Infraspection Institute®
425 Ellis Street • Burlington, NJ 08016
609-239-4788 • FAX 609-239-4766
www.infraspection.com

DISTANCE LEARNING
INFRARED THERMOGRAPHY FOR
INTEGRATED PEST MANAGEMENT PROFESSIONALS

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. Infrared Electrical System Inspections

- Theory and thermal signatures of problems
- Seven types of detectable defects
- Conducting an inspection
- Safety practices
- Confirming exceptions
- Data recording
- Standards for inspections

4. Infrared Mechanical System Inspections

- Theory and thermal signatures of problems
- Rotating equipment
- Power transmission components
- High-temperature insulation
- Steam systems, process equipment, heat exchangers, storage vessels
- Active thermographic inspection techniques
- Safety practices
- Confirming exceptions
- Data recording
- Standards for inspections

5. **Infrared Roof Inspections**

- Theory and component construction
- Insulation and material characteristics
- Inspection techniques
  - ground based / aerial
- Weather variables and influences
- Required site conditions
- Safety practices
- Thermal signatures of latent moisture
- Verification of data
- Data recording
- Alternate methods of moisture detection
- Standards for inspections

6. **Infrared Building Inspections**

- Theory and component construction
- Insulation and material characteristics
- Inspection techniques
  - interior / exterior
- Weather variables and influences
- Required site conditions
  - creating sufficient Delta T
- Thermal signatures
  - missing & damaged insulation
  - air leakage
  - latent moisture
  - pest damage
- Mold detection
- Other tools
- Verification of data
- Data recording
- Standards for inspections

7. **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

8. **Pest Detection Inspections**

- Detection techniques: direct and indirect
- Required site conditions
- Creating sufficient Delta T via active thermography
- Verification of data
- Inspection and data recording
- Preparing inspection reports
- Guidelines and standards