ASSETs+
Alliance for Strategic Skills addressing Emerging Technologies in Defence

EDUCATION & TRAINING

Drone electronic devices Technology & Programming (ID 4.4)

Co-funded by the Erasmus+ Programme of the European Union

AEROCAMPUS AQUITAINE

DESCRIPTION OF THE COURSE:

- **Context**
  The importance of drones in the defense context is increasing fast. It is necessary to understand their electronic structure to be able to maintain them and to improve their performances.
- **Objectives**
  - ❑ learn the electronic technology of drones.
  - ❑ how to manage an embedded computer connected to sensors, display screens, camera and motors.
  - ❑ How to program an embedded computer to control all its attached electronic devices
  - ❑ How to establish a client/server communication between a drone and a remote computer and how to secure it by data encryption.
- **Pre-requisites**
  - ❑ Programming basics
  - ❑ Electronic basics
  - ❑ Binary and hexadecimal coding

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This programme is focused on:

- Professionals working in Defence and AeroSpace Industry (up-skilling and re-skilling activities) and
- University Licence students

IMPORTANT: This prototyped programme is **EXCLUSIVE FOR** partners of the **ASSETs+ consortium** and **associated stakeholders.**

If you want to join the ASSETs+ Stakeholders Group and become part of our ecosystem, please, **click here**.

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General information

- **Format:** Online
- **Language:** English
- **EQF level:** 4
- **Instructor:** Benoit Mathieu
- **Hours:** 28
- **Host institution:** Aerocampus

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Programme schedule

15 /May/2023 8:00 – 12:00	Embedded computer and shields
17 /May/2023 14:00 – 18:00	Display screens
22 /May/2023 8:00 – 12:00	Logical sensors
24 /May/2023 14:00 – 18:00	Digital sensors
31 /May/2023 14:00 – 18:00	Analog sensors, camera
5 /June/2023 8:00 – 12:00	Motors part 1
7 /June/2023 14:00 – 18:00	Motors part 2

Learning outcomes:

Knowledge

Drone electronic devices: technology and programming

Skills

Manage an embedded system for drones

Manage Keys for Data Protection

Program real time computing software

Remote control of an embedded system for drones

More information

https://assets-plus.eu/education-training/drone-electronic-devices-technology-programming-id-4-4/

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www.assets-plus.eu

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