MASTÈRE SPÉCIALISÉ ADVANCED MASTER IN EXPERIMENTAL FLIGHT TEST ENGINEERING

TYPE DE DIPLÔME
Mastère spécialisé

NIVEAU D'ÉTUDE VISÉ : BAC +7

DOMAINE D'ÉTUDE : Ingénierie aéronautique et spatiale

Domaine : Sciences, Ingénierie et Technologies

Présentation

Under the aegis of the DGA, ISAE and EPNER joined their expertise setting up the first Master's degree in Flight Test Engineering for pilots and engineers using the synergy of their recognized competences in aerospace education.

Objectifs

Under the aegis of the DGA, ISAE and EPNER joined their expertise setting up the first Master's degree in Flight Test Engineering for pilots and engineers using the synergy of their recognized competences in aerospace education. EPNER is one of the world leader Flight Test School offering high-level courses for Flight Test Pilots and Flight Test Engineers. EPNER offers fixed wing and rotary wing courses for test pilots and engineers.
ISAE and EPNER studied and developed a comprehensive program integrating their competencies and existing courses to provide EPNER flight test courses attendants with a Master's degree Specialized in Experimental Flight Test Engineering of ISAE besides the EPNER qualification.
The Experimental Flight Test Engineering Master is a 12-month course organized by ISAE and EPNER aiming at providing either Flight test Governmental organizations or Aircraft manufacturers with high-qualified test pilots and flight test engineers. Aware of the necessity to conduct flight tests program in close coordination between pilots and engineers, the original spirit of this program is to prepare pilots and engineers to work in integrated team.
The objectives of the Master is to develop theoretical and applied skills of experienced pilots and engineers for the preparation, implementation and report of flight tests either of aircraft or complex embedded-systems, in the best safety conditions. After graduation, these skilled professionals are able to participate to civilian certification of new or modified aircraft, to aircraft or equipment development program, to military acceptance program, either fixed-wing or rotarywing.
Academic session consists of around 450h of ground and simulators courses, provided by ISAE's and EPNER permanent professors and experts from industry bringing current knowledge and experience.
And around 110 flight hours on more than 20 airplanes for fixedwing stream and 15 helicopters for the rotary-wing stream. All along the program, students conduct professional theses, assessment of aircrafts or embedded-systems. These theses are concluded by the preparation of a report and an oral dissertation
Career opportunities
The Master intends to prepare skilled professionals, pilots or engineers for:
- Managers of flight tests implementation, fight envelop extension of aircraft or embedded-systems in close cooperation with design and development offices,
- Managers of flight tests centers.

ÉTABLISSEMENT(S)
ISAE - SUPAERO

LIEU(X) D'ENSEIGNEMENT
Toulouse

Parcours

Année 1

Semestre 1

Partie 1 : ENSEIGNEMENTS ISAE - TRONC COMMUN

- Liste d'éléments pédagogiques (Obligatoire)
  · Mathématiques
  · Mécanique du vol
  · Guidage et pilotage
  · Visites

Partie 2 : ENSEIGNEMENTS ISAE SPECIFIQUES

Etudiants

- Liste d'éléments pédagogiques (Obligatoire)
  · IEV Etudiants internationaux
  · IEV Etudiants français

Semestre 2

Condition d'accès

Academic requirements
A master's degree, or an equivalent degree in science or engineering, or bachelor degree completed by 3 years of professional experience
Selection and admission
Admission to ISAE's master at: http://admissionsmasters.isae-supaero.fr
Selection and admission are made by an admission committee: possible interviews can be organized if necessary
Deadlines for application: several admission committees scheduled from February to July, see schedule on our website: http://admissionsmasters.isae-supaero.fr
Language requirements :
TOEFL (Paper-based): 550, or TOEFL (IBT): 79, or TOEIC: 785, or IELTS: 6.5

Poursuite d'études

Mathematics
Flight mechanics
Automatic acontrol and aircraft control
Human factors
Aircraft preliminary design
Advanced aeronautical Franch and aeronautical phraseology
Systems engineering
Safety of flight tests
Performances tests
Propulsion tests.....

Contact