MEng
DUI

AESOP: Aero-System Operations

Collaborative Double Diploma

University of CINCINNATI

evering INGÉNIERIE AÉRONAUTIQUE

université de BORDEAUX

Program factsheet

Collaborative Degree Program
- University of Cincinnati (Ohio, US)
- University of Bordeaux (France)

Duration: one year
- Fall semester in Evering Institute of UB in Merignac
- Spring semester in Cincinnati

Diplomas
- Master of Engineering (MEng) in Aerospace Engineering
- Diplôme Universitaire International (DUI) in Aero-System Operations

Specializations
- Structural Maintenance
- Avionics