

Master « Aerospace engineering »

Wednesday, January 15th 2020

Who are we ? Where are we located?

Since 1909, leader of higher education in aerospace engineering

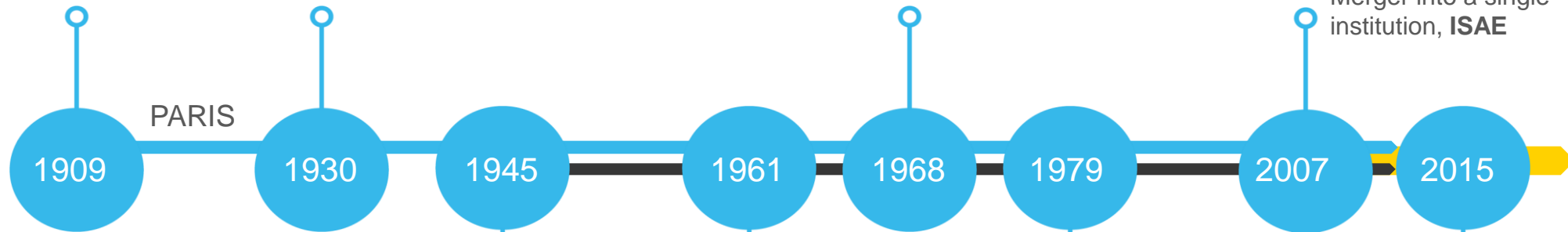
Creation of l'Ecole Supérieure d'Aéronautique or « **SUPAERO** » by Colonel Roche

Nationalization : **Ecole Nationale Supérieure d'Aéronautique (ENSAE)**

SUPAERO moves to Toulouse



Merger into a single institution, **ISAE**



PARIS

TOULOUSE






Creation of l'**Ecole Nationale des Travaux Aéronautiques**

L'**ENTA** becomes **ENICA** and moves to Toulouse

L'**ENICA** becomes **ENSICA** (Ecole Nationale Supérieure d'Ingénieurs en Constructions Aéronautiques)

ISAE-SUPAERO on a single campus

-  SUPAERO
-  ENTA – ENITA - ENSICA
-  ISAE-SUPAERO

Our alumni, pioneer engineers



Henri Coanda
Creator of the first jet aircraft

1910



André Lefèbvre
Designer of Citroën Traction avant (front-wheel drive), 2CV and DS

1913

Mikhail Gurevitch
Designer of MiG-1 to MiG-25 planes

1914



Pierre Satre
Father of the « Caravelle »

1922

Alexandre Kartveli
Designer of P-47 Thunderbolt and F-84 Thunderjet

1934



Henri Perrier
Test engineer then Concorde program manager

1943

Jean Bertin
Hovertrain creator

1953



Lionel de la Sayette
Rafale program manager

1978

Charles Champion
A380 program manager

1979

1991

Christophe Robin
Dyn'Aéro Light planes



Our alumni, leaders of industry



Henri Potez
Founder of Potez Aéronautique

1911



Henri Ziegler
CEO of Aerospatiale
Founder of Airbus Industries

1931



Serge Dassault
CEO Groupe Dassault

1951



Francis Bernard
Father of CATIA
Co-Founder of Dassault
Systèmes

1965



Alain Bellemare
President and
CEO of Bombardier

1985

1913

Marcel Bloch-Dassault
Founder of Dassault Aviation

1944

René Ravaut
CEO SNECMA (1971-82),
Founder of CFM International

1963

Jean Pierson
CEO Airbus 1985-1998

1975

Jean-Paul Herteman
President of SAFRAN
(2007-2015)



Our alumni, flight test pilots and astronauts



Constantin « Kostia » Rozanoff
First to reach Mach 1
In a French aircraft

1933



Jean Pinet
Concorde Test pilot

1944

Jean Boulet
Helicopter test pilot – holder of
the altitude record since 1972!



