

electrical training  
**electrical training**  
 IBEW - NECA ALLIANCE

INSTRUMENTATION  
 TRAINING  
 PROGRAM  
*NTI 2017 Update*





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electrical training  
**Jason Lunardini**  
 20 Year Member of IBEW Local 5 – Pittsburgh  
 Served 5 year Apprenticeship in Pittsburgh  
 9 Years as a local instructor

Instrumentation Curriculum Specialist

- Textbook
- LMS Courses
- FLUKE Instrumentation Academy
- Assist with Program Set-Up
- Develop New Labs
- Certification Exam



[jlunardini@electricaltrainingalliance.org](mailto:jlunardini@electricaltrainingalliance.org)

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electrical training  
*What is the program?*

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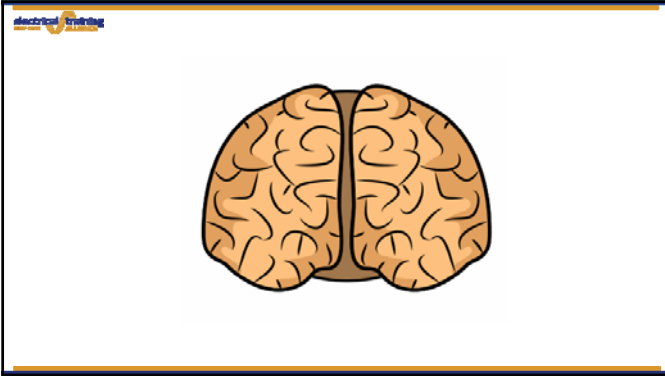
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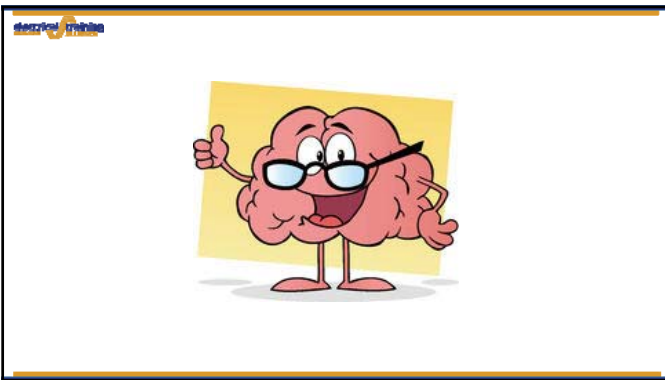
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Questions?

Contact:  
**Jason Lunardini**  
[jlunardini@electricaltrainingalliance.org](mailto:jlunardini@electricaltrainingalliance.org)  
301.715.2312

In the top-left corner of the slide, there is a small logo for "electrical training" with a stylized orange and blue icon.

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What is the program?



- Joint Venture between the IBEW and the UA (United Association of Pipefitters) to train Instrumentation Techs.

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What is the program?



- Joint Venture between the IBEW and the UA (United Association of Pipefitters) to train Instrumentation Techs.
- Certification is owned by the Joint Venture

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What is the program?



- Joint Venture between the IBEW and the UA (United Association of Pipefitters) to train Instrumentation Techs.
- Certification is owned by the Joint Venture
- The training is optimized for our use.

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Fundamentals of Instrumentation Text

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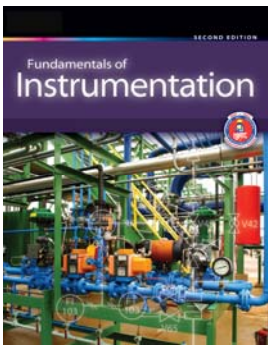
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Fundamentals of Instrumentation Text

- Current text in use today

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## Fundamentals of Instrumentation Text

- Current text in use today
- Phase out will begin following NTI 2017

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## Fundamentals of Instrumentation Text

- Current text in use today
- Phase out will begin following NTI 2017
  - Will no longer be available for Journeyman classes as of the fall 2017

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## Fundamentals of Instrumentation Text

- Current text in use today
- Phase out will begin following NTI
  - Will no longer be available for Journeyman classes as of the fall 2017
  - Will continue to be available for apprenticeship classes for 2017-2018 school year
    - Due to the LMS roll out schedule, 5<sup>th</sup> year classes are not in the LMS yet

