

# Level 1 - Thermographic Applications

## LIMITED TO 16 STUDENTS



**May 19th - 22nd, 2026**

**8AM—5PM**

**Certification Cost \$2250.00**

**Students should provide their own thermal imager. (not a brand specific requirement)**

**Coffee, bagels, donuts, beverages and lunch will be available**

**FLUKE**

Fluke will supply a limited number of imagers to use free of charge while taking the course.  
(supply is very limited)



NFPA 70E states that only qualified persons may work on or near energized electric circuits. Since infrared inspections of electrical equipment will often require a thermographer to come in close proximity to exposed live conductors, **thermographers must be Qualified Persons in order to comply with the standard.**

This 32 hour class covers the theory and applications of infrared thermography in the preventive maintenance, quality assurance, condition monitoring and nondestructive testing of materials fields. This class focuses on qualitative thermography and how to collect data, capture clear thermograms, perform diagnostics and follow proven and published inspection procedures. Upon completion of the course an exam will be offered on accepted ASTM, ISO, NFPA, NETA, IEEE, OSHA, EPRI, and BINDT methodologies.

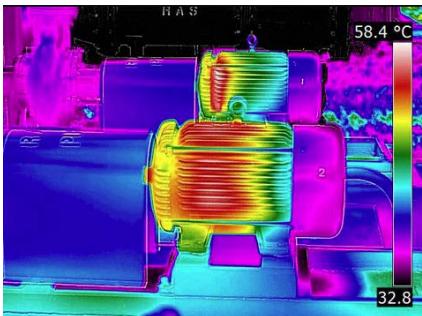
### An overview of the most common applications include:

Electrical distribution systems	Nondestructive testing of materials
Mechanical systems	Steam systems
Refractories	Underground piping
Active thermography	Building envelopes
Low-slope roofs	

*This course fully meets the educational requirements for certification in accordance with Recommended Practice No. SNT-TC-1A, as defined by the American Society for Nondestructive Testing.*

**Register at online [www.iuoelocal95.org](http://www.iuoelocal95.org)**

# THERMAL IMAGING- LEVEL 1



## SCOPE:

The purpose of this training is to provide hands-on applications instruction in the use of thermographic imaging equipment. This on-site training will focus on those applications relevant to inspection needs of your facility, especially inspections of electrical and mechanical systems, approaches to production and process-related problems, and a general background in solving thermal problems.

The participants, upon completion of the training, will have an understanding of the basic heat theory consistent with the course instruction, will know how to best utilize the imaging equipment they have, and will be better able to employ the equipment to perform surveys. This will enable them to more fully incorporate this inspection method in your existing programs to reduce unscheduled downtime, improve system performance and reduce maintenance costs.

## FORMAT:

The training will consist of classroom lectures, group discussions, demonstrations and possibly localized fieldwork. Materials prepared especially for instruction in maintenance thermography will be used. Hands-on activities are emphasized so that participants use the equipment during a large portion of the training. Comprehensive training manuals, for use during and after the course, are included for each participant.

## COURSE OUTLINE/SCHEDULE:

The outline for the proposed four-day training course, it is recommended to plan for approximately 8 hours/day of training to meet the requirements.

### Day One:

Introductions and overview of training schedule

Learning to Think Thermally™

Applied theory:

Heat transfer basics

Radiometry

Using imaging equipment, hands-on instruction and practice

### Day Two:

Inspecting electrical systems:

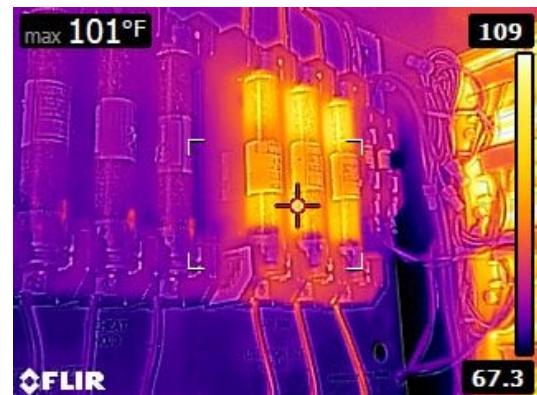
Conducting inspections safely

Patterns and causes

Conditions for successful inspections

Examples of equipment to be inspected

How to conduct a systematic electrical survey



# **THERMAL IMAGING- LEVEL 1**

## **Fieldwork:**

Electrical survey of Training Center equipment

Review of fieldwork

Basic temperature measurement in electrical surveys

Prioritizing findings

## **Day Three:**

Inspecting mechanical systems:

    Motors

    Rotating equipment

    Steam traps

    Refractory insulation

    Tanks and silos

Fieldwork: Inspecting electrical and mechanical systems

Review of fieldwork

Implementing thermography

    Report forms

    Setting up inspection routes

    Procedures

Using imaging equipment, hands-on instruction and practice

## **Day Four:**

An overview of other applications

    Building diagnostics

    Roof moisture inspections

Using imaging equipment, hands-on instruction and practice

Course wrap-up and review

Course test

## **POST-COURSE SUPPORT:**

The Snell Group provides post-course support to all graduates of the training courses. This can take many forms as outlined by the following:

- Consultation by phone/fax or email
- Ongoing support of individual learning needs
- Review of program protocol and program results
- Critique of program documents
- Help with development of applications protocol
- Requests for information
- Image interpretation assistance
- Periodic mailings, including our newsletter
- Access to our reference library and body of graduate thermographers



# THERMAL IMAGING- LEVEL 1

Students are only required to take the general exam to successfully complete the course.

## **CERTIFICATION:**

**Additionally, students will have the opportunity to take a three-part certification examination.** It consists of two written portions and a practical where you must show proficiency with your infrared camera.

The 40-question general exam will evaluate your general knowledge in infrared theory and all the mainstream applications. The specific exam will be based on accepted ASTM, ISO, NFPA, NETA, IEEE, OSHA, EPRI, and BINDT methodologies. T

**The practical exam will allow you to prove you have the skills necessary to perform testing in the field.**

Each student will be given a copy of the applicable standard that applies to your work. Students will also leave with a copy of a Written Practice. A Written Practice is a suggested guideline on how to organize and manage a certification program for your company. It is a straightforward document and process to set up a program, but it has critical importance in describing the educational experience and testing requirements for certification for your organization.

The curriculum and all instructors are overseen by ASNT Level III Certificate Holders.

