



# Commercial Drone Academy

## 6 Course Mega Series - \$290

- > Included Level 1 Thermography materials
- > English & Thai languages supported by 26 subtitled videos



### COURSE SUMMARY

#### Photography

Starting with the essentials, which are a vital component throughout commercial life when capturing data, the course includes, UAS camera controls, sensors and storage, practical factors, basics of photography and capture plans.

#### Videography

This topic builds upon the basics of photography and consists of pro level videography, understanding the mission, the shoot, producing the video, and post production. Helping you to understand the principles behind videography and the factors that contribute to creating a polished final product.

#### Surveying, Mapping & 3D Modelling

This course will give you the knowledge to start performing drone-based surveying jobs. You will be familiar with the types of data that need to be collected for both 2.5D (mapping) and 3D (modelling) surveying work, as well as how to effectively capture images for both cases. The information is geared towards visual photogrammetry, but the same methods apply to thermal mapping, multispectral imaging, and other remote sensors.

#### Telecom Tower Inspections

Drones are controlled by radio waves, which mean you need to understand the nature of, and the danger of radio waves and the telecom infrastructure. This course not only tutors you through capturing the quality data that is required by duty holders but also delves deeply into the health and safety hazards involved in operating around telecom towers. We look at governmental laws and signage's and your approach to assessing risks.

#### Thermography to Level 1

The materials contained inside this course mirror directly the Level 1 ITC requirements and comply with International (ISO) standards for thermography, it covers the fundamentals of infrared science and thermal physics, thermal camera design and operation, and an introduction to interpreting thermal images

This course is suitable for those looking to expand their services to include thermal imaging. This includes surveyors, inspectors, and assessors. This course contains in depth information and videos covering the science behind thermography, correct practices and industry recognized standard operating procedures. Thermal payloads available for drones and their operation. How to interpret a thermal image. Thermal orthomosaics (infrared mapping) and 3D modelling.

Applications in various industries including: Infrastructure, power lines, construction, solar panel arrays and more.

#### Multispectral Imaging

Drones and multispectral imaging are growing areas within the agricultural community, helping to identify many huge, and new areas of data within the industry. In this topic we look at data collection, precision agriculture and physics.

Multispectral camera capture image data within specific wavelength ranges (also called spectral bands) across the electromagnetic spectrum. They often include a combination of both visible light and EM radiation outside of what the human eye can see.

Multispectral cameras mounted on drones are primarily used in one industry right now; agriculture. By picking the right spectral bands, a drone-mounted multispectral camera can be used to manage crops, soil, fertilizing and irrigation more effectively.

This course will teach you how to choose and use a drone mounted multispectral camera so that you can find work in this exciting new area of technology.

### TESTS & CERTIFICATES

At the end of each topic there is a 20-question assessment to test and prove your understanding of the material.

Safety Works will then receive alerts when you have passed each assessment.

Safety Works collate this information and issue a certificate that shows all successful passes but can issue individual topic certificates upon request.



**REVALIDATION:**  
There is no revalidation requirement for these courses