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electrical training

APPLIED SCIENCE of INSTRUMENTATION TEXT

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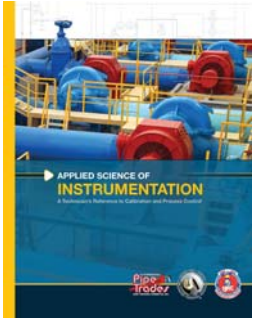
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APPLIED SCIENCE OF  
**INSTRUMENTATION**

Pipe Tracer

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electrical training

APPLIED SCIENCE of INSTRUMENTATION TEXT

- Joint effort with the UA Education and Training Department

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APPLIED SCIENCE of INSTRUMENTATION TEXT

- Joint effort with the UA Education and Training Department
- Initially a merger of texts, resulted in 95% new textbook

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APPLIED SCIENCE of INSTRUMENTATION TEXT

- Joint effort with the UA Education and Training Department
- Initially a merger of texts, resulted in 95% new textbook
- Primary author is Paul Meyers out of Indianapolis Local 481

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APPLIED SCIENCE of INSTRUMENTATION TEXT

- Joint effort with the UA Education and Training Department
- Initially a merger of texts, resulted in 95% new textbook
- Primary author is Paul Meyers out of Indianapolis Local 481
- Currently available in the bookstore as Item S600 at a cost of \$55.00

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**electrical training**

What makes this book unique?

- Two trade organizations shared resources
- Designed to offer a smooth transition with the LMS

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**electrical training**

What makes this book unique?

- Two trade organizations shared resources
- Designed to offer a smooth transition with the LMS
- Implemented QR codes to quickly get to additional info including videos and related LMS pieces

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**electrical training**

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For additional  
information, visit  
[qr.njatcdb.org](http://qr.njatcdb.org)  
Item #2050

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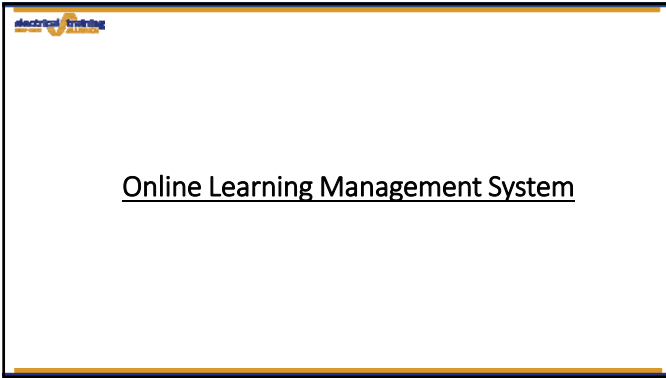
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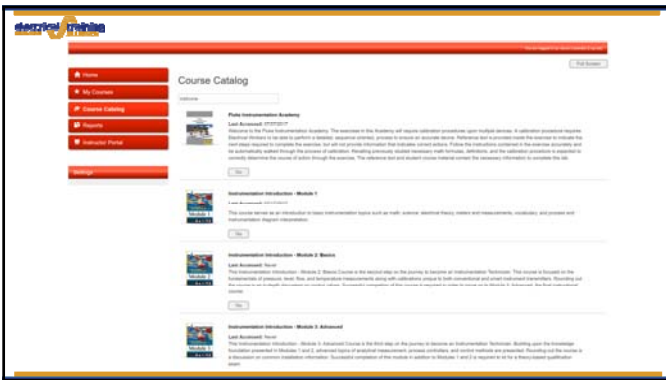
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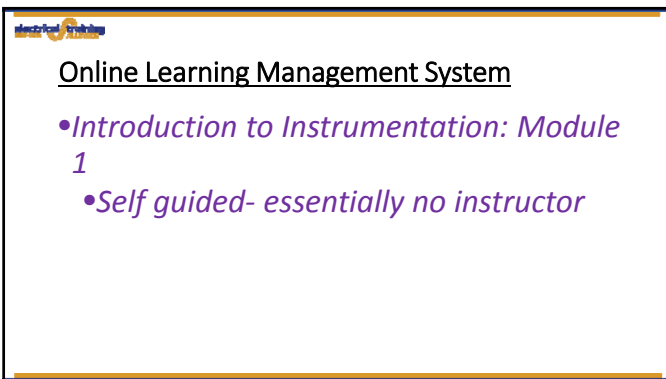
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Online Learning Management System

