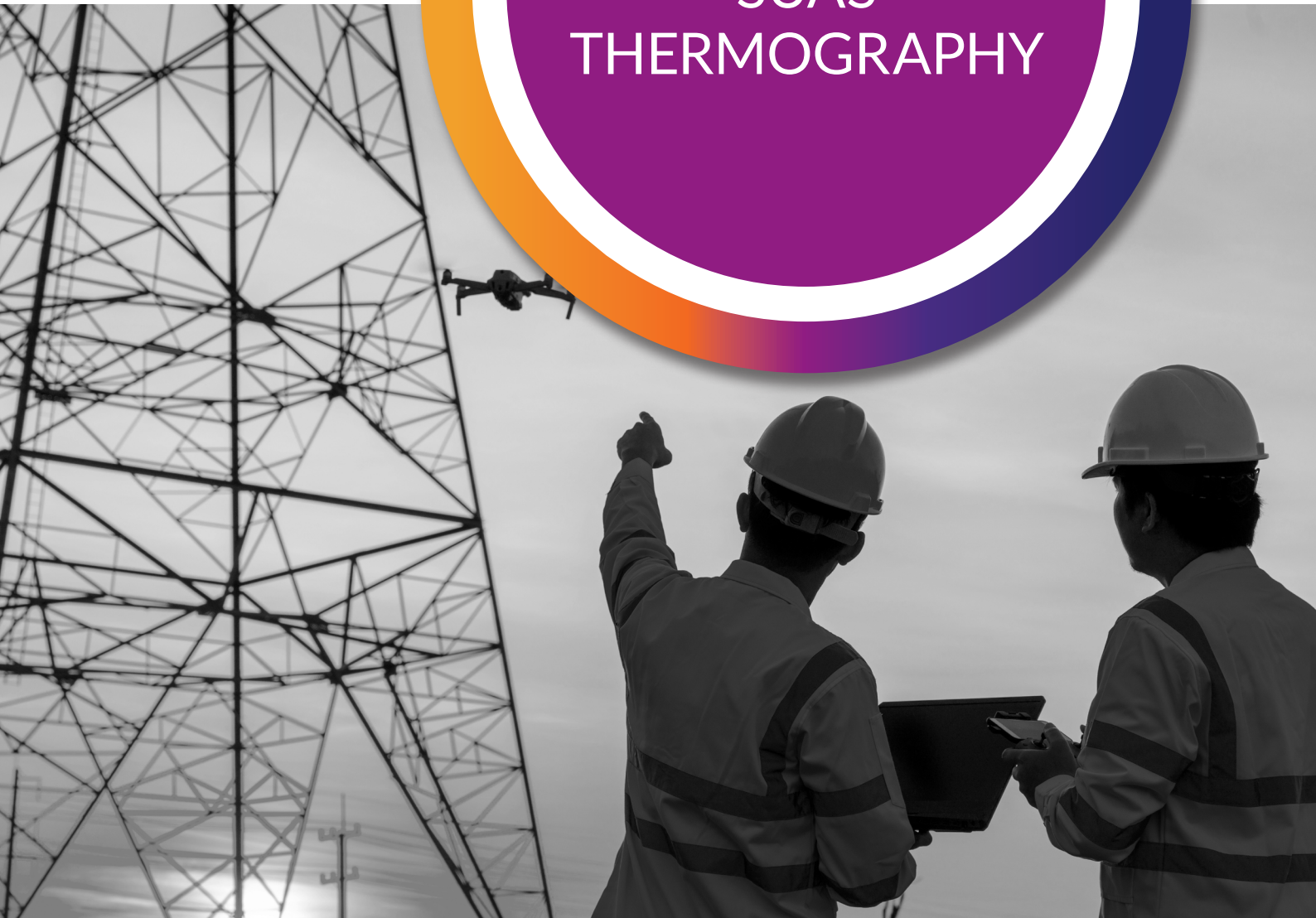




LEARNING
FOR PREDICTIVE MAINTENANCE TECHNOLOGIES

LEVEL 1 SUAS THERMOGRAPHY



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.





sUAS Thermography provides practical techniques for beginners and experienced thermographers wishing to get the most from their drone-based thermal imaging system.

Course overview

This course covers:

Infrared theory, heat transfer concepts, equipment operation, and temperature measurement using drone-based thermal imaging equipment. It also covers several applications including infrared inspections of electrical systems, mechanical systems, photovoltaic installations, underground piping, building envelopes, low-slope roofing systems, and environmental studies.

Students are trained to:

Identify and document thermal patterns caused by improper design, workmanship, or material failure. Specific applications include: electrical distribution systems, mechanical systems, steam systems, refractory systems, underground piping, active thermography, building envelopes, and flat roofs.

Who should apply?

- Those who have little or no experience with thermography
- Those who are considering purchasing a thermal imager
- Those who have recently purchased a thermal imager

Course benefits

- 24-hour, 60 day access to all online presentations
- Experienced instructors
- Comprehensive course notes

Further study

LEVEL 1 Certified Infrared Thermographer®

LEVEL 2 Certified Infrared Thermographer®

Course name	Level 1 sUAS Thermography
Course code	APPsUAS
Entry requirements	None
Study mode	Distance Learning
Duration	20 Hours
Assessment	Written Exam

Inclusions (Fees)

Course tuition includes: all course presentations, Student Reference Manual, and the Infraspexion Institute Certified sUAS Thermographer exam. This is a limited certification course that focuses on the specific applications listed. Course attendance may be applied to training requirements for thermographer certification.

Student support

 **Comprehensive website**
certifiedinfraredtraining.com

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

 **Free advice from expert thermographers**
Email training@certifiedinfraredtraining.com
Phone +61 (0)3 9872 5055

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



LEVEL 1

SUAS THERMOGRAPHY

COURSE OUTLINE

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

sUAS Thermography

- Qualitative applications
- Active and passive thermography
- Daytime versus nighttime inspections
- Required conditions for inspections
- Selecting the correct color palette
- Temperature measurement
- Conducting and inspection
- Safety practices

4

Electrical System Inspections

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

5

Mechanical System Inspections

- Theory and thermal signatures of problems
- Steam systems, high temperature structures, storage vessels
- Conducting an inspection
- Confirming exceptions
- Data recording
- Standards for inspections

6

Infrared Roof Inspections

- Theory and thermal signatures of problems
- Insulation materials and characteristics
- Weather variables and influences
- Required site conditions
- Conducting an inspections
- Thermal signatures of latent moisture
- Verification of data
- Data recording
- Standards for Inspections
- Alternate methods of moisture detection

7

Infrared Building Envelope Inspections

- Theory and detectable conditions
- Thermal signatures of problems
- Inspection Techniques
- Weather variables and influences
- Required site conditions
- Conducting an inspection
- Verification of data
- Data recording
- Standards for inspections



LEVEL 1

SUAS THERMOGRAPHY

To register and see our course schedule visit:

infraredtraining.com.au

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

For further information

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

Melbourne

12/634-644 Mitcham Rd Vermont VIC 3133

Phone: 1300 781 701 (Australia)

1-909-547-3300 (USA)

+61 3 9872 5055 (International)

Email: training@infraredtraining.com.au

Web: infraredtraining.com.au

  @ipilearning



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