Module Overview

This module describes the different sectors in the electrical trade, and the types of work and work environments electricians would find in the field. It covers apprenticeship, training programs, and career opportunities. The responsibilities and characteristics a worker should possess are also described.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Describe the apprenticeship/training process for electricians.
2. Describe various career paths/opportunities one might follow in the electrical trade.
3. Define the various sectors of the electrical industry.
4. State the tasks typically performed by an electrician.
5. Explain the responsibilities and aptitudes of an electrician.

Performance Tasks

This is a knowledge-based module. There are no Performance Tasks.

Materials and Equipment

- Multimedia projector and screen
- *Electrical Level One* PowerPoint® Presentation
- Slides
- Whiteboard/chalkboard
- Markers/chalk
- Computer
- Pencils and scratch paper
- Appropriate personal protective equipment

*Careers in Construction,* © 2006, NCCER/Pearson Education

- Copies of the latest editions of the NEC® and NFPA 70E® standards
- Help-wanted section from an electrical trade publication
- Samples of NCCER Training Credentials
- Employee manual
- OSHA Safety and Health Standards for the Construction Industry (29 CFR, Part 1926)
- TV/VCR/DVD player (optional)
- Module Examination*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.
Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


Safety videos or DVDs can often be obtained free of charge from professional associations, trade associations, or university safety offices. The following safety training videos are available free of charge at the OSHA website ([www.osha.gov](http://www.osha.gov)):


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 2½ hours are suggested to cover *Orientation to the Electrical Trade.* You will need to adjust the time required for hands-on activity and testing based on your class size and resources.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Session I. Introduction; The Electrical Trade; Review and Testing</strong></td>
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</tbody>
</table>
Module Overview

This module introduces the trainees to the safety rules and regulations for electricians, including the necessary precautions for avoiding various job site hazards.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum: Electrical Level One, Module 26101-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Recognize safe working practices in the construction environment.
2. Explain the purpose of OSHA and how it promotes safety on the job.
3. Identify electrical hazards and how to avoid or minimize them in the workplace.
4. Explain electrical safety issues concerning lockout/tagout procedures, confined space entry, respiratory protection, and fall protection systems.
5. Develop a task plan and a hazard assessment for a given task and select the appropriate PPE and work methods to safely perform the task.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Perform a visual inspection on various types of ladders.
2. Set up a ladder properly to perform a task.
3. Properly don a harness.
4. Perform a hazard assessment of a job such as replacing the lights in your classroom.
   - Discuss the work to be performed and the hazards involved.
   - Locate the phone closest to the work site and ensure that the local emergency telephone numbers are either posted at the phone or known by you and your partner(s).
   - Plan an escape route from the location in the event of an accident.

Materials and Equipment

- Multimedia projector and screen
- Electrical Level One PowerPoint® Presentation Slides
- Computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Copy of the latest edition of the National Electrical Code®
- OSHA Electrical Safety Guidelines (pocket guide)
- NFPA 70E®
- Company safety manual
- Solvent MSDS
- Access to eye wash station
- Various types of personal protective and safety equipment, including:
  - Rubber gloves
  - Insulating blankets
  - Hot sticks
  - Fuse pullers
  - Shorting probes
  - Safety glasses
  - Face shields
  - Hard hats
  - GFCI device
  - Company lockout/tagout procedures
  - Lockout/tagout devices and labels
  - Stepladders
  - Straight ladders

(continued)
Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

**Safety Considerations**

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to work with ladders. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize electrical safety.

**Additional Resources**

This module presents thorough resources for task training. The following resource material is suggested for further study.

- Managing Electrical Hazards, © 2009, NCCER/Pearson Education.

**Teaching Time for this Module**

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover Electrical Safety. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Session I. Introduction; Electrical Hazards</strong></td>
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<tr>
<td>A. Introduction</td>
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<tr>
<td>B. Electrical Shock</td>
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<tr>
<td>C. Protective Equipment</td>
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<tr>
<td>D. OSHA</td>
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<tr>
<td>E. NFPA 70E®</td>
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</tr>
<tr>
<td><strong>Session II. Ladders, Lifts, and Lifting</strong></td>
<td></td>
</tr>
<tr>
<td>A. Ladders and Scaffolds</td>
<td></td>
</tr>
<tr>
<td>B. PT/Laboratory</td>
<td></td>
</tr>
<tr>
<td>Have trainees practice visually inspecting ladders. This laboratory corresponds to Performance Task 1.</td>
<td></td>
</tr>
<tr>
<td>C. PT/Laboratory</td>
<td></td>
</tr>
<tr>
<td>Have trainees practice setting up a ladder. This laboratory corresponds to Performance Task 2.</td>
<td></td>
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<tr>
<td>D. Lifts, Hoists, and Cranes</td>
<td></td>
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<tr>
<td>E. Lifting</td>
<td></td>
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<tr>
<td>F. Basic Tool Safety</td>
<td></td>
</tr>
</tbody>
</table>
Session III. General Construction Safety Topics

