



Introduction to Aerial Thermography

Goal

This is a 1-day course for beginners and anyone interested in infrared thermography and how it can be used together with unmanned aerial vehicles (UAVs.). The course combines important aspects of infrared thermography, equipment selection, and flight -related aspects, which are all relevant when doing thermographic inspections using UAVs.

Description

After a short overview of applications for aerial thermography, different types of technical solutions and equipment are discussed. You will then learn what to consider to record suitable images from the air, and how aerial thermography differs from traditional earthbound thermography. Before flying on your own, you will be taken through the preflight, flight, and post-flight procedures, and will receive important information on legal aspects.

Content

- Background.
- Applications for aerial thermography.
- Equipment: off the shelf and customized solutions, detector sizes, radiometry, selection criteria.
- Thermography from another point of view: focus, spatial resolution, mapping, emissivity, reflections, image adjustment.
- Preflight, flight, and post-flight: battery, propeller, location, weather. line of sight, flight modes.
- Legal aspects: regulatory, no fly zones, commercial use of UAVs, flying safely.
- Practical flying exercises.

Target group

This course is designed for beginners in thermography who may already know about UAVs and are curious about thermography, as well as for thermographers who are interested in UAV applications. It is especially suitable for thermographers doing inspections of inaccessible outdoor installations or civil buildings.

Prerequisites and recommendations

ITC recommends an interest in the technology and some basic thermography knowledge.

Confirmation of course attendance

Students receive a confirmation of course attendance (Diploma).

Contact your closest ITC office or visit our online course schedule on www.irtraining.eu.