- *Introduction to Instrumentation: Module 1*
  - *Self guided- essentially no instructor*
  - *Available and in use since April of 2016*

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Online Learning Management System

- *Introduction to Instrumentation: Module 1*
  - *Self guided- essentially no instructor*
  - *Available and in use since April of 2016*
  - *Worth 2 Credits in the CLCS*

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Online Learning Management System

- *Introduction to Instrumentation: Module 1*
  - *Self guided- essentially no instructor*
  - *Available and in use since April of 2016*
  - *Worth 2 Credits in the CLCS*
  - *Designed to be used at the discretion of a program and training director.*

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**electrical Training**

Course Syllabus	
Lesson 1: Math Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 2: Math	<input type="button" value="Open"/>
Lesson 3: Science Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 4: Science	<input type="button" value="Open"/>
Lesson 5: Electrical Theory Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 6: Electrical Theory	<input type="button" value="Open"/>
Lesson 7: Motors and Measurements Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 8: Motors and Measurements	<input type="button" value="Open"/>
Lesson 9: Instrumentation Vocabulary Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 10: Instrumentation Vocabulary	<input type="button" value="Open"/>
Lesson 11: Process and Instrumentation Diagram Interpretation Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 12: Process and Instrumentation Diagram Interpretation	<input type="button" value="Open"/>
Lesson 13: Final Exam	<input type="button" value="Open"/>

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**electrical Training**

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**Lesson 5: Electrical Theory Pre-Test Assessment**

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**Lesson 6: Electrical Theory**

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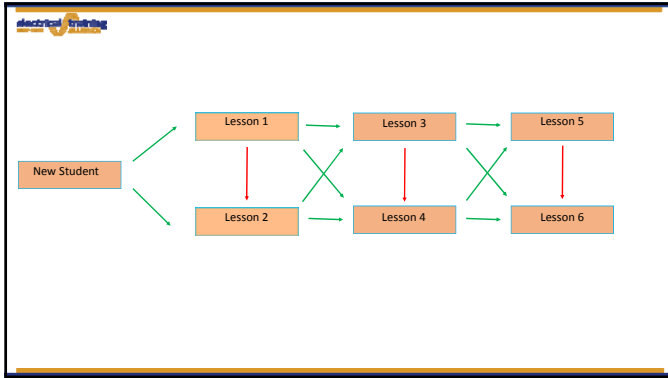
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Lesson 1: Math Pre-Test Assessment	<input type="button" value="Open"/>
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Lesson 4: Science	<input type="button" value="Open"/>
Lesson 5: Electrical Theory Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 6: Electrical Theory	<input type="button" value="Open"/>
Lesson 7: Meters and Measurements Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 8: Meters and Measurements	<input type="button" value="Open"/>
Lesson 9: Instrumentation Vocabulary Pre-Test Assessment	<input type="button" value="Open"/>
Lesson 10: Instrumentation Vocabulary	<input type="button" value="Open"/>
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Lesson 12: Process and Instrumentation Diagram Interpretation	<input type="button" value="Open"/>
Lesson 13: Final Exam	<input type="button" value="Open"/>

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Online Learning Management System

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**electrical training**

### MODULE 1 Locking and Credits

- Serves 2 purposes
  - JW ranking tool
  - Apprentice practice without taking more class time
- Pre exams
  - Can be used as preassessment
  - Can be used to allow "jumping" of lessons
  - Feedback is **NOT** given, that is at the discretion of a program.
- Final exam response:

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**electrical training**

### Quiz for Lesson 13

Summary of your previous attempts

Attempt	State	Review	Feedback
Previous	Finished Submitted Monday, July 17, 2017, 10:27 AM		You have completed Instrumentation Introduction - Module 1. See your Instructor or Training Director for information on further courses.

**Overall feedback**  
You have completed Instrumentation Introduction - Module 1. See your Instructor or Training Director for information on further courses.

