



# St. Kabeer Academy(CBSE)

## Syllabus For Class 11<sup>th</sup>



### Drone Module

#### **Chapter 1:** Key features of Drone Regulations

- 1.1 Notification of Final Regulations for Civil Use of RPAS
  - 1.1.1 Operational/ Procedural Requirements
  - 1.1.2 No Drone Zones
  - 1.1.3 Operations through Digital Platform
  - 1.1.4 Enforcement Actions
- 1.2 RPAS regulation document 4

#### **Chapter 2:** Introduction to drones and their applications

- 2.1 Definition of drones
- 2.2 History of drones
- 2.3 India and drones
- 2.4 Tinkering and drones
- 2.5 Do's and Don'ts
  - 2.5.1 Do's
  - 2.5.2 Don'ts
- 2.6 Classification of drones based on structure
  - 2.6.1 Fixed wing structure
  - 2.6.2 Lighter than air systems
  - 2.6.3 Rotary-wing aircraft
- 2.7 Application of drones

#### **Chapter 3:** Dynamics of an aerial system

- 3.1 Forces of flight
- 3.2 Principal axes and rotation of aerial systems
  - 3.2.1 Longitudinal axis
  - 3.2.2 Lateral (transverse) axis
  - 3.2.3 Perpendicular axis

#### **Chapter 4:** Stability and Control

- 4.1 Equilibrium
- 4.2 Stability
  - 4.2.1 Stable system
  - 4.2.2 Unstable system
  - 4.2.3 Neutrally stable system
- 4.3 Control
  - 4.3.1 Roll
  - 4.3.2 Pitch
  - 4.3.3 Yaw
  - 4.3.4 Throttle

# Intellectual Property Rights

## 1- INTRODUCTION

## 2 - COPYRIGHTS

2.1 - Flow chart to register a copyright

2.2 - Expert Session on Copyright

2.3 - Videos on Copyrights

## 3 - TRADEMARKS

3.1 - Flowchart to register the a trademark

3.2 - Trademarks Office Website

3.3 - Expert Session on Trademarks

## 4 - PATENTS

4.1 - Understanding Patents & Filing

4.2 - Patent Office Website

4.3 - Expert Session on Patents