildings.

**Instructor:** Roseanne Crisafi, LEED GA, Green Advantage Certified

### CD 477 Smart Home Construction and Sustainability

6 sessions; \$255

001, Th.; February 16-March 29, 2012

Hours: 6:30-9:00 p.m.

Location: TBA

Educate your clients and win new business by embracing some of the principles of smart construction. Learn about the difference between “sustainable” and “green.” This new course will outline some of the ways you can help your client build a safer healthier environment through the use of new materials, sustainable and recycled products. You will learn: Alternative Energy, Reducing Energy Consumption, Reclaimed and recycled materials, planning your project to maximize or minimize natural elements. Use Recycled materials in innovative ways, Breathing easier, VOC's Air quality and off-gassing, Resources and Agencies.

**Instructor:** Roseanne Crisafi, LEED GA



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### **CD 405 Basic to Advanced Blueprint Reading**

16 sessions; \$400

001, Mon./Wed.; February 27-April 25, 2012

(no class 3/19 & 3/21)

**Hours:** 6:30-9:00 p.m.

**Location:** TBA

This 40-hour course starts as an introduction to blueprints and working drawings, dimensioning and using scales, symbols, sections, profiles and cross sections, details, topography and contour lines, notes and structural drawings. Construction personnel learn in-depth floor plans and abbreviations and symbols. Topics also covered include: topography and elevations, utilizing benchmarks, fire separation assembly, means of egress, and when to call an architect versus an engineer.

**Required text:** *Building Trades Print Reading Part 2 "Residential & Light Commercial Construction," Building Trades Print Reading Part 2 "Plans," Building Trades Print Reading Part 3 "Heavy Commercial Construction," Building Trades Print Reading Part 3 "Plans."* Available at the BCC Bookstore.

**Instructor:** Ken Schiller

### **CD 580 Construction Project Scheduling**

8 sessions; \$195

001, Wed.; April 11-May 30, 2012

**Hours:** 6:30-8:30 p.m.

**Location:** TBA

Understanding a project schedule is a basic requirement for Owners, Engineers, Architects, and of course Contractors. This course will provide the student insight into the creation of a schedule. The course will teach the basics and fundamentals of construction project scheduling. It will provide students with an introduction to the concepts of basic logic and planning, preparation, tasks, tracking and updating of a project schedule. We will also discuss the impacts of delays, and how change orders effect a project completion. We will review project schedules and introduce students to MS Project scheduling software.

**Instructor:** Seth Jacobson, PSP

### **CD 459 Construction Contract Law**

6 sessions; \$125

001, Sat.; February 4-March 10, 2012

**Hours:** 9:30 a.m.-12:00 p.m.

**Location:** TBA

This course will provide a basic understanding of contract law for those in the construction field. It will include a review of relevant published options impacting the construction industry with special emphasis on avoiding litigation if at all possible.

Topics to be covered include basic contract theory, contract preparation, the litigation process, alternate dispute resolution (mediation and arbitration) and New Jersey cases in Construction Law. This course will culminate in a mock trial.

**Instructor:** John Norton, Esq.

### **CD 473 Negotiating Construction Contracts**

8 sessions \$275

001, Tue.; January 24-March 13, 2012

**Hours:** 6:30-8:30 p.m.

**Location:** TBA

Develop and enhance the skills necessary to effectively negotiate construction contracts by learning and applying proven negotiating tools, identifying and managing various styles and learning bargaining opportunities relative to specific construction clauses (including American Institute of Architects forms). Topics include: building relationships and trust, ethics, dealing with deadlocks; negotiating by phone, letter, email, dealing with delays; mitigating risk; managing time an defining priorities.

**Required Text:** *The Only Negotiating System You Need For Work & Home*, by Jim Camp. Available at the BCC Bookstore.

**Instructor:** Bruce Bloch

### **CD 466 Construction Industry Organization**

5 sessions; \$195

001, Tue./Th.; January 24-February 7, 2012

**Hours:** 6:00-9:00 p.m.

**Location:** Meadowlands, Lyndhurst

This course will provide an overview of the construction industry, exploring focused details on the total sequence from start to finish. Inter-workings between various trades, construction systems, procedures, organizational planning, and decision making techniques will be covered.

**Instructor:** Tom Rybak

### **CD 467 Construction Project Management**

5 sessions; \$195

001, Tue./Th.; February 21-March 6, 2012

**Hours:** 6:00-9:00 p.m.

**Location:** Meadowlands, Lyndhurst

The management of a construction project, various types, fees and organizational systems will be explained. An overview of roles and responsibilities of various parties will be discussed to establish the flow of action for project completion. At the end of the course, you will put together a master plan for a project.

**Instructor:** Tom Rybak