A. Confined Space Entry Procedures
B. First Aid
C. Solvents and Toxic Vapors
D. Asbestos, Batteries, PCBs, and Vapor Lamps
E. Lead Safety

Session IV. Fall Protection; Hazard Assessment; Review and Testing

A. Fall Protection
B. PT/Laboratory
   Have trainees practice donning a safety harness. This laboratory corresponds to Performance Task 3.
C. Hazard Assessment
D. PT/Laboratory
   Have trainees practice performing a hazard assessment. This laboratory corresponds to Performance Task 4.
E. Review
F. Module Examination
   1. Trainees must score 70% or higher to receive recognition from NCCER.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
G. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module introduces the trainee to electrical circuits. It offers a general introduction to electrical concepts used in Ohm’s law. It includes atomic theory, electromagnetic force, resistance, and electric power equations. It also covers series, parallel, and series-parallel circuits.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 and 26102-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Define voltage and identify the ways in which it can be produced.
2. Explain the difference between conductors and insulators.
3. Define the units of measurement that are used to measure the properties of electricity.
4. Identify the meters used to measure voltage, current, and resistance.
5. Explain the basic characteristics of series and parallel circuits.

Performance Tasks

This is a knowledge-based module. There are no performance tasks.

Materials and Equipment

Multimedia projector and screen
Presentation Slides
Computer
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Sample schematics
Basic electrical circuit, including:
Battery/power source
Wiring
Loads
Switches
Examples of conductors, insulators, and color-coded resistors

Magnets
Simple electromagnet
Metal sheet
Iron filings
Various types of meters, including:
Multimeter
Voltmeter
Clamp-on ammeter
Ohmmeter
Continuity tester
Voltage tester
Module Examination*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. Trainees may work with electrical test equipment. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize electrical safety.
Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


Teaching Time for This Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 7½ hours are suggested to cover *Introduction to Electrical Circuits*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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</thead>
<tbody>
<tr>
<td>Session I. Introduction to Electrical Theory</td>
<td></td>
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<tr>
<td>A. Introduction</td>
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<tr>
<td>B. Atomic Theory</td>
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<tr>
<td>C. Electrical Power Generation and Distribution</td>
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<tr>
<td>D. Electric Charge and Current</td>
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<tr>
<td>Session II. Ohm’s Law; Schematics; Measurements</td>
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<tr>
<td>A. Ohm’s Law</td>
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<tr>
<td>B. Schematic Representation of Circuit Elements</td>
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<tr>
<td>C. Resistors</td>
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<tr>
<td>D. Electrical Circuits</td>
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<tr>
<td>E. Electrical Measuring Instruments</td>
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<tr>
<td>Session III. Power Equations; Review and Testing</td>
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<tr>
<td>A. Electrical Power</td>
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<tr>
<td>B. Module Review</td>
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</tr>
<tr>
<td>C. Module Examination</td>
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</tr>
<tr>
<td>1. Trainees must score 70% or higher to receive recognition from NCCER.</td>
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<tr>
<td>2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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</tbody>
</table>
Module Overview
This module introduces trainees to circuit calculations involving the application of Ohm’s and Kirchoff’s laws.

Prerequisites
Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum: Electrical Level One, Modules 26101-14 through 26103-14.

Objectives
Upon completion of this module, the trainee will be able to do the following:
1. Explain the basic characteristics of combination circuits.
2. Calculate, using Kirchhoff’s voltage law, the voltage drop in series, parallel, and series-parallel circuits.
3. Calculate, using Kirchhoff’s current law, the total current in parallel and series-parallel circuits.
4. Using Ohm’s law, find the unknown parameters in series, parallel, and series-parallel circuits.

Performance Tasks
This is a knowledge-based module. There are no performance tasks.

Materials and Equipment

| Electrical Level One PowerPoint® Presentation | Whiteboard/chalkboard |
| Slides can be downloaded (with your access code) from www.ncercirc.com | Markers/chalk |
| Multimedia projector and screen | Pencils and scratch paper |
| Computer | Module examination* |

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Safety Considerations
Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. Trainees may work with electrical test equipment. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize electrical safety.

Additional Resources
This module presents thorough resources for task training. The following resource material is suggested for further study.

