Residential Lighting Control

"Go Green" and help customers save money

BEDROCK Learning

Online Course

8 hours **$149 US**

Description

Gain a solid foundation from lighting fixtures and lamp types, to switching, dimming and control. Explore communication control options, design steps, installation procedures and programming. This course covers both wired and wireless lighting control technologies and systems.

Objectives

- Explain the technology principles of lighting control
- List the benefits of lighting control
- Identify methods of switching, dimming, and control
- Name different lighting, fixture, and lamp types
- List the steps to design a lighting control system
- List the steps to install a lighting control system
- Explain how to program a lighting control system
- Use lighting control troubleshooting techniques

Earn CEUs

ESA Electronic Security Association · CEDIA · ETA Electronics Technicians Association International

Delaware 6 CEUs

Tennessee 8 hrs

8 Credit Hours
16-4764

4 CEUs
#521

8 Contact Hours

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1. **Course Introduction**
2. **Principles of Lighting Control**
   - Lighting control components and features
   - Methods of control
3. **Benefits of Lighting Control**
   - Convenience and Safety
   - Ambiance and Aesthetics
   - Energy Savings and Increased Lamp Life
4. **Safety and Tools**
   - Common job site hazards
   - Electrical Safety Guidelines
   - Code and License requirements
   - Proper tools for each phase of installation
5. **Electrical Wiring and Switches**
   - Residential wiring basics
   - Switch and dimmer types
   - Three and four-way switching methods
   - Dimming technologies
6. **Lighting Fixture and Lamp Types**
   - How lighting influences atmosphere
   - Types of lighting
   - Lighting fixtures and common lamp types
7. **Lighting Control Devices**
   - Three types of lighting control systems
   - Local and remote load control devices
   - Lighting control user interface devices
   - Common external inputs to lighting control
8. **Lighting Control Communication**
   - Lighting control communications types
   - Wired lighting control technologies
   - Wireless lighting control technologies
   - Power line carrier lighting control
9. **Designing a Lighting Control System**
   - Select the system type for a project
   - Identify load types
   - Calculate total wattage
   - How to do derating for dimmer capacity
   - System programming requirements
10. **Install a Lighting Control System**
    - Install lighting fixtures
    - Install lighting control components
    - Method to power up a lighting control system
    - Baseline programming requirements
    - Testing procedures
11. **Programming Lighting Control**
    - Methods for programming
    - Scene and Event programming
    - Conditional programming
12. **Troubleshoot Lighting Control**
    - Typical electrical problems
    - Communication problems for lighting control
    - Typical programming problems
13. **Course Summary**
14. **FINAL TEST**