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**electrical training**

### Online Learning Management System

- *Instrumentation Course 2: The Basics*
  - *Works in parallel with "AS of I" text for Chapters 1-10*
    - *Covers about 75% of necessary knowledge*

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**Online Learning Management System**

- *Instrumentation Course 2: The Basics*
  - *Works in parallel with "AS of I" text for Chapters 1-10*
    - *Covers about 75% of necessary knowledge*
  - *Available simultaneously with text release*

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**Online Learning Management System**

- *Instrumentation Course 2: The Basics*
  - *Works in parallel with "AS of I" text for Chapters 1-10*
    - *Covers about 75% of necessary knowledge*
  - *Available simultaneously with text release*
  - *Incorporates videos and animations as related to each lesson*

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**Online Learning Management System**

- *Instrumentation Course 2: The Basics*
  - *Works in parallel with "AS of I" text for Chapters 1-10*
    - *Covers about 75% of necessary knowledge*
  - *Available simultaneously with text release*
  - *Incorporates videos and animations as related to each lesson*
  - *5 credits assigned in CLCS*

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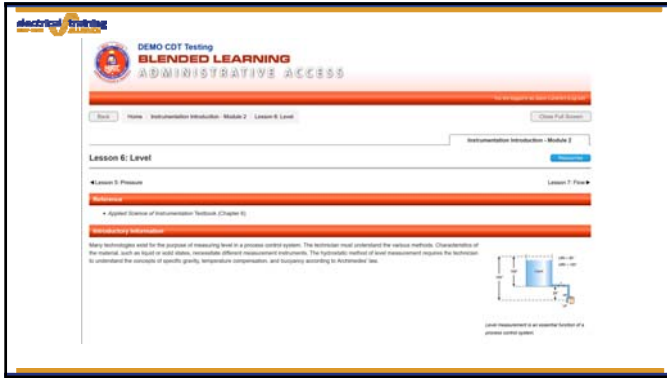
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**Online Learning Management System**

- Introduction to Instrumentation: Module 1
- Instrumentation Course 2: The Basics
- *Instrumentation Course 3: The Advanced*
  - *Works in parallel with "AS of I" text Chapters 11-14 utilizing the same features as Course 2*

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**Online Learning Management System**

- Introduction to Instrumentation: Module 1
- Instrumentation Course 2: The Basics
- *Instrumentation Course 3: The Advanced*
  - *Works in parallel with "AS of I" text Chapters 11-14 utilizing the same features as Course 2*
  - *2 Credits assigned in the CLCS*

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### Applied Science Train-The-Trainer Schedule

Harriman, New York	September 21-22, 2017
Las Vegas	October 12-13, 2017
Portland, Oregon	October 16-17, 2017
Tampa, Florida	November 13-14, 2017

[www.electricaltrainingevents.org](http://www.electricaltrainingevents.org)

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### Part A Theory Examination

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### Part A Theory Examination

- Current exam
  - 1 part exam consisting of 200 questions
  - Open reference exam using published materials
  - Minimum passing score of 75%
  - Proctored using a third party service
  - 3.5 Hour Maximum Test Duration
- New exam parameters as of **APRIL 1, 2017**
  - Closed reference exam except for one published reference resource provided by the exam committee
  - Minimum passing score of 80%
  - Increased allotted test duration to 4 hours

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Part A Theory Examination

- Former Exam Prior to April 1, 2017
  - 1 part exam consisting of 200 questions
  - Open reference exam using published materials
  - Minimum passing score of 75%
  - Proctored using a third party service
  - 3.5 Hour Maximum Test Duration

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Part A Theory Examination

- **New Exam Procedures effective April 1, 2017**
  - Closed reference exam except for one published reference resource provided by the exam committee
  - Minimum passing score of 80%
  - Increased allotted test duration to 4 hours

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Part A Theory Examination

- Additional parameters to be released as they are finalized
  - Availability in 3 parts to match course structure
  - Availability to be administered online
  - Elimination of the third party proctor
  - Proctors to be supplied by the JATC and trained by the *electrical training ALLIANCE*

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### Part B Hands-On Examination

- Additional parameters to be released as they are finalized
  - Availability in 3 parts to match course structure
  - Availability to be administered online
  - Elimination of the third party proctor
  - Proctors to be supplied by the JATC and trained by the *electrical training ALLIANCE*

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## Questions?

Contact:

**Jason Lunardini**

[jlunardini@electricaltrainingalliance.org](mailto:jlunardini@electricaltrainingalliance.org)

301.715.2312

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