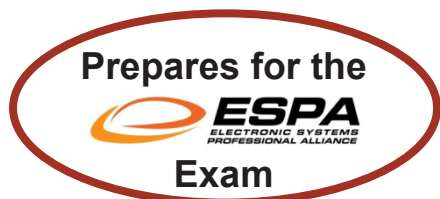


Fundamentals for ESTs

Build a solid knowledge foundation for installing 21st-century digital solutions

BEDROCK
Learning



8-HOUR ONLINE COURSE

\$149US

This course delivers a solid foundation for Electronic Systems Technicians. Construction methods, electrical basics, job site safety, tools and industry standards; as well as principles of structured wiring are explained, including cabling, components and outlets. As well as install procedures, testing and troubleshooting methods.

OBJECTIVES

- Define various residential electronic systems
- Explain the benefits of residential electronic systems
- Recognize components of residential construction
- Create a safe working environment on the job
- Use project plans and documents
- Design and document a structured wiring system
- Pre-wire a structured wiring system
- Safely install and terminate structured wiring system
- Test and troubleshoot a structured wiring system

EARN CEUs

CEDIA™

4 CEUs
#575



8 Contact Hours

Delaware	8 CEUs
Louisiana	8 hours
Mississippi	8 hours
New Jersey	8 hours
Tennessee	8 hours

1. Course Introduction
2. Introducing Electronic Systems
 - Components of Structured Wiring
 - Electronic System Services
 - Electronic System Subsystems
3. Benefits of Electronic Systems
 - Occupant Benefits
 - Builder Benefits
 - Technology Contractor Benefits
4. Construction and Electrical Basics
 - Basics of Construction
 - Running Cables and Drilling in Walls
 - Ohm's Law
 - Surge Prevention
5. Jobsite Safety
 - Jobsite Hazards and Safety Rules
 - Jobsite Injuries and First Aid
 - Jobsite Standards of Governing Agencies
6. Tools and Industry Standards
 - Planning Tools, Symbols and Abbreviations
 - Hand and Power Tools
 - Applying Industry Standards
 - Industry Certification
7. Fasteners and Anchors
 - Types of Fasteners and Their Uses
 - Types of Anchors and Their Uses
8. Components of Structured Wiring
 - Characteristics and Performance of Wire
 - Low Voltage Cable Types
 - Types of Distribution Panels and Modules
 - Wall Outlets and Access Points
9. Layout of Structured Wiring
 - Home Run Layout vs. Daisy Chain
 - Wire Run Industry Standards
 - Outlet and Audio Speaker Locations
 - Surge Protection Importance
10. Design and Install Wiring
 - Installation Stages
 - Conduit Types and Selection
 - Low Voltage Cable Installation Guidelines
11. Terminating Structured Wiring
 - Cable Termination Steps
 - TIA-568A and TIA-568B
 - Termination Tools
 - Distribution Panel Termination
 - Distribution Module Installation
12. Testing and Troubleshooting
 - Importance of Testing
 - When to Test
 - Common Wiring Problems
 - Common Testing Tools
13. Course Summary
14. FINAL TEST

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