



# SUMMER SCHOOL 2021

IMAGINE | DEVELOP | CONTROL | FLY

online or on-site

A 3-week summer program aiming at providing key concepts and general understanding of what drones and robotic arms are and how to control them. First, with the expertise of our team, you will learn how to design a robot using one of the most commonly used robotic environment: Robot Operating System. Then, you will discover how to develop a mobile application that allows you to control such systems.

July 5-23, 2021

6 ECTS credits



Courses and experimental  
tests



Intercultural  
workshops

## PROGRAM FEES

**Online**  
900 euros

**On-site**  
2.400 euros\*

\*including tuition fees, extra-curricular activities, accommodation, breakfasts and lunches (on class days), public transport pass. A special discount applies to students coming from our partner universities.

On-site organization is subject to modification in function of the number of enrolled students and on the sanitary situation linked to covid-19.

# ONLINE PROGRAM

4 hours / day - from Monday to Friday

## Curriculum

- Introduction to drones
- Multi-motor system
- Perception
- Inertial Measurement Unit
- GPS
- ROS
- Control the drone using ROS with a specific mission
- Presentation of the work using ROS
- Introduction to mobile programming
- Programming language
- Create responsive UI on mobile
- Handling user interactions
- Simple UI creation with the core widgets
- Navigating between views
- JSON format
- Using API to query resources

## Cultural activities

- fun virtual visits
- interactive virtual workshops

# ON-SITE PROGRAM

the program will be sent upon registration

## ELIGIBILITY

### Prerequisites

Basics of python and intermediate programming skills. Applicants must understand Object Oriented Programming and usual design patterns. It's recommended to have 2 years of higher education in IT or computer science. Highly recommended to have 2 screens.

### Application documents

1. Application form;
2. Copy of passport;
3. Official transcripts from home university;
4. Proof of English language proficiency (B2 level).

**Application deadline: May 31, 2021**

More information and applications at:  
**summer@epita.fr** and **international@ipsa.fr**