

NASSAU BOCES - ADULT EVENING PROGRAM  
Joseph M. Barry Career & Technical Education Center  
1196 Prospect Ave.  
Westbury, NY 11590

COURSE OUTLINE

Course Name: **Trade Electric III - Commercial**  
Weeks: 10  
Sessions: 20  
Hours: 60  
Days/Time: Tue/Thu 7-10pm  
Instructor: Jim Calo  
Required Textbook: Electrical Wiring-Commercial 12<sup>th</sup> Ed.; Ray C. Mullen  
Prerequisites: Trade Electric-II  
Adult evening Office: (516) 622-6950

Course Overview:

Explore industrial and commercial wiring and services. Apply both theoretical and practical elements and methods of working in industrial electricity. This course follows the guidelines of the National Electrical Code and is primarily a theory class. Students must supply copies of national Electrical Code.

Trade Electricity Certificate Program: Trade Electric Theory, Trade Electric I, Trade Electric II, Trade Electric III, Trade Electric IV, Minimum 270 hours.

Course Topics

Session 1 Commercial building plans & specifications  
Session 2 Reading electrical working drawings – entry level  
Session 3 Computing the electrical load  
Session 4 Branch-circuits  
Session 4 Switches, receptacles, devices  
Session 5 Branch-circuits installation  
Session 6 Motor and appliance circuits  
Session 6 Feeders  
Session 7 Special systems  
Session 8 Working drawings – upper level  
Session 9 Special circuits  
Session 10 Panelboard selection and installation  
Session 11 The electric service  
Session 12 Lamps for lighting  
Session 12 Luninaires (fixtures)  
Session 13 Emergency and standby power systems  
Session 13 Overcurrent protection: fuses and circuit breakers  
Session 14 Short-circuit calculations and coordination  
Session 14 Equipment and conductor short-circuit protection  
Session 15 Low-voltage remote control; Final Exam  
Session 16-19 Optional topics at instructor's discretion  
Session 20 Review and Final Exam