



*Institute of Infrared Thermography
Infrared Thermography Level I*

Day 1 of 4

<i>Topic</i>	<i>Sub-Topic</i>	<i>Technique</i>
Introduction	Course Objectives	Oral Presentation
Introduction to Thermography	Temperature measurements Misconceptions Definition of thermography Thermal Imaging Instruments	Oral, Oheads, Flipchart
Demonstration / Hands on	Thermal Imaging Instruments Overview of Equipment & Features - Equipment Familiarization	Hands on
LUNCH		
Thermodynamics	Nature of heat, temperature, thermal energy.	Oral, Ohead, Flipchart
Qualitative	Qualitative thermography How to obtain thermal image	Oral, Ohead, Flipchart
Demonstration / hands on	Exercises qualitative thermography	Hands on



The Institute of Infrared Thermography is an Associate Member of British Institute of Non-Destructive Testing and provides Certification Training based on the PCN Certification Scheme, ISO 18436 and the American ASNT SNT-TC-1A standard.

Day 2 of 4

<i>Topic</i>	<i>Sub-Topic</i>	<i>Technique</i>
Review		Discussion
Heat transfer theory	Conduction	Hands-on, Discussion
Heat transfer theory	Convection	Hands-on, Discussion
Heat transfer theory	Radiation	Hands-on, Discussion
LUNCH		
Thermal Radiation Principles	Basic Concepts Blackbody, Realbody Absorbance Emittance Reflectance Transmittance	Oral, Hands-on, Flipchart, Oheads
Radiosity Concepts Cont'd	Hands-on Workshop to Reinforce Radiation Concepts	Oral, Hands-on, Flipchart, Oheads

Day 3 of 4

<i>Topic</i>	<i>Sub-Topic</i>	<i>Technique</i>
Review		Discussion
Quantitative thermography	Quantitative thermography Requirements for Accurate Measurements	Oral, Flipchart, Oheads, hands on
Quantitative thermography	Performing Temperature Measurements	Hands-on, Flipchart, Oral
Temperature Measurement	Exercises / hands on	Hands-on, Oral
LUNCH		
Resolution	Instrument Resolution & Accuracy Instrument Drift/Compensation	Oral, Oheads
Resolution	Spatial Resolution - Distance/Size Relationship - Errors & Compensation - Atmospheric Effects	Oral, Oheads
Exercise hands on	Field trip, basic	Hands on

Day 4 of 4

<i>Topic</i>	<i>Sub-Topic</i>	<i>Technique</i>
Review		Discussion
Applications	Building Mechanical Process Electrical	Oral, Ohead, Discussion
Reports	Report Writing, Characteristics That Make a Good Report - Real Life Pictures - Support Equipment - Environmental Data	
Lunch	Electrical	Oral, Ohead, Discussion
Review		
	EXAM	