1952



Thomas Pesquet
Astronaut

1983

Jean-François Clervoy
Astronaut



2001

2009

Luca Parmitano
Astronaut



TOULOUSE : European capital of aeronautics and space



More than 100 000 jobs in the aeronautics and space sector
More than 100 000 students at l'Université Fédérale de Toulouse

Strong partnerships with the industries

SINCE 2010, 15 CHAIRS OR SUPPORT PROGRAMMES HAVE BEEN SET UP WITH OUR INDUSTRIAL PARTNERS



With the support of the ISAE-SUPAERO Foundation, created in 2008

Key facts and figures

Status : Public Higher Education Institution, under the authority of the Ministry for the Armed Forces

34 HIGHER EDUCATION PROGRAMS

- » 650 graduates (MSc to PhD) per year
 - » Ingénieur ISAE-SUPAERO (MSc) degree
 - » CNAM-ISAE co-op engineering internship program
 - » **MSc Aerospace Engineering International Master**
 - » 15 Advanced Masters[®]
 - » 6 Masters / Research focus
 - » 6 Doctoral schools
- » Executive Education (degree & non-degree programs)

STUDENT NUMBERS

- » 1700 students registered
 - » 1100 Ingénieurs students
 - » 400 students in Masters and Advanced Masters programs
 - » 200 doctoral students
- » 40% international students in 2019

Key facts and figures

RESEARCH

- 400 researchers on the campus (ISAE-SUPAERO + ONERA)
- ISAE research budget: 28 M€ (6,5 M€ financed by contracts and sponsorships)
- Involved in 6 Doctoral Schools

FACULTY

- Permanent faculty :
100 research professors
+ 15 professors
- 1800 lecturers (50% industry professionals) in charge of 2/3 of teaching hours

RESOURCES

- More than 500 employees
- Budget ~ 60 M€ / year

ALUMNI

- ISAE-SUPAERO-ENSICA Alumni association : a network of 21 500 graduates
- ISAE-SUPAERO Foundation and Friends of ISAE (USA)

Fast-developing research activity



3 joint research units:

**Research federation + EUR
« Toulouse School of Aerospace
Engineering »**

> 500 researchers - systems engineering / aerospace engineering)

Institut Clement Ader 200 researchers - Solid mechanics lab)

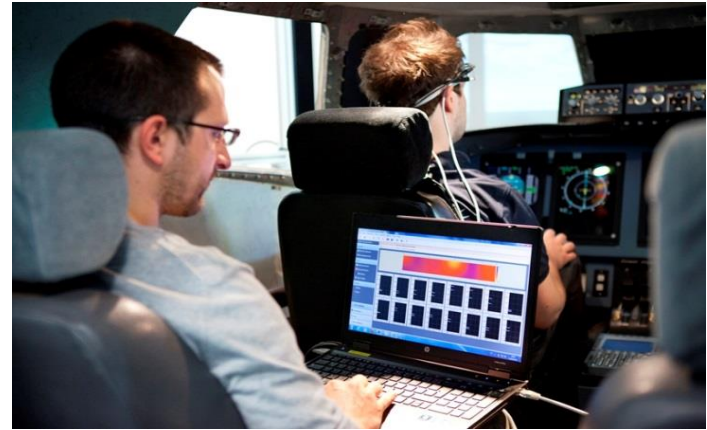


ANITI - Artificial and Natural Intelligence Toulouse Institute –
(French gvt's investment plan on AI)
200 researchers from 33 different teams and from >30 entreprises.
Supported by local and regional authorities,

