

## Category 1 Thermography Online training

### Online Training sessions:

Part Number	Description	Duration	EUR	GBP
ITC-CER-4001	Full Online Certification inc exam - 1 student	4 days	1600	1400
ITC-CER-4002	Full Online Certification inc exam – group of 5	4 days	7000	6300
ITC-CER-4003	Full Online Certification inc exam – group of 10	4 days	13000	11700

This Category 1 thermography course meets or exceeds the syllabus requirement as stated in the British Institute of Non Destructive Testing CMGEN Appendix B syllabus and prepares you for qualification as an ITC 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 (60 question multiple choice test) to be held

on last day of course online via a secure platform.

Recommended Reading: Principles and Practice Volume one Thermography

ISBN 0903132338

Applications Volume Two Thermography

ISBN 090313232x



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#### Online certification classes:

Classes are presented via Zoom.gov

The online certification classes are presented live by one of the ITC instructors covering all subjects that would normally be found in a cat 1 customer facing class. The only real difference will be that the training session will be presented using the Zoom platform.

Student classes will be limited to 10 people with all attendees having video and sound options enabled by the host during the training session.

There will be practical demonstrations throughout the training session and discussions on related topics, practical workbook for students to complete and a secure online exam.

	2023	
23 <sup>rd</sup> to 26 <sup>th</sup> Jan	ITC Category 1 Thermography Online	4 Day Online inc exam
27 <sup>th</sup> to 30 <sup>th</sup> Mar	ITC Category 1 Thermography Online	4 Day Online inc exam
22 <sup>nd</sup> to 25 <sup>th</sup> May	ITC Category 1 Thermography Online	4 Day Online inc exam
12 <sup>th</sup> to 15 <sup>th</sup> June	ITC Category 1 Thermography Online	4 Day Online inc exam
21st to 24th August	ITC Category 1 Thermography Online	4 Day Online inc exam
25 <sup>th</sup> to 28 <sup>th</sup> Sept	ITC Category 1 Thermography Online	4 Day Online inc exam
30 <sup>th</sup> Oct to 2 <sup>nd</sup> Nov	ITC Category 1 Thermography Online	4 Day Online inc exam
11 <sup>th</sup> to 14 <sup>th</sup> Dec	ITC Category 1 Thermography Online	4 Day Online inc exam

In order to get the maximum benefit from ITC courses students find it beneficial to work with a thermal camera during the online training session. It is recommended to have the appropriate report writing software installed as well.

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

ITC website <u>www.infraredtraining.com</u> which includes course dates, certification information and course booking details.

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

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