



### This course is intended for the infrared thermographer who will:

Set up and operate the thermal imaging equipment for safe thermographic data collection

Verify the calibration of thermographic measurement systems

Identify, prevent minimize and control poor data acquisition and error sources

Apply a specified thermographic measurement technique

Evaluate and report test results and highlight areas of concern

- The difference between thermal conductivity and specific heat capacity
- Real-life examples of conductive heat transfer
- Convective heat transfer
- How wind will affect the results you achieve
- Radiant heat transfer
- How your infrared camera works and the functionality to perform inspections
- How to acquire data and process images
- "Thermal tuning."
- How to determine emissivity
- How to identify and deal with reflections

### Duration

32 hours, typically over four days

### Format

Live public course

On-site course

Virtual online course

Video distance learning online courses

### There are so many benefits to taking this course. You will learn...

- Why we perform condition monitoring
- How to decide between reactive, preventive, condition-based, and proactive maintenance
- Vibration Analysis, Ultrasound Analysis, Oil Analysis, Wear Particle Analysis, and Electric Motor Testing
- All about heat vs. temperature and temperature scales
- The laws of thermodynamics
- How thermal conductivity occurs in different materials

- How to acquire data and store images
- The basic principles of diagnostics and prognostics
- The relationship between CBM, diagnostics, and prognostics
- The different thermal signatures of heat generation
- The concept of "comparative temperature measurements."
- How to distinguish between active and passive thermography

### Compliance:

- Training and certification: ISO 18436-7
- Certification: ISO 18436-1, ISO/IEC 17024
- Training: ISO 18436-3

### Exam:

- Two hours
- 50 multiple-choice questions
- 75% passing grade
- Can be taken online or in-person at the course

### Certification requirements:

- Training course completed
- 12-months of work experience, verified by an independent person
- Pass the Ishihara color perception test
- Valid for 5 years

