

Level 1 Thermography ISO18436 PCN

ITC offers certification training to recognised standards and is an accredited Authorised Training Organisation (ATO) for the British Institute of Non Destructive Testing (BINDT) as per the requirements of ISO 18436. BINDT is an accredited certification body offering personnel certification against criteria set out in International and European standards.

This course prepares you for qualification as a category 1 certified thermographer. You will learn about the basics of infrared, how to operate the camera under different conditions and for various purposes, how to do an appropriate judgement of the measurement situation in the field and identify potential error sources. You will be able to do IR inspections following written guidelines and to report the result of this inspection.

Introduction to Thermography:	History; benchmarks; applications including electrical, Mechanical, Building, Medical and R&D. Camera technology overview from older scanning systems to modern day FPA's. Explanation of camera operation and how the camera converts radiation into an image
Heat & Temperature:	Heat and measurement; contact v non-contact temperature measurement. How radiation is converted into temperature and an introduction to heat transfer.
Infrared Theory Basics:	Scientific Laws relating to : conduction, convection, radiation, blackbodies, Transmission Emissivity, Reflectivity & Calibration. Practical demonstration of these heat transfer modes with follow up theory
Measurement Techniques:	Atmospheric & Environmental considerations including Distance, humidity, air temp and Reflected Apparent Temperature. How to measure them and setup the camera correctly
Basic Heat transfer theory:	Temperature definition and measurement, thermodynamics, heat and temperature, heat transfer, conduction, convection and radiation.
Camera Measurement tools:	A look at cross hair measurement, Area box/ circle, colour alarms and specific dew point and insulation alarms
Camera/Software familiarisation:	Hands-on camera experience throughout the course. Camera practice using portable simulated labs; integration of images with Reporting software; creation of reports.
ITC Certification Test:	ITC qualification (50 question multiple choice test) to be held on last day of course.

Recommended Reading:

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Principles and Practice Volume one Thermography
 ISBN 0903132338
Applications Volume Two Thermography
 ISBN 090313232x



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ITC level 1 course dates RSA 2016

ITC-CER-5101 ITC Cert. Course L1 - attendance, 1 pers. 5 days

18 th to 22 nd July	ITC Level 1 Thermography	Johannesburg
24 th to 28 th October	ITC Level 1 Thermography	Johannesburg

Minimum number of delegates is 10, maximum is 15.

Additional dates can be scheduled also in different cities but on request

In order to get the maximum benefit from ITC courses most students find it beneficial to work with their own camera. If possible bring your IR camera and laptop to the course.

The level 1 course can be run onsite anywhere within RSA and is classed as a group booking. If you would like to find out more about the onsite training including pricing and availability contact your distribution partner.

For software updates, free downloads and technical support logon to <http://flir.custhelp.com>

If you would like to book yourself on a training session contact,

- **Your FLIR distribution partner**
- Test and Measurement Instruments C.C. 011 683 4365
www.instrumentsgroup.co.za

See Also:

http://instrumentsgroup.co.za/index_files/thermography_LTC1_courses_in_south_africa.htm