

Review for Georgia Electrical License Exam

Course Outline

- Introduction *Georgia Electrical Exam Prep Review*
- General Theory including Voltage Drop
- Business related questions
- Introduction to the 2005 National Electrical Code: NFPA 70
- Article 90 Introduction
- 110 Definitions
- 210 Branch Circuits
- 215 Feeders
- 220 Branch Circuit, Feeder and Service Calculations
- 230 Service Calculations
- 240 Overcurrent Protection
- 250 Grounding Calculations
- 300.17 Number and Size of Conductors in Raceways
- 314 Boxes
- 430 Motors
- 450 Transformers
- Chapter 9 — Tables; 1, 4, 5, 8 — Sizing Conduit
- Table 8 — Conductor Properties
- GEORGIA ELECTRICIANS LICENSING AND REGULATIONS

Voltage Drop / Motors / Transformers / Services / Feeders / Branch Circuits / Paralleling Conductors / Ranges / Taps / Cable Trays / Temperature Limitations at Terminations

Calculate ampacity, conductor size, overcurrent device, tap, termination, ranges, continuous loads; boxes, parallel conductors, panelboards; grounding conductors, bonding jumpers, grounding electrode conductors; motor branch circuit and feeder conductors, motor branch circuit short circuit—ground fault protection. Learn how make adjustments for temperature, number of conductors, terminations. Calculate number and size of conductors in raceways, wireways, auxiliary gutters, cable trays, along with ampacity of installed conductors.

Georgia Electricians Licensing and Regulations are also included.

Note: Temperature limitations at terminations, overcurrent protection, cable tray fill, ranges, and service calculations are included in appropriate Articles as part of branch circuits, feeders, number of conductors in raceways, motors, etc.

Instructor

STEVEN J. OWEN

STEVEN J. OWEN has been active in the electrical industry for over 31 years. Starting as an Apprentice Electrician; working up to Superintendent, Project Manager, Electrical Engineer, Senior Electrical Designer and **CHIEF ELECTRICAL CODE ANALYST**. Steve has worked on projects ranging from one-person-operations to projects in which he was responsible for the supervision of 550 electricians and an electrical budget of 25 million dollars.

Steve is certified as a **National Electrical Code Instructor and Sponsor** for (30) states - AK, CT, DE, FL, GA, IA, ID, KY, MA, ME, MI, MN, , MS, MT, NE, NH, NJ, NC, ND, OH, OK, OR, RI, SD, TX, UT, VT, WA, WI and WY: the cities of Austin, Bowling Green, Cedar Rapids, Fort Wayne, Lexington, San Antonio, St. Louis and other cities. Steve is certified to teach **GENERAL CONTRACTOR Continuing Ed. Classes in FL & LA; Professional Engineers Continuing Ed. Classes in FL**. Steve has been sponsoring and instructing seminars for **ELECTRICAL LICENSE EXAM PREPARATION** for the states of AL, GA, KY, LA, MN, NJ, TN & WY. Steve has been certified as a **CRAFT INSTRUCTOR** by **NCCER; ABC** of AL, **Bessemer State** Technical College of Birmingham, AL; **Georgia Tech**, Atlanta, GA; **UAB** - Birmingham, AL; **SouthEastern Electrical Council; Lewellyn Technology, NATIONAL CODE SEMINARS (NCS)**, and (NTT) **NATIONAL TECHNOLOGY TRANSFER**.

Steve is a certified **MASTER ELECTRICIAN/CONTRACTOR** in 45 states - AK, AL, AR, CO, CT, DE, FL, GA, HI, ID, IA, IL, KY, LA, ME, MD, MA, MI, MN, MO, MT, MS, NE, NV, NH, NJ, NM, NC, ND, OH, OK, OR, SC, SD, TN, TX (Dallas), UT, VT, VA, WA, WV, WI & WY.

Steve is certified as an **ELECTRICAL INSPECTOR** by BOCA, CABO, IAEI, ICBO & SBCCI; as a **LIGHTNING PROTECTION DESIGNER, INSPECTOR & JOURNEYMAN INSTALLER** by LPI; **POWER DISTRIBUTION ENGINEERING TECHNICIAN** by NICET; **CHIEF ELECTRICAL CODE ANALYST** by SBCCI; **MASTER ELECTRICIAN** by NBEE; **EIT** in Arizona, and is **AUTHORIZED by OSHA** to provide 10 & 30 hour voluntary compliance classes for Construction and General Industry; member of **ABC, ASCET, ASSE, IAEI, NETA, NICET, NFPA, RSES, SBCCI**.

A former volunteer **FIRE CHIEF & CAPTAIN; VICE COMMANDER** of American Legion Post 82; U.S. Armed Forces Veteran; **SUNDAY SCHOOL SUPERINTENDENT & TEACHER; EXECUTIVE COMMITTEE MEMBER** of the Central Alabama Chapter of the International Association of Electrical Inspectors; *Charter Member, Sergeant at Arms, Vice President of Membership* at his local Toastmasters International club; member of **ABC, ASCET, ASSE, IAEI, ICBO, NETA, NFPA, NICET, RSES, SBCCI**, and is a **PRINCIPAL VOTING MEMBER of NFPA NEC 70 Committee for Panel #3**.