

# HF420 – Experimentation and measures

From the Advanced Master TAS Aero (Aeronautical Engineering)



## Highlights

- Hands-on experimental work
- Use of physiological tools

This course focuses on the five main physiological sensors dedicated to measure human performance and mental activity. The students learn the know-how of technical, measurements and signal processing issues for each of these sensors.

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

Dates:

**27 - 30 January 2020**

Duration:

**25 hours**

For whom:

**Recent graduates, jobseekers and experienced employees**

Location:

**ISAE-SUPAERO, Toulouse**

Course fees: **2 300 €**

Language: **English**

## Learning objectives

After completing this course, participants will be able to:

- Understand the operation of five sensors used to assess operators' mental state
- Record and analyze physiological data on human operators
- Be able to interact with experts of the Human Factors and Neuroscience domains to improve flight safety.

## Practical information and registration

Natalia Perthuis - 05 61 33 80 47 – [info.exed@isae-supaeero.fr](mailto:info.exed@isae-supaeero.fr)

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## Course Content

- Initiation to Experimentation
- Ethics
- Eye-tracking
- Electrocardiography
- Electroencephalography
- Near Infra-Red Spectroscopy
- Application Focuses: Certification, Aviation/Aerospace psychology & medicine