

Ecole Nationale de l'Aviation Civile

## MSC HUMAN COMPUTER INTERACTION

### IN BRIEF

Type of diploma : Master of science degrees Ministry field(s) : Science and Technology Mention : Informatique

## Presentation

The Masters in Human Computer Interaction is a joint degree organised by Paul Sabatier University (Toulouse 3) and the ENAC (*École Nationale de l'Aviation Civile* - French School of Civil Aviation). This course trains high-level professional specialists in the design and development of interactive applications, with an understanding of IT techniques and human performance.

HMI Master graduates are able to:

- Manage the "user-based" development of interactive software.
- Define and apply standards in terms of formats and usability.
- Assess the ergonomics and usability of software.

**Master's modules** round off initial training in IT and provide specific skills in the field:

- Technological skills: understanding of the tools and techniques used in New Information and Communication Technologies (NICT).

- Method-based skills: software engineering, development process management and project management methods in the context of the development of interactive software.

- Integrating human performance considerations in the design of human-machine interfaces: human engineering, cognitive psychology, experimental psychology, ensuring our graduates can produce human-friendly software with a high level of usability.

## Organization

Master Human Computer Interaction (MSc)

Semester 9

- Upgrading lessons (Mandatory)
  - · IH5003 JavaFX upgrade

#### 06/07/2025

### MORE INFO

**Level :** Year 5 higher education – Master

Training Audience \* Initial Education

**Kind of education :** Curriculum



### Ecole Nationale de l'Aviation Civile

- · IH5004 CISI upgrade
- · IH5005 Design Pattern Upgrading
- Interactive Systems Engineering (Mandatory)
- · IH5001 Interactive Systems Engineering
- IH5002 Project management and requirements engineering for interactive systems
- Technologies and Techniques for Interactive Systems (Mandatory)
  - · IH5011 Mobile
  - · IH5012 Prototyping tools and techniques
  - · IH5013 Implementation of standard services of interfaces
  - · IH5014 Component-based approach
  - · IH5015 Interactive Web
  - Interaction techniques and application domains (Mandatory)
    - · IH5021 Information visualisation
    - · IH5022 Application domains
    - · IH5023 Groupware
    - · IH5024 Multitouch
    - · IH5025 Methods of interactions
    - · IH5016 3D programming environments and applications
  - Human Factors and experimental methods (Mandatory)
    - · IH5031 Understand and Describe Humans
    - · IH5032 Usability and User experience
    - · IH5033 Assessement and experimental methods
    - · IH5034 Context, users and tasks
  - Interactive Systems Design (Mandatory)
    - · IH5051 Creativity for human-computer interaction
    - · IH5052 Graphic design of interactive systems
    - · IH5053 2D, 3D and multitouch application
    - · IH5054 Semiology and graphic structure
    - · IH5055 Sound design

Semester 10

- English for Information Technology Professionals (Mandatory)
  - · LV5003 English for Information Technology Professionals
  - · LV5007 English for intellectual properties
- Capstone project (Mandatory)
  - · IH5099 Capstone project
- Scientific research & HCI (Mandatory) · IH5041 - Research & HCI
- Internship project (Mandatory)
  - TX5099 Internships in a research lab or in the industry

### **Access conditions**

For more information please click <u>here</u>.



Ecole Nationale de l'Aviation Civile

# **Organizational unit**

ENAC - Ecole nationale de l'aviation civile **Places** 

Toulouse Contacts

**Course Director** 

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