



# Commercial Electrical Inspector Part I

## Course Outline

**Course Description:** This **12-module** course, followed by a **60 question (2 hour) practice examination**, is based on the *2017 National Electrical Code (NEC)*. A total of over **13 hours** of instruction is included. It teaches the practical application of the NEC. Each module consists of an integrated video presentation, including presentation slides, explanation, examples, and review quizzes. Modules are designed to be approximately 40 – 60 min. in length. *Note: This is Part I of a two-part series.*

**Course Objectives:** This course is designed to prepare you for the *International Code Council's (ICC)* Commercial Electrical Inspector exam, utilizing the *2017 NEC*. This course also serves as a review for those already familiar with the NEC and may serve as an update course for those unfamiliar with the latest edition of the code. *Note: This is Part I of a two-part series.*

**Texts and Readings:** The *2017 National Electrical Code* is the textbook for this course. It is highly recommended that you purchase a paper-back copy of this code, which is available online at [www.iccsafe.org](http://www.iccsafe.org) or [www.nfpa.org](http://www.nfpa.org). A physical copy can be utilized during the actual exams, which are open book, and serves as a valuable reference for in the field inspections.

### Course Outline of Topics:

Module:	Topics:	Readings:	Quiz:	Duration:
1	Introduction/Electrical Basics	Article 90 and Annex H	Y	25 min.
2-1	Definitions	Article 100	Y	42 min.
2-2	Definitions	Article 100	Y	36 min.
3-1	Electrical Installations	Article 110.1 – 110.25	Y	41 min.
3-2	Electrical Installations	Article 110.26 – 110.28	Y	38 min.
4	Grounded Conductors	Article 200.1 – 200.10	Y	43 min.
5-1	Branch Circuits	Article 210.1 – 210.12	Y	39 min.
5-2	Branch Circuits	Article 210.13 – 210.71	Y	37 min.
6-1	Services	Article 230.1 – 230.33	Y	34 min.
6-2	Services	Article 230.40 – 230.95	Y	34 min.
7	Feeders	Article 215	Y	15 min
8	Outside Branch Circuits & Feeders	Article 225	Y	37 min.
9-1	Overcurrent Protection	Article 240.1 – 240.21	Y	42 min
9-2	Overcurrent Protection	Article 240.21 – 240.86	Y	40 min
10-1	Grounding and Bonding	Article 250.1 – 250.28	Y	58 min.
10-2	Grounding and Bonding	Article 250.30 – 250.122	Y	74 min.
11	Wiring Methods and Materials	Article 300	Y	65 min.
12	Conductors for General Wiring	Article 310	Y	82 min.
	18 Quizzes			
	120 Questions, 2 min. each	2017 NEC		240 min.
	Practice Exam			120 min.
	<b>Total Course Hours</b>			<b>19 hours</b>



# Commercial Electrical Inspector Part I

**Quizzes and Exams:** Each module associated with this course will be followed by an assessment quiz of varying length. A passing score of 75% is required in order to advance to the next module. At the conclusion of the course is a timed practice exam. The exam is similar in length and duration as the actual ICC exam, although it only covers through Article 310 of the NEC. Topics in both the exam and the quizzes may or may not have been covered in the video modules. A thorough reading of the code may be necessary in order to progress through this course.

**Expectation of Participants:** This course requires that you to watch each training video, complete each quiz, as well as the exam. You are expected to read portions of the applicable code and become familiar with its layout and organization. We recommend 2 hrs. of personal study, for each module. Marking, tabbing, and highlighting in the code book is highly recommended. We have layout out a plan and method to help you learn the material, but it's up to you to put in the work necessary for you to mater the material. You can progress through this course at your own pace; however, you only have access for 120 days.

**Continuing Education Credits:** Completion of this course results in **1.90 CEU's** being provided by ICC, as West Coast Code Consultants is a Preferred Provider.

## **Instructor:**



**Doug Smith, MCP, CBO** serves as both a plans examiner and building inspector for WC<sup>3</sup>. He has been an inspector since 2005 and has more than 20 years of experience in the building safety and construction industries. He has obtained over 18 ICC certifications including Certified Master Code Professional. He specializes in the requirements of the electrical code and is especially knowledgeable on the topic of solar photovoltaic systems.