Cutting-edge research equipment



Anechoic chamber



6 axle simulator



Aero-acoustic wind tunnel

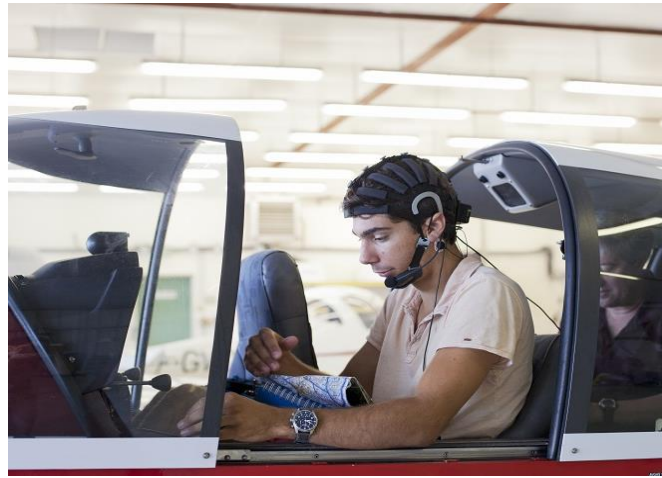


Drones of all shapes and uses

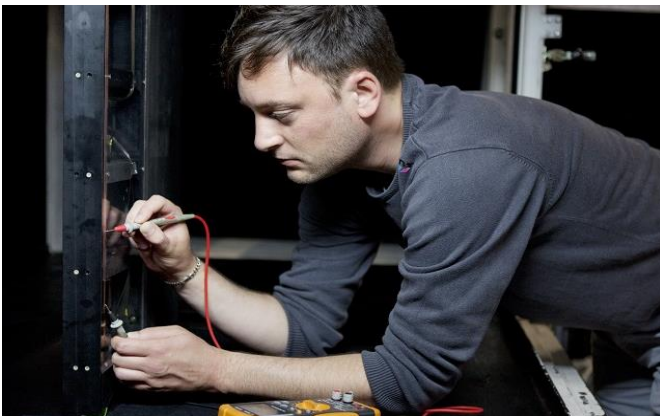
Cutting-edge research equipment



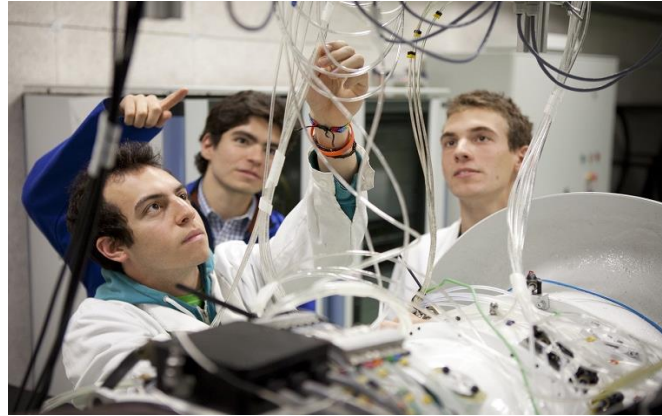
Gas canons



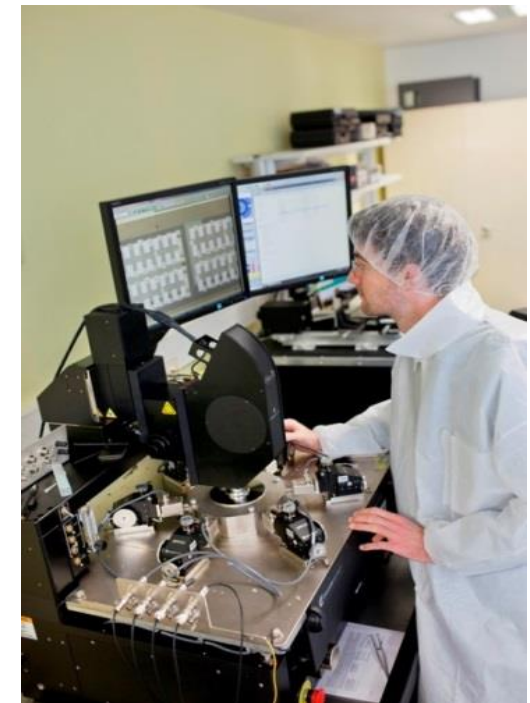
A fleet of light planes for in-flight experimentations



SABRE wind tunnel



Turbofan engine test bench



Clean rooms for microelectronics

A campus to enjoy

Student housing, a student center, and extensive sports and leisure facilities all on a 22 hectares campus



Vibrant student life

Over 80 Student clubs and associations



Drones, aeromodelling, robotics, space.

Arts : theater, improvisation, debating, film, photography

Special events : Air expo, gala, supaerowing ...

Sports : all!

