



LEARNING
FOR PREDICTIVE MAINTENANCE TECHNOLOGIES

INFRARED
INSPECTIONS FOR
WEATHERIZATION
PROFESSIONALS

PRACTICAL TRAINING FOR REAL WORLD THERMOGRAPHY

WHY CHOOSE IPI LEARNING?

IPI Learning trains employees of large international corporations and standalone operators in cities across multiple countries. We provide the most comprehensive and progressive predictive maintenance training in the world. As a one stop training centre for predictive maintenance technologies, IPI Learning course subjects include:



Infrared Thermography



Infrared Windows & Electrical Safety



Condition Monitoring



Vibration



Alignment



Airborne Ultrasound

“ Our training courses are designed to provide you with the skills you need to perform your surveys with confidence, competence and most importantly, results. ”

Brenton Ward, IPI Learning Trainer

IPI Learning has been providing expert predictive maintenance services for almost 20 years.

- ✓ Training
- ✓ Sales support
- ✓ Professional consultancy to industry

Our Trainers have decades of real world experience and are qualified in training & assessment (TAE 40110) in Australia.





Infrared Inspections for Weatherization Professionals focuses on the use of thermal imaging as a diagnostic tool for use in the weatherization of building envelopes.

Course overview

This course provides: Course provides in-depth and practical instruction for thermographically detecting hidden problems in building sidewalls, roofs, HVAC ducts, and related building subsystems. Course attendance may be applied to training requirements for thermographer certification through Infraspection Institute and the InterNational Association of Certified Home Inspectors.

This course covers: Infrared theory, heat transfer concepts, equipment operation and selection, using a thermal imager in conjunction with a blower door, standards compliance, image analysis, tools for confirming infrared data, and report generation.

Students are trained to identify and document thermal patterns caused by improper design, workmanship, or material failure.

Inclusions (Fees)

Course tuition includes all course presentations, Student Reference Manual, and Certificate of Completion. Course qualifies for 16 hours of continuing education by the InterNational Association of Certified Home Inspectors and meets the training requirements for their Infrared Certified professional designation and logo.

This is a non-certification course focused on the use of a thermal imager to inspect building envelopes and building subsystems. Course completion may be applied to training requirements for thermographer certification.

Course name	Infrared Inspection for Weatherization Professionals
Course code	APPWEAT
Prerequisite	None
Study mode	Distance Learning
Duration	16 hour theory and application course
Assessment	n/a

Student support



Comprehensive websites
certifiedinfraredtraining.com
cita.org.au



Onsite consulting & mentoring
 Program setup
 Program audits
 Onsite training and mentoring



Free advice from expert thermographers
Email training@certifiedinfraredtraining.com
Web forum cita.org.au

TYPES OF TRAINING



Distance Learning

Take your infrared training wherever and whenever it's convenient for you. With IPI Learning's distance learning course, you get the same quality content for which we are famous.

We utilize state-of-the-art web servers and dynamic multimedia resources to provide a unique, quality educational experience

- Distance Learning Courses are divided into narrated one-hour online infrared lecture training units allowing you to work at a pace that's convenient for you.



INFRARED INSPECTIONS FOR WEATHERIZATION PROFESSIONALS

COURSE OUTLINE

1

Course Overview

- Learning objectives
- Course terminology
- Weatherization defined
- Verification of weatherization retrofit work practices

2

Basic Infrared Theory and Heat Transfer

- Heat transfer modes
- Conduction, convection, and radiation
 - variables affecting rate of heat transfer
- Conductors and insulators
- Electromagnetic spectrum
- Discovery of infrared spectrum
- Emittance, reflectance, and transmittance
- Atmospheric transmission
- IR imaging systems and lens materials

3

Infrared Equipment

- Selection criteria
- Range and level settings
- Equipment set-up and operation
- Image interpretation and recording
- Equipment care and maintenance

4

Infrared Building Inspections

- Theory and component construction
- Applications of thermal imaging for weatherization
 - Initial building condition assessment, project monitoring, final inspection
- Insulation and material characteristics
- Building energy loss
 - Conduction and convection
- Air leakage
 - Air infiltration and ex-filtration
- Inspection techniques
 - Interior / exterior
- Weather variables and influences
- Error sources
 - Wind, solar loading, surface moisture, building construction, building contents
- Required site conditions
 - Creating sufficient Delta-T
- Thermal signatures
 - Missing and damaged insulation
 - Air leakage
 - Thermal bypasses
 - Latent moisture
 - Pest damage
- Building Science
- Mold detection
- Inspection of building subsystems
- Verification of data
- Verification tools
- Data recording



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To register and see our course schedule visit:

certifiedinfraredtraining.com

Register directly on the training website or complete the registration form included in this information pack and return it by email to:

training@certifiedinfraredtraining.com

For further information

or to find out about our course schedules and locations please contact us.

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