



<p style="text-align: center;">DISTANCE LEARNING INFRARED THERMOGRAPHY FOR OPTICAL GAS IMAGING</p>

1. Basic Infrared Theory

- Heat transfer
- Electromagnetic spectrum
- Emittance, reflectance, and transmittance
- Atmospheric transmission
- IR wavebands, imaging systems, and lens materials

2. Infrared Equipment

- Selection criteria
- Range and level settings
- Image and data recording
- Self-directed learning activities for hands-on use

3. Optical Gas Imaging

- Theory and application of OGI
- Detectable gases
- Determining correct imaging wavelength
- Safety considerations
- Inspection procedures for different gases
- Thermal signatures of gas leaks and venting
- Frequency of inspections
- Confirmation of infrared data
- Recording imagery
- Standards for inspection
 - end user and thermographer responsibilities
 - safety practices
 - data gathering and report preparation

4. Implementing an IR Predictive Maintenance Program

- 9 steps to setting up a program
- Integrating with other predictive technologies
- Cross-verifying with other predictive technologies
- Why programs fail, how they succeed
- Generating standards-compliant reports