



## BASIC TRAINING IN DRONE ASSEMBLY AND MANUAL FLIGHT

A comprehensive course on general features of Unmanned Aerial Vehicles commonly called Drones and their Control Systems. By mastering the basics of drone terminologies, you will gain the skills needed for a wide range of applications. Nowadays areas like agriculture, construction, mining and also the military rely on these drone technologies for precise aerial photography, shipping and delivery, geographical mapping, precision agriculture and research and rescue. By acquiring these skills, you will unlock career opportunities, enhance productivity, optimize energy usage, and become a valuable asset in these fields.

### PREREQUISITES

- Basic electronics and electrical connections,
- Basic Coding languages such as Python or C++
- Basic knowledge of physics, sensors and control systems.

### OBJECTIVE

This course is to enhance the basic concepts of drones and assemble a complete drone from scratch, teach the calibration of its primary flight parameters as well as train to fly them manually.

### TARGET GROUP

- Engineering students with any specialization having basic knowledge of physics and electrical connections.
- Professionals working in roles such as trainers, programmers, and operators, who can enhance their expertise in assembly and manual flight control.
- Individuals involved in agriculture, photography, construction and mining work who will benefit from gaining in-depth knowledge of drone navigation.

### CONTENTS

- Type of Drones, their common parts and basic principles.
- Hardware assembly of the base plate, limbs, motors, propellers, and landing gears.
- Electrical connections of the PDB, BEC, BLDC, and other components.
- Calibration of flight parameters and RC communication.
- Manual flight training.

### DURATION

6 Days (18 Hours)

