IRPD ACADEMY
Building Competency in Infrared Thermography
Partial Discharge & Predictive Maintenance

LEVEL I
ELECTRICAL THERMOGRAPHY

4 Days Training Programme



SBL Khas Code Programme: 10001787504

This 4-day training programme provides a practical introduction to infrared thermography for electrical inspection. Participants will learn infrared fundamentals, camera operation, safe inspection practices, thermal image analysis, basic electrical defect interpretation, and professional reporting. The programme combines classroom learning, camera and software training, practical inspection exercises, and a written examination.

DATE

25-28 JAN 2027

Mon-Thu | 4 Days | 9AM - 5PM

VENUE

CYBERVIEW RESORT & SPA

Cyberjaya, Selangor

ENQUIRIES & REGISTRATION

WHATSAPP / CALL
+60 10-318 0716

EMAIL
irpd.academy@gmail.com

REGISTER ONLINE
www.irpdtechnic.com

INTRODUCTION

IRPD Academy provides independent infrared thermography training designed to develop participants' theoretical knowledge and practical skills in thermal imaging, inspection techniques, and condition monitoring. The training programme is developed with reference to selected requirements and technical guidance from ISO 18436-7 and applicable ASNT recommended practices, where relevant to the course scope. Course content, training hours, examinations, and assessment criteria are established by IRPD Academy to meet its training objectives.

Infrared thermography is a non-contact inspection technique that detects infrared radiation emitted by objects and converts the measured signals into thermal images, commonly known as thermograms. These images display temperature patterns across a surface, helping users identify abnormal thermal conditions that may indicate developing faults or changes in equipment performance. Unlike conventional temperature measurement methods, thermal imaging allows multiple areas of an asset to be inspected quickly without direct contact, making it useful for inspecting operating equipment under suitable conditions.

OBJECTIVE

01 Understand the basic principles of infrared thermography and temperature measurement.

02 Operate an infrared camera for basic electrical inspections.

03 Identify common electrical anomalies and potential fire risk indicators.

04 Apply safe inspection practices, including PPE and IR window awareness.

05 Analyse thermal images using software and prepare thermography reports.

06 Understand relevant standards, regulatory considerations, and industry requirements.

WHO SHOULD ATTEND

- Electrical Maintenance Technician and Engineer
- Reliability and Predictive Maintenance Personnel
- Thermographers seeking to specialise in electrical applications
- Facility and Building Maintenance Personnel
- Electrical Supervisors and Competent Persons
- Data Center Technical Manager and Facility Manager

OUR TRAINER

Ts. Muhammad Farhan bin Norazman

The Trainer is an experienced Reliability Engineer and Level III Infrared Thermographer with over 10 years of experience in high-voltage diagnostic services, condition-based monitoring and predictive maintenance. His industry experience spans electrical substations, transmission systems, solar farms, industrial facilities and oil & gas installations. He specialises in infrared thermographic inspection, electrical asset diagnostics, transformer testing, partial discharge testing and condition monitoring.

As a trainer, he provides technical guidance and professional training for Level I and Level II thermographers, combining technical knowledge with practical industry experience to help participants understand thermographic principles, identify thermal anomalies and apply effective inspection techniques in real-world maintenance environments.

Over 10 years of experience across electrical utilities, renewable energy, industrial facilities and oil & gas sectors, including involvement in thermographic inspections, electrical diagnostics and solar farm inspections in Malaysia and overseas.



CORE EXPERTISE

- Infrared Thermography & Thermal Inspection
- Electrical Asset Diagnostics & High-Voltage Systems
- Predictive Maintenance (PdM) & Condition-Based Monitoring (CBM)
- Partial Discharge (PD) Testing
- Transformer Testing & Diagnostics
- Ultrasound Analysis & Acoustic Imaging

PROFESSIONAL QUALIFICATIONS

- Level III Infrared Thermography Certification — Infraspection Institute
- Level II Infrared Thermography Certification — Infraspection Institute
- Level I Infrared Thermography Certification — Infraspection Institute
- Level I Airborne Ultrasound Certification
- HRD Corp Accredited Trainer
- Professional Technologist — Malaysia Board of Technologists (MBOT)

Iszaizul bin Ismail

The Trainer is an experienced thermography and Condition-Based Monitoring (CBM) specialist with over 15 years of experience in industrial inspection, electrical diagnostics and predictive maintenance. His expertise spans infrared thermography, partial discharge testing, advanced infrared gas leak detection, Corrosion Under Insulation (CUI) inspection and drone-based thermographic inspection across the electrical utilities, power generation, manufacturing and oil & gas industries.

Throughout his career, he has been involved in a wide range of technical projects, including high-voltage substation and transmission line inspections, offshore gas leak detection, furnace tube inspections and CUI assessments at industrial facilities. His project experience includes technical engagements involving major organisations such as Tenaga Nasional Berhad (TNB), PETRONAS, ExxonMobil, Malaysia LNG Sdn. Bhd. and Shell MDS, demonstrating his exposure to diverse industrial inspection and condition monitoring applications.

In addition to his field experience, Iszaizul has contributed to infrared thermography training and technical knowledge transfer. His experience includes assisting participants during practical sessions for Level I infrared thermography certification courses and conducting basic thermography, thermal camera product and software training. He combines hands-on industry experience with technical knowledge to support effective inspection practices, equipment condition assessment and predictive maintenance.



CORE EXPERTISE

- Infrared Thermography & Electrical Inspection
- Condition-Based Monitoring (CBM)
- Partial Discharge (PD) Testing
- Advanced Infrared Gas Leak Detection
- Corrosion Under Insulation (CUI) Inspection
- Drone-Based Thermographic Inspection
- Thermal Imaging Equipment & Software Applications

PROFESSIONAL QUALIFICATIONS

- ITC Level III Certified Master Thermographer — Infrared Training Center
- ITC Level II Certified Infrared Thermographer — Infrared Training Center
- ITC Level I Certified Infrared Thermographer — Infrared Training Center
- Partial Discharge Level 1 Certification — EA Technology
- Remote Pilot Certificate of Competency – Basic (RCoC-B)