Teaching Time for This Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 7½ hours are suggested to cover Electrical Theory. You will need to adjust the time required for hands-on activity and testing based on your class size and resources.

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td><strong>Session I. Introduction; Resistive Circuits</strong></td>
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<tr>
<td>A. Introduction</td>
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<tr>
<td>B. Resistances in Series</td>
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<tr>
<td>C. Resistances in Parallel</td>
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<tr>
<td>D. Series-Parallel Circuits</td>
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</tr>
<tr>
<td><strong>Session II. Applying Ohm’s Law to Resistive Circuits</strong></td>
<td></td>
</tr>
<tr>
<td>A. Voltage and Current in Series Circuits</td>
<td></td>
</tr>
<tr>
<td>B. Voltage and Current in Parallel Circuits</td>
<td></td>
</tr>
<tr>
<td>C. Voltage and Current in Series-Parallel Circuits</td>
<td></td>
</tr>
<tr>
<td><strong>Session III. Kirchhoff’s Law; Review and Testing</strong></td>
<td></td>
</tr>
<tr>
<td>A. Kirchhoff’s Law</td>
<td></td>
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<tr>
<td>B. Module Review</td>
<td></td>
</tr>
<tr>
<td>C. Module Examination</td>
<td></td>
</tr>
<tr>
<td>1. Trainees must score 70% or higher to receive recognition from NCCER.</td>
<td></td>
</tr>
<tr>
<td>2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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</tbody>
</table>
Module Overview

This module introduces trainees to the requirements and structure of the National Electrical Code®.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 through 26104-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Explain the purpose and history of the NEC®.
2. Describe the layout of the NEC®.
3. Demonstrate how to navigate the NEC®.
4. Describe the purpose of the National Electrical Manufacturers Association and the NFPA.
5. Explain the role of nationally recognized testing laboratories.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Use NEC Article 90 to determine the scope of the NEC®. State what is covered by the NEC® and what is not.
2. Find the definition of the term feeder in the NEC®.
3. Look up the NEC® specifications that you would need to follow if you were installing an outlet near a swimming pool.
4. Find the minimum wire bending space required for two No. 1/0 AWG conductors installed in a junction box or cabinet and entering opposite the terminal.

Materials and Equipment

Multimedia projector and screen  Pencils and scratch paper
Electrical Level One PowerPoint® Presentation  Copy of the latest edition of the National Electrical Code®
Slides  Module Examination*
Computer  Performance Profile Sheets*
Whiteboard/chalkboard
Markers/chalk

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.

Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 7½ hours are suggested to cover *Introduction to the National Electrical Code*®. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td><strong>Session I. Introduction to the NEC®</strong></td>
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<tr>
<td>A. Introduction</td>
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<tr>
<td>B. Purpose and History of the NEC®</td>
<td></td>
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<tr>
<td>C. The Layout of the NEC®</td>
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</tr>
<tr>
<td><strong>Session II. Navigating the NEC®, Part One</strong></td>
<td></td>
</tr>
<tr>
<td>A. Chapter 1 – General</td>
<td></td>
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<tr>
<td>B. Chapter 2 – Wiring and Protection</td>
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<tr>
<td>C. Chapter 3 – Wiring Methods and Materials</td>
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<td>D. Chapter 4 – Equipment for General Use</td>
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<tr>
<td>E. Chapter 5 – Special Occupancies</td>
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<tr>
<td>F. Chapters 6, 7, and 8 – Special Equipment, Special Conditions, and Communications Systems</td>
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</tr>
<tr>
<td><strong>Session III. Navigating the NEC®, Part Two; Review and Testing</strong></td>
<td></td>
</tr>
<tr>
<td>A. Examples of Navigating the NEC®</td>
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</tr>
<tr>
<td>B. PT/Laboratory</td>
<td></td>
</tr>
<tr>
<td>Have trainees practice using the NEC®. This laboratory corresponds to Performance Tasks 1–4.</td>
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<tr>
<td>C. Other Organizations</td>
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<tr>
<td>D. Review</td>
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<tr>
<td>E. Module Examination</td>
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</tr>
<tr>
<td>1. Trainees must score 70% or higher to receive recognition from NCCER.</td>
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<tr>
<td>2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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<tr>
<td>F. Performance Testing</td>
<td></td>
</tr>
<tr>
<td>1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.</td>
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</tr>
<tr>
<td>2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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</tbody>
</table>
Module Overview
This module explains how to select and size outlet boxes, pull boxes, and junction boxes pursuant to NEC® requirements.

Prerequisites
Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 through 26105-14.

