



A great class offered by a partnership with the State of Oklahoma and Autry Technology Center and OPMUG!



**COURSE COSTS:**

Oklahoma based company  
Class: \$635  
Test- (Level I): \$250 (optional)

**Total: \$885**

*You save \$810 off retail cost!*

**Autry Technology Center**  
1201 West Willow  
Enid, OK 73703  
580.242.2750



# “Thermography Level I”

OPEN TO OPMUG MEMBERS

Thermography ANST Certification Level I  
By: The Snell Corporation

**March 2nd-6th 2009**

**DEADLINE TO ENROLL IS FEBRUARY 25!**

**Location:**  
Autry Technology Center  
1201 W. Willow Road  
Enid, Oklahoma

<http://www.autrytech.com>

**Registration will be limited to the first 12 students that register!**  
<http://www.opmug.net/>  
[gburkett@autrytech.com](mailto:gburkett@autrytech.com)

## *A basic course including theory, applications and hands-on training:*

This training will provide hands-on applications instruction in the use of the thermographic imaging equipment to OPMUG Members. Training will focus on those applications relevant to the inspection needs of your company, especially inspections of electrical and mechanical systems, approaches to production and process-related problems, and a general background in solving thermal problems. Participants will have an understanding of the basic heat theory necessary for thermal work, will know how to best utilize the imaging equipment you have, and will be better able to employ the equipment to perform surveys. This will allow them to more fully incorporate this inspection method in your existing programs to reduce unscheduled downtime, improve system performance and reduce maintenance costs.

## **Format - 2009 Courses**

The training will consist of classroom lectures, group discussions, demonstrations and fieldwork for a group of up to twelve people. 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 Schedule/Outline

### DAY ONE

- Introduction and overview of training schedule
- Learning to Think Thermally
- Applied Theory
  - Heat Transfer Basics
  - Radiometry
- Using the imaging equipment, hand-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
- Fieldwork:
  - Electrical survey of plant 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 the imaging equipment, hands-on instruction and practice

### DAY FOUR

- An overview of other applications
  - Building diagnostics
  - Roof moisture inspections
- Using the imaging equipment, hands-on instruction and practice
- Course wrap up and review
- Course Test

### **\*\*Cancellation Policy\*\***

A training class can be cancelled when, less than 75% funded and is less than 30 days from the start of class (training). In this case there will be a 100% fee refund for registered participants. If a registered participant cancels less than 10 days before the start of class (training) they will forfeit 50% of the registration fee.