

HF430 - Advanced techniques

From the Advanced Master TAS Aero (Aeronautical Engineering)



Highlights

- Unique Neuroergonomics approach
- In-flight practical work

The objective of this course is to provide engineers with a high-level multi-disciplinary approach and state-of-the art knowledge to analyze operators at work. All courses and practical works are taught with a view to apply the acquired knowledge to the aeronautical and transportation domains.

Prerequisites

- Master level

Key elements

Period:

Late March

Estimated duration: 25 hours

For whom:

Recent graduates, jobseekers and experienced employees

Location:

ISAE-SUPAERO, Toulouse

Language: **English**

Learning objectives

After completing this course, participants will be able to:

- Assess operators' cognitive state using in-lab and in-flight measurements
- Interact with experts of the Human Factors and Neuroscience domains to improve flight safety.

Information and registration

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Course Content

- Signal processing for physiological data
- Statistical analyses of experimental data
- Passive Brain-Computer-Interfaces as tools for Neuroergonomics
- Haptics & virtual reality
- Application Focuses: Experimental work using real light airplanes, Accidentology.

Teaching methods

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

Assessment

- Marked practical (100 %)