WI231
Thermographic Applications–Level 1

Recommended for:

Personnel seeking to advance their knowledge in thermographic and infrared inspections. This includes supervisors, maintenance and reliability engineers, electricians, mechanics, equipment operators, energy auditors, and service company personnel who perform PDM, energy audits, or thermographic and infrared services for their clients. Although a basic understanding of infrared technology is helpful, this is an entry level course and no prerequisites are required

Course objectives:

Participants will learn the principles of how to Think Thermally®, basic heat transfer theory, electrical applications, mechanical equipment applications, building system inspections, roof inspections, proper use of thermal imaging equipment, accurate image acquisition and diagnostic skills. This course includes the Snell Certification Standard. Objectives are measured through daily quizzes, a hands-on practical exam, an application specific written exam, and a general written exam.

2017 course schedule	
January 23–27	Montreal, QC
February 6–10	San Diego, CA
February 13–17	Houston, TX
February 20–24	Montreal, QC
February 27–March 3	Toronto, ON
March 13–17	Charlotte, NC
April 3–7	Dallas, TX
April 24–28	Nashville, TN
April 24–28	Calgary, AB
May 1–5	Kansas City, MO
May 1–5	Montreal, QC
May 8–12	Sacramento, CA
May 15–19	Charleston, SC
June 5–9	Minneapolis, MN
June 5–9	Cleveland, OH
July 10–14	Barre, VT
August 14–18	Toronto, ON
August 21–25	Indianapolis, IN
September 11–15	Denver, CO
September 11–15	Minneapolis, MN
September 11–15	Montreal, QC
September 18–22	Seattle, WA
September 25–29	Little Rock, AR
September 25–29	Calgary, AB
October 2–6	Cincinnati, OH
October 16–20	Omaha, NE
October 16–20	Toronto, ON
October 23–27	Tampa, FL
November 6–10	San Antonio, TX
November 20–24	Edmonton, AB
December 4–8	Montreal, QC
December 4–8	Phoenix, AZ
December 4–8	Barre, VT

2017 tuition	
Public classes	$1,795
On-site	
per class	$10,995
# people	5
6+ people	$495 per person

4.5 days

Public classes start Monday at 3 PM local time and end on Friday at noon local time

Course description

This course covers the theory and applications of infrared thermography in the preventive maintenance, quality assurance, condition monitoring and non-destructive testing of materials fields. This class focuses on qualitative thermography and how to collect data and follow proven and published inspection procedures. Upon completion students will be able to capture clear thermograms and make basic inferences and diagnosis.

Level 1 material includes infrared theory, heat transfer concepts, operation of thermal imaging equipment and specific recommendations on how to make quality thermal images that are clear, concise and easy to interpret. Students are challenged daily with hands-on demonstrations, experiments and inspection situations similar to those they will experience in their work. Students leave the class ready to put this amazing technology to work.

An overview of the most common applications include:

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

Students learn the basic inspection techniques based on accepted industry and international inspection procedures.

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 Non-Destructive Testing.

The course is open to everyone regardless of whether or not they own a thermal imager. Attendees that do have equipment are encouraged to bring their systems as there are a number of hands-on learning opportunities available during the week.

Pre-study*

WI130 Thermography basics
Webinar–Mechanical inspections using infrared
Webinar–Emissivity and its impact on thermographers

Post-study*

JM02008 Introduction to thermographic analysis
Webinar–Successful electrical inspections using infrared
White Paper–Locating levels in tanks, vessels and silos

*** On-line learning material at http://www.skf.com/us/knowledge-centre/elearning/index.html**