

Thermal Imaging CAT II

ISO 18436 – IRT 2

Level II Certified Infrared Thermographer® is a five-day course for the application of qualitative thermal imaging for P/PM, Condition Assessment, Condition Monitoring, Quality Assurance, Forensic Investigations, and Building Sciences.

Infrared Thermography – CAT II Training Main Topics:

1. Thermometry Fundamentals

- Temperature scales and conversions
- Absolute and relative temperatures
- Classes and benefits of contact thermometers
- Classes and benefits of non-contact thermometers
- Identifying and reducing errors

2. Advanced IR Theory

- Units for measuring radiant power
- Relationship between power and temperature
- Planck's blackbody curves

3. Temperature Measurement Error Sources and Corrections

- Calibration / Reflectance / Emittance / Transmittance / Target Width/Distance Ratios

4. Traceable Temp. Limits: How Hot is Too Hot

- Delta T classifications
 - NETA, Mil Spec, and other standards
- Absolute temperature classifications
 - ANSI, IEEE, NEMA standards for electrical systems
 - correction formula for load and ambient temperature

5. Preparing Quantitative Reports

- Data to gather
- Report procedures
- Image processing software capabilities
- Report generation software capabilities