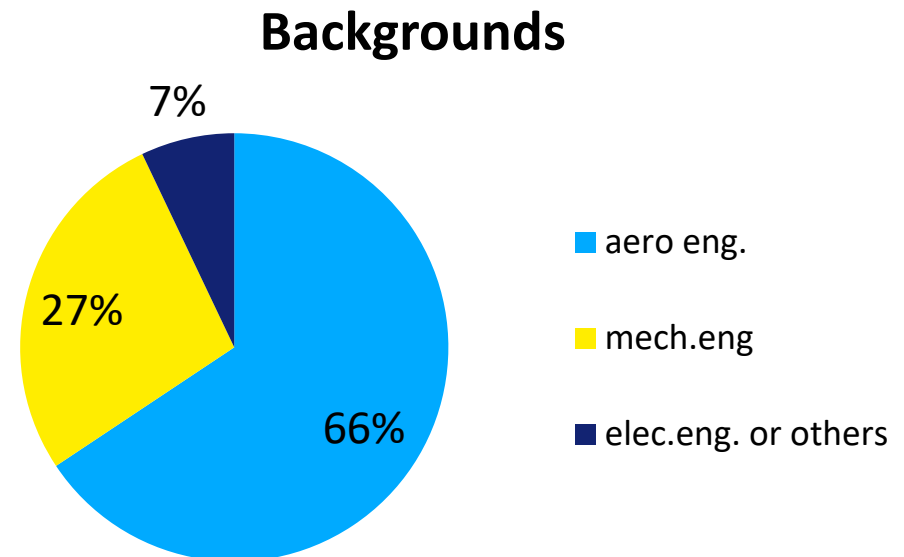
Who are our students? Who will they be?

Where do our students come from?

93 students in M1 2019/2020 from 28 countries and 63 different universities:

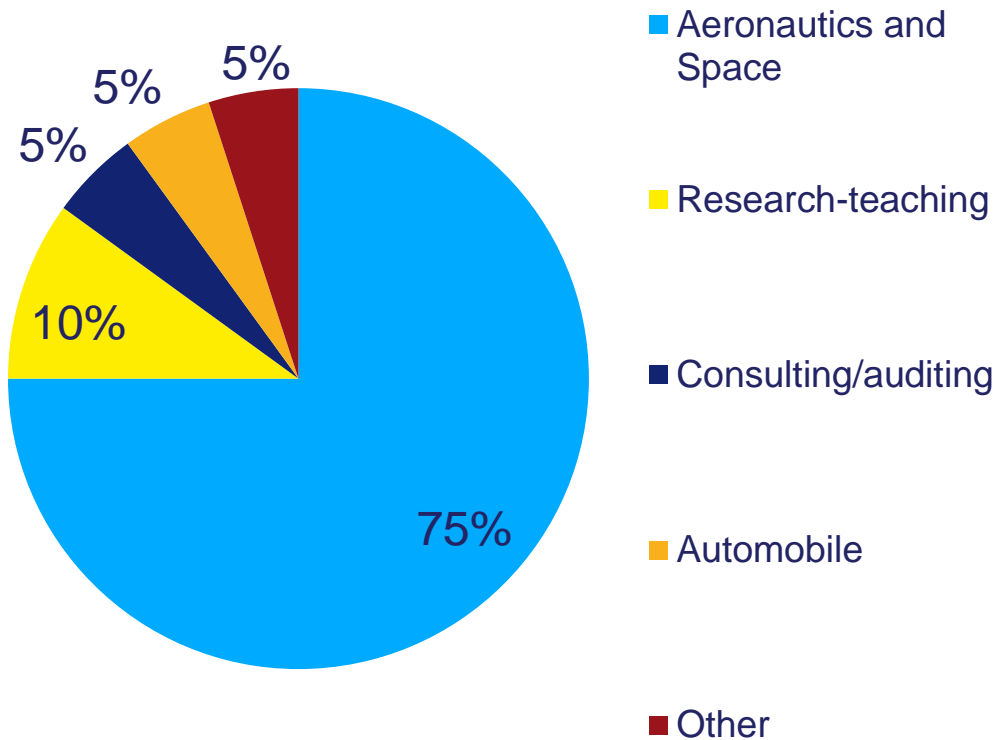
- 23 in Europe
- 24 in Asia
- 11 in North & South America
- 1 in Australia
- 4 in Africa & Middle East

