THE4 - Helicopter avionics systems

From the MS HADA
(Helicopter, Aircraft and Drone Architecture)

Key elements

Period: **Mid-March to Late March**

Estimated duration: **30 hours**

For whom: **recent graduates, jobseekers and experienced employees**

Location: **AIRBUS HELICOPTERS, Marignane**

Language: **English**

Highlights

- Helicopter Avionics Systems
- Cockpit Cognitive Ergonomics
- Helicopter flight control systems

This module provides an overview of all helicopter avionics systems.

Learning objectives

After completing this course, participants will be able to:

- Describe and explain the design methodology for avionic systems and the cockpit cognitive ergonomics.

Prerequisites

- Basics of aerospace engineering

Information and registration

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Course content

- Helicopter systems
- Evolution of systems on helicopter
- Definition of an architecture
- System tools and methodology
- Presentation of various helicopter systems
- Operating safety
- Maintainability/testability
- Flight control
- Civil missions and associated systems
- Automatic pilot
- Fly-by-wire control
- Generalized active control
- Cockpit ergonomics
- Display & dialog resources
- Compatibility with the use of light-intensifier tubes
- Piloted simulation / training-test simulation
- Navigation - Air control
- Navigation and guidance for helicopters
- Radio communication, navigation and identification
- System tests
- Helicopter environment
- Equipment / Qualification
- System integration testing

Teaching methods

Teaching methods	Yes
Lectures / tutorial	X
Collaborative learning	
Flipped classroom	
Blended learning (online and face to face)	
Learning by doing	X
Project-based	
Simulation	
Case study	X

Assessment

Written exam