Objectives
Upon completion of this module, the trainee will be able to do the following:
1. Describe the different types of nonmetallic and metallic boxes.
2. Calculate the NEC® fill requirements for boxes under 100 cubic inches.
3. Identify the appropriate box type and size for a given application.
4. Select and demonstrate the appropriate method for mounting a given box.

Performance Tasks
Under the supervision of the instructor, the trainee should be able to do the following:
1. Identify the appropriate box type and size for a given application.
2. Select the minimum size pull or junction box for the following applications:
   • Conduit entering and exiting for a straight pull.
   • Conduit entering and exiting at an angle.

Materials and Equipment

Multimedia projector and screen  
Examples of different types of metallic and  
Electrical Level One PowerPoint® Presentation  
nonmetallic boxes, device covers, and  
Slides can be downloaded (with your access  
extraction rings  
(code) from www.ncercir.com  
Examples of pull and junction boxes

Computer  
Examples of device boxes

Whiteboard/chalkboard  
Wire nuts

Markers/chalk  
Stripping tools

Pencils and scratch paper  
Wire

Conduit caps  
Module Examination*

Copy of the latest edition of the National  
Performance Profile Sheets*

Electrical Code®

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Safety Considerations
Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. Trainees may work with device boxes. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize electrical safety.
Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover *Device Boxes*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td><strong>Session I. Introduction to Device Boxes</strong></td>
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<tr>
<td>A. Introduction</td>
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<tr>
<td>B. Types of Boxes</td>
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<tr>
<td><strong>Session II. Sizing Outlet Boxes</strong></td>
<td></td>
</tr>
<tr>
<td>A. Sizing Outlet Boxes</td>
<td></td>
</tr>
<tr>
<td>B. PT/Laboratory</td>
<td>Have trainees practice identifying the appropriate type and size of box for a given application. This laboratory corresponds to Performance Task 1.</td>
</tr>
<tr>
<td>C. Pull and Junction Boxes</td>
<td></td>
</tr>
<tr>
<td>D. PT/Laboratory</td>
<td>Have trainees practice selecting the minimum size pull or junction box. This laboratory corresponds to Performance Task 2.</td>
</tr>
<tr>
<td><strong>Session III. Installing Boxes</strong></td>
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</tr>
<tr>
<td>A. <em>NEC®</em> Requirements</td>
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<tr>
<td>B. Making Connections</td>
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<tr>
<td><strong>Session IV. Review and Testing</strong></td>
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</tr>
<tr>
<td>A. Module Review</td>
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<tr>
<td>B. Module Examination</td>
<td>1. Trainees must score 70% or higher to receive recognition from NCCER. 2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
</tr>
<tr>
<td>C. Performance Testing</td>
<td>1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements. 2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
</tr>
</tbody>
</table>
Module Overview
This module introduces trainees to the methods and procedures used in cutting, bending, and reaming conduit.

Prerequisites
Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 through 26106-14.

Objectives
Upon completion of this module, the trainee will be able to do the following:
1. Identify the methods for hand bending and installing conduit.
2. Determine conduit bends.
3. Make 90° bends, back-to-back bends, offsets, kicks, and saddle bends using a hand bender.
4. Cut, ream, and thread conduit.

Performance Tasks
Under the supervision of the instructor, the trainee should be able to do the following:
1. Make 90° bends, back-to-back bends, offsets, kicks, and saddle bends using a hand bender.
2. Cut, ream, and thread conduit.

Materials and Equipment
- Multimedia projector and screen
- Electrical Level One PowerPoint® Presentation
  - Slides can be downloaded (with your access code) from www.nccerirc.com
- Computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Appropriate personal protective equipment
- Copy of the latest edition of the National Electrical Code®
- OSHA Electrical Safety Guidelines (pocket edition)
- Hand bender and manufacturer’s instructions
- Various pieces of conduit
- Hickey bar
- Manufacturers’ gain tables
- No. 10 or No. 12 solid wire
- Tape measure
- Calculator
- Hacksaw
- Pipe vise
- Pipe cutter
- Reamer
- Cutting oil
- Shop towels
- Hand-operated threader
- Sandbox or drip pan
- Torpedo level
- PVC pieces
- PVC cements
- Module Examination*
- Performance Profile Sheets*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Safety Considerations
Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to cut and bend pipe. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize hand tool safety.
**Additional Resources**

This module presents thorough resources for task training. The following resource material is suggested for further study.


**Teaching Time for this Module**

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover Hand Bending. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

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<tr>
<th>Topic</th>
<th>Planned Time</th>
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<td>B. Hand Bending Equipment</td>
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<td>C. Geometry Required to Make a Bend</td>
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<td>D. Making a 90° Bend</td>
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<td>E. PT/Laboratory</td>
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<tr>
<td>Have trainees practice making 90° bends. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td>F. Back-to-Back Bends</td>
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<td>G. PT/Laboratory</td>
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<tr>
<td>Have trainees practice making back-to-back bends. This laboratory corresponds to Performance Task 1.</td>
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<td><strong>Session II. Offset and Saddle Bends</strong></td>
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<td>B. Parallel Offsets</td>
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<td>C. PT/Laboratory</td>
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<tr>
<td>Have trainees practice making offset bends. This laboratory corresponds to Performance Task 1.</td>
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<td>D. Saddle Bends</td>
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<tr>
<td>E. PT/Laboratory</td>
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<tr>
<td>Have trainees practice making saddle bends. This laboratory corresponds to Performance Task 1.</td>
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<td><strong>Session III. Joining Conduit</strong></td>
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<td>A. Cutting, Reaming, and Threading Conduit</td>
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<tr>
<td>B. PT/Laboratory</td>
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<tr>
<td>Have trainees practice cutting, reaming, and threading conduit. This laboratory corresponds to Performance Task 2.</td>
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<tr>
<td>C. Cutting and Joining PVC Conduit</td>
<td></td>
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</tbody>
</table>
Session IV. Review and Testing

A. Review

B. Module Examination
   1. Trainees must score 70% or higher to receive recognition from NCCER.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

C. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module introduces types and applications of raceways, wireways, and ducts. It stresses the appropriate NEC® requirements.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 through 26107-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Identify and select various types and sizes of raceways and fittings for a given application.
2. Identify various methods used to fabricate (join) and install raceway systems.
3. Identify uses permitted for selected raceways.
4. Demonstrate how to install a flexible raceway system.
5. Terminate a selected raceway system.
6. Identify the appropriate conduit body for a given application.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Identify and select various types and sizes of raceways, fittings, and fasteners for a given application.
2. Demonstrate how to install a flexible raceway system.
3. Terminate a selected raceway system.
4. Identify the appropriate conduit body for a given application.

Materials and Equipment

| Multimedia projector and screen | Sample sections and fittings for the following types of conduit: |
| Whiteboard/chalkboard | EMT |
| Markers/chalk | RMC |
| Pencils and scratch paper | Plastic-coated RMC |
| Appropriate personal protective equipment | Aluminum |
| Copy of the latest edition of the National Electrical Code® | Rigid black |
| OSHA Electrical Safety Guidelines (pocket edition) | IMC |
| Concrete, masonry, and wood for fastener application | EB ans DB RNC |
| Assorted hand tools (wrenches, screwdrivers, hammers) | LFNC |
| Drills/drivers and assorted drill bits | Flexible metal |
| Hammer-driven tools and related pin and stud fasteners | Various conduit couplings |
| Powder-actuated tool, powder charges, and related pin and stud fasteners | Combination couplings |
| | Type C, Type L, Type T, and Type X conduit bodies |
| | Various types of bushings |
| | Insulated bushings |
| | Threaded waterproof hubs |
| | Offset nipples |
| | Sample loads |

continued
Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to install and terminate raceway systems. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize hand tool, power tool, and electrical safety.

Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


Assorted threaded fasteners, including:
- Bolts
- Cap screws
- Studs
- Machine screws
- Nuts
- Washers
- Special threaded fasteners

Assorted special threaded fasteners

Assorted screws, including:
- Wood screws
- Lag screws and shields
- Concrete/masonry screws
- Thread-forming (sheet metal) and thread-cutting screws
- Deck screws
- Drywall screws

Assorted mechanical anchors and assorted anchor fastening tools, including:
- Wedge
- Stud
- Sleeve
- One-piece
- Hammer-driven
- Drop-in
- Expansion shields
- Lead (caulk-in)
- Screw (fiber, lead, plastic)
- Self-drilling

Toggle bolts
- Sleeve-type
- Wallboard
- Metal drive-in
- Metal boxes
- Nonmetallic boxes
- Bushings and locknuts
- Seal fittings and packing material
- Liquid sealing compound
- Various straps
- Standoff support

Access to job site where trainees can observe a variety of wireway components, including:
- Connectors
- End plates
- Closing plates
- Tee fittings
- Crosses
- Elbows
- Nipples
- Slip fittings

Access to job site where trainees can observe a variety of cable tray support systems, including:
- Direct rod
- Trapeze mounting
- Center hung support
- Wall mounting
- Pipe rack mounting
- Module Examination*

Performance Profile Sheets*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.
Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 20 hours are suggested to cover Raceways and Fittings. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
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<td>B. Raceways</td>
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<td>C. Conduit</td>
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<tr>
<td><strong>Sessions II and III. Metal Conduit</strong></td>
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<tr>
<td>A. Metal Conduit Fittings</td>
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<td>B. PT/Laboratory</td>
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<tr>
<td>Have trainees practice identifying conduit bodies. This laboratory corresponds to Performance Task 4.</td>
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<td>C. Making a Conduit-to-Box Connection</td>
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<td>D. PT/Laboratory</td>
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<tr>
<td>Have trainees practice terminating conduit. This laboratory corresponds to Performance Task 3.</td>
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<td><strong>Session IV. Fittings, Fasteners, and Supports</strong></td>
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<td>A. Seal Fittings</td>
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<td>B. Fasteners and Anchors</td>
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<td>C. Raceway Supports</td>
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<td>D. PT/Laboratory</td>
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<tr>
<td>Have trainees practice identifying raceways, fittings, and fasteners. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td><strong>Session V. Wireways and Cable Trays</strong></td>
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<td>A. Wireways</td>
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<td>B. Cable Trays</td>
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<td>C. Storing Raceways</td>
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<td><strong>Sessions VI and VII. Construction Methods</strong></td>
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<tr>
<td>A. Construction Methods</td>
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<tr>
<td>B. PT/Laboratory</td>
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<tr>
<td>Have trainees practice installing a flexible raceway system. This laboratory corresponds to Performance Task 2.</td>
<td></td>
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</tbody>
</table>
Session VIII. Review and Testing

A. Review

B. Module Examination
   1. Trainees must score 70% or higher to receive recognition from NCCER.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

C. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module focuses on the types and applications of conductors and covers proper wiring techniques. It also stresses the appropriate NEC® requirements.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 through 26108-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. From the cable markings, describe the insulation and jacket material, conductor size and type, number of conductors, temperature rating, voltage rating, and permitted uses.
2. Determine the allowable ampacity of a conductor for a given application.
3. Identify the NEC® requirements for color coding of conductors.
4. Install conductors in a raceway system.

Performance Task

Under the supervision of the instructor, the trainee should be able to do the following:

1. Install conductors in a raceway system.

Materials and Equipment

- Multimedia projector and screen
- Electrical Level One PowerPoint® Presentation
  
  Slides can be downloaded (with your access code) from www.nccerirc.com
- Computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Appropriate personal protective equipment
- Copy of the latest edition of the National Electrical Code®
- Electrician’s hand tools
- Access to a conduit run
- Reel cart
- Pull lines
- Instrument control wiring
- Power fishing system
- Variety of solid wire conductors
- Samples of stranded conductors
- Samples of cable, including:
  - Type NM
  - Type NMC
  - Type SE
  - Type UF
  - Type NMS
  - Type MV
  - High-voltage shielded
  - Type MC
  - Type FC
  - Type FCC
  - Type TC
  - Type USE
- Basket grip
- Wire grip
- Manual wire puller
- Power puller
- Module Examination*
- Performance Profile Sheets*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to install conductors. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize hand tool, power tool, and electrical safety.
### Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


### Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 10 hours are suggested to cover Conductors and Cables. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

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<td>B. Wire Size</td>
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<td>C. Ampacity</td>
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<td>D. Conductor Material</td>
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<td>E. Conductor Insulation</td>
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<td><strong>Session II. Specialty Conductors</strong></td>
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<td>B. Safety</td>
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<td>C. Feeding Conductors into Conduit</td>
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<td>E. Terminating Conductors</td>
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<tr>
<td><strong>Session IV. Review and Testing</strong></td>
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<tr>
<td>A. Review</td>
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<tr>
<td>B. Module Examination</td>
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</tr>
<tr>
<td>1. Trainees must score 70% or higher to receive recognition from NCCER.</td>
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<tr>
<td>2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.</td>
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<tr>
<td>C. Performance Testing</td>
<td></td>
</tr>
<tr>
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</tbody>
</table>
Module Overview

This module describes the types and uses of construction drawings. It provides information about the format and content of basic electrical construction drawings and their use in conveying specific construction requirements. It describes the standard format for specifications.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; and Electrical Level One, Modules 26101-14 through 26109-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Explain the basic layout of a set of construction drawings.
2. Describe the information included in the title block of a construction drawing.
3. Identify the types of lines used on construction drawings.
4. Using an architect’s scale, state the actual dimensions of a given drawing component.
5. Interpret electrical drawings, including site plans, floor plans, and detail drawings.
6. Interpret equipment schedules found on electrical drawings.
7. Describe the type of information included in electrical specifications.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Using an architect’s scale, state the actual dimensions of a given drawing component.
2. Make a materials takeoff of the lighting fixtures specified in Performance Profile Sheet 2 using the drawing provided on Performance Profile Sheet 3. The takeoff requires that all lighting fixtures be counted, and where applicable, the total number of lamps for each fixture type must be calculated.

Materials and Equipment

Multimedia projector and screen
PowerPoint® Presentation Slides
Computer
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment

Copy of the latest edition of the National Electrical Code®
Set of electrical drawings
Architect’s scales (both flat and triangular)
Engineer’s scale
Module Examination*
Performance Profile Sheet*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module may require trainees to visit job sites. Make sure that all trainees are briefed on site safety procedures.
Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


**Teaching Time for This Module**

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 7½ hours are suggested to cover *Basic Electrical Construction Drawings*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

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<td>B. Drawing Layout</td>
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<td>C. Drafting Lines</td>
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<td>D. Electrical Symbols</td>
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<td>E. Scale Drawings</td>
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<td>F. PT/Laboratory</td>
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<tr>
<td>Have trainees practice using an architect’s scale. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td><strong>Session II. Analyzing Drawings</strong></td>
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<td>C. Lighting Floor Plan</td>
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<td>D. PT/Laboratory</td>
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<tr>
<td>Have trainees practice preparing a materials takeoff. This laboratory corresponds to Performance Task 2.</td>
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<td>E. Electrical Details and Diagrams</td>
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<td><strong>Session III. Specifications; Review and Testing</strong></td>
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<td>B. Review</td>
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<tr>
<td>C. Module Examination</td>
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</tbody>
</table>
Module Overview

This module introduces trainees to the various types of devices and installation procedures used in residential wiring. It also covers service-entrance and branch circuit calculations and National Electrical Code® requirements.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; and Electrical Level One, Modules 26101-14 through 26110-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Explain the role of the National Electrical Code® in residential wiring and describe how to determine electric service requirements for dwellings.
2. Explain the grounding requirements of a residential electric service.
3. Calculate and select service-entrance equipment.
4. Select the proper wiring methods for various types of residences.
5. Compute branch circuit loads and explain their installation requirements.
6. Explain the types and purposes of equipment grounding conductors.
7. Explain the purpose of ground fault circuit interrupters and tell where they must be installed.
8. Size outlet boxes and select the proper type for different wiring methods.
9. Describe rules for installing electric space heating and HVAC equipment.
10. Describe the installation rules for electrical systems around swimming pools, spas, and hot tubs.
11. Explain how wiring devices are selected and installed.
12. Describe the installation and control of lighting fixtures.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. For a residential dwelling of a given size, and equipped with a given list of major appliances, demonstrate or explain how to:
   • Compute lighting, small appliance, and laundry loads.
   • Compute the loads for large appliances.
   • Determine the number of branch circuits required.
   • Size and select the service-entrance equipment (conductors, panelboard, and protective devices).
2. Using an unlabeled diagram of a panelboard (Performance Profile Sheet 3), label the lettered components.
3. Select the proper type and size outlet box needed for a given set of wiring conditions.

Materials and Equipment

Multimedia projector and screen
Electrical Level One PowerPoint® Presentation Slides
Computer
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment

Copy of the latest edition of the National Electrical Code®
Calculator
Residential floor plan
Blank worksheet for general lighting loads
Various types of GFCIs
Panelboard

(continued)
Examples of cable, including:
- Type NM
- Type AC
- Type UF
- Type SE/USE

Examples of raceways, including:
- Rigid
- IMC
- EMT
- Flexible
- PVC

Examples of made-type grounding electrodes
- Assortment of metallic and plastic outlet boxes
- Assorted types of electrical receptacles
- Assortment of switches, including:
  - Single-pole
  - Three-way
  - Four-way
  - Photoelectric switches
  - Dimmer
  - Relays
  - Module Examination*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.

### Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module may require trainees to visit job sites. Make sure that all trainees are briefed on site safety procedures.

### Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.


### Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 15 hours are suggested to cover Residential Electrical Services. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

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<tr>
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<td>B. Sizing Electrical Service</td>
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<td>C. Sizing Residential Neutral Conductors</td>
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<td>D. Sizing the Load Center</td>
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<tr>
<td>E. PT/Laboratory</td>
<td>Have trainees practice computing various branch loads. This laboratory corresponds to Performance Task 1.</td>
</tr>
<tr>
<td><strong>Session III. Grounding</strong></td>
<td></td>
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<tr>
<td>A. Grounding Electrical Services</td>
<td></td>
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<tr>
<td>B. Main Bonding Jumper</td>
<td></td>
</tr>
<tr>
<td>C. PT/Laboratory</td>
<td>Have trainees practice identifying the components of a panelboard. This laboratory corresponds to Performance Task 2.</td>
</tr>
</tbody>
</table>
### Session IV. Installation, Part One

A. Installing the Service Entrance
B. Panelboard Location
C. Wiring Methods
D. Equipment Grounding System
E. Branch Circuit Layout for Power

### Session V. Installation, Part Two

A. Branch Circuit Layout for Lighting
B. Outlet Boxes
C. PT/Laboratory
   - Have trainees practice selecting the proper type and size outlet box needed for a given set of wiring conditions. This laboratory corresponds to Performance Task 3.
D. Wiring Devices
E. Lighting Control

### Session VI. Electric Heating; Pools; Review and Testing

A. Electric Heating
B. Residential Swimming Pools, Spas, and Hot Tubs
C. Review
D. Module Examination
   1. Trainees must score 70% or higher to receive recognition from NCCER.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
E. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.
Module Overview

This module introduces the trainee to electrical test equipment. It explains the purpose and use of voltmeters, ohmmeters, clamp-on ammeters, multimeters, megohmmeters, and motor and phase rotation testers. It also covers basic safety and explains category ratings.

Prerequisites

Prior to training with this module, it is recommended that the trainee shall have successfully completed Core Curriculum; Electrical Level One, Modules 26101-14 through 26111-14.

Objectives

Upon completion of this module, the trainee will be able to do the following:

1. Explain the operations of and describe the following pieces of test equipment:
   - Voltmeter
   - Ohmmeter
   - Clamp-on ammeter
   - Multimeter
   - Megohmmeter
   - Motor and phase rotation testers

2. Select the appropriate meter for a given work environment based on category ratings.

3. Identify the safety hazards associated with the various types of test equipment.

Performance Tasks

Under the supervision of the instructor, the trainee should be able to do the following:

1. Under instructor supervision, measure the voltage in your classroom from line to neutral and neutral to ground.

2. Under instructor supervision, use an ohmmeter to measure the value of various resistors.

Materials and Equipment

- Multimedia projector and screen
- Electrical Level One PowerPoint® Presentation Slides
- Computer
- Whiteboard/chalkboard
- Markers/chalk
- Pencils and scratch paper
- Appropriate personal protective equipment
- Analog meter
- Continuity tester
- Resistors
- Copy of the latest edition of the National Electrical Code®
- Examples of the following test instruments with their operator’s manuals:
  - Voltmeter
  - Voltage tester
  - Ohmmeter
  - Clamp-on ammeter
  - Multimeter
  - Megohmmeter
  - Motor and phase rotation testers
  - Safety video/DVD (optional)
  - TV/Video/DVD player (optional)
- Module Examination*
- Performance Profile Sheet*

* Single-module AIG purchases include the printed exam and performance task sheet. If you have purchased the perfect-bound version of this title, download these materials from the IRC using your access code.
Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to work with electrical test equipment. Make sure that all trainees are briefed on appropriate safety procedures. Emphasize electrical safety.

Additional Resources

This module presents thorough resources for task training. The following resource material is suggested for further study.

- *ABCs of Multimeter Safety*, Everett, WA: Fluke Corporation.
- *ABCs of DMMs, Multimeter Features and Functions Explained*, Everett, WA: Fluke Corporation.
- *Clamp Meter ABCs*, Everett, WA: Fluke Corporation.

Teaching Time for this Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 2½ hours are suggested to cover *Electrical Test Equipment*. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td>Session I. Introduction; Electrical Test Equipment</td>
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<tr>
<td>A. Introduction</td>
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<tr>
<td>B. Voltmeter</td>
<td></td>
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<tr>
<td>C. PT/Laboratory</td>
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<tr>
<td>Have trainees practice measuring voltage. This laboratory corresponds to Performance Task 1.</td>
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<tr>
<td>D. Ohmmeter</td>
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<tr>
<td>E. PT/Laboratory</td>
<td></td>
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<tr>
<td>Have trainees practice using an ohmmeter. This laboratory corresponds to Performance Task 2.</td>
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<tr>
<td>F. Ammeter and Multimeter</td>
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<tr>
<td>G. Megohmmeter and Other Instruments</td>
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<tr>
<td>H. Category Ratings and Safety</td>
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<tr>
<td>I. Review</td>
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<td>J. Module Examination</td>
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