24% female students

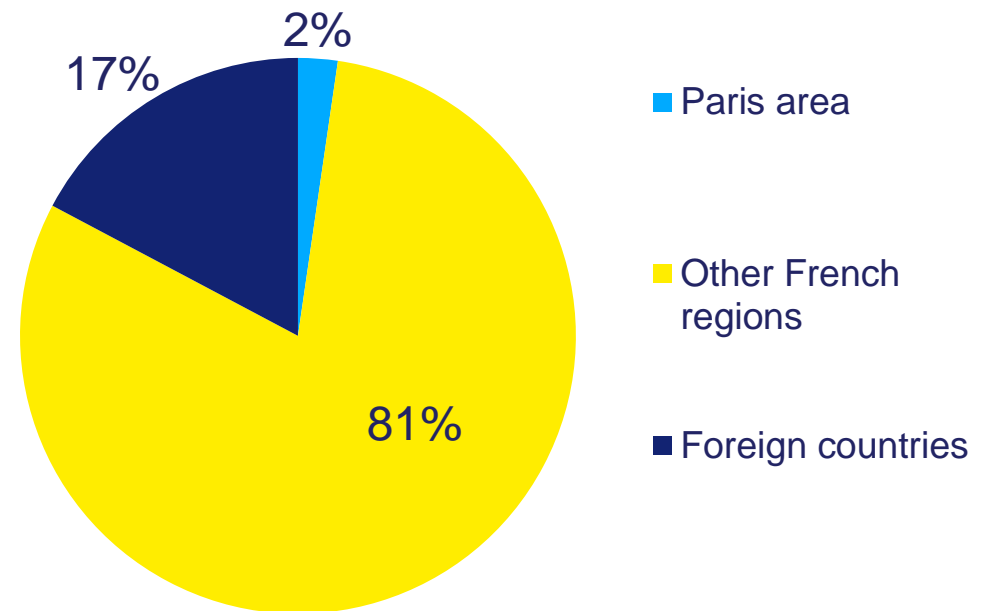


Who will they be ? Professional Integration of the 2018 MAE graduates (1)

Fields of activity



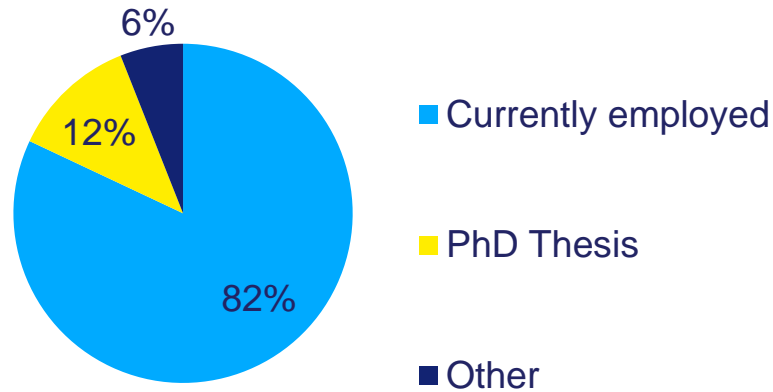
Working location



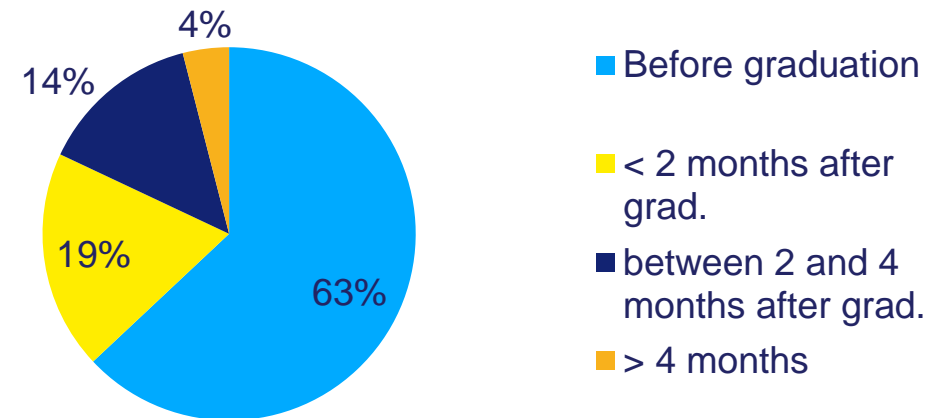
Who will they be ? Professional Integration of the 2018 MAE graduates (2)

RAPID INTEGRATION

Professional situation 6 months after graduation



Time for obtaining a job



MAIN RECRUITMENT COMPANIES

AIRBUS

AKKA
PASSION FOR
TECHNOLOGIES

altran

THALES

 **ALTEN**



*Have an excellent year
and welcome at ISAE-
SUPAERO for next year!*



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