THE4 – Helicopter avionics systems
From the MS HADA (Helicopter, Aircraft and Drone Architecture)

Key elements
Dates: 29 March – 2 April 2021
Duration: 31 hours
For whom: recent graduates, jobseekers and experienced employees
Location: AIRBUS HELICOPTERS, Marignane
Course fees: 2 300 €
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

Practical 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

<table>
<thead>
<tr>
<th>Teaching methods</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Lectures / tutorial</td>
<td>X</td>
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<tr>
<td>Collaborative learning</td>
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<td>Flipped classroom</td>
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<td>Blended learning (online and face to face)</td>
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<td>Learning by doing</td>
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<td>Project-based</td>
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<td>Simulation</td>
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<td>Case study</td>
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Assessment
Written exam