



## LEVEL EXAM SPECIFICATIONS

### PIPELINE ELECTRICAL & INSTRUMENTATION, 3<sup>rd</sup> Edition, Level 1

#### **NCCER Overview**

NCCER is a not-for-profit 501(c)(3) education foundation created in 1996 as The National Center for Construction Education and Research. It was developed with the support of more than 125 construction CEOs and various association and academic leaders who united to revolutionize training for the construction industry. Sharing the common goal of developing a safe and productive workforce, these companies created a standardized training and credentialing program for the industry.

NCCER develops standardized construction and maintenance curriculum and assessments with portable credentials. These credentials are tracked through NCCER's Registry System that allows organizations and companies to track the qualifications of their craft professionals and/or check the qualifications of possible new hires. NCCER's Registry System also assists craft professionals by maintaining their records in a secure database.

NCCER is headquartered in Alachua, Florida, and is affiliated with the University of Florida's M.E. Rinker, Sr. School of Construction Management.

#### **Pipeline Electrical & Instrumentation – Overview**

Provides basic, intermediate and advanced training to safely inspect, operate and maintain electrical components and instrumentation on pipelines. Level 1 is split into two volumes, and includes key content such as electrical safety and theory, control/auxiliary systems and process theory, transformers, switchgear, and SCADA communications.

#### **Module Exam Guidelines**

- May use a basic function, non-printing calculator
- No extra papers, books, notes or study materials are allowed
- The minimum passing score is 70

#### **Study Materials**

All NCCER written module exams are referenced to NCCER's curriculum listed in the content. You may order modules from Pearson (800.922.0579) or from NCCER's Online Catalog at [www.nccer.org](http://www.nccer.org).

#### **Credentials**

NCCER will send appropriate credentials to the location designated by the accredited training sponsor for successful completions.

#### **Registry**

Module exam results will be maintained in NCCER's Registry and become a portable record of the candidate's training and assessment achievements.

<b>Table of Contents:</b>	<b>Recommended Training Hours</b>	<b>Number of Exam Items</b>	<b>Performance Task Required?</b>
<b>Volume 1:</b>			
64102-02 - Pipeline E&I Safety	15	20	No
64103-02 - Trade Math	40	25	No
64104-02 - Electrical Theory	40	25	Yes
64105-02 - Tools of the Trade	15	15	Yes
64107-02 - Pipeline E&I Drawings	30	25	Yes
64108-02 - Understanding the National Electrical Code®	7.5	15	Yes
64109-02 - Fasteners and Anchors	40	10	Yes
64201-02 - Electrical Installations in Classified Areas	40	20	Yes
64202-02 - Use of Meters and Test Equipment	15	30	Yes
64203-02 - Grounding	30	30	Yes
<b>Total Number of Training Hours &amp; Module Exam Questions (Volume 1):</b>	<b>272.5</b>	<b>215</b>	
<b>Volume 2:</b>			
64204-02 - Process Control Theory	40	30	Yes

NCCER

13614 Progress Blvd. • Alachua, FL 32615 • 1-888-622-3720 • [www.nccer.org](http://www.nccer.org)

## LEVEL EXAM SPECIFICATIONS

### PIPELINE ELECTRICAL & INSTRUMENTATION, 3<sup>rd</sup> Edition, Level 1

<b>Table of Contents:</b>	<b>Recommended Training Hours</b>	<b>Number of Exam Items</b>	<b>Performance Task Required?</b>
64205-02 - Supervisory Control Systems	15	20	Yes
64301-02 – Transformers	25	30	Yes
64302-02 - Switchgear and MCCs	25	30	Yes
64303-02 - Low-Voltage and Standby Power	25	30	Yes
64304-02 - Power Quality	25	30	Yes
64305-02 - Prime Movers	32.5	30	Yes
64306-02 - Facility Auxiliary Systems	22.5	30	Yes
64307-02 - SCADA	30	30	Yes
<b>Total Number of Training Hours &amp; Module Exam Questions (Volume 2):</b>	<b>240</b>	<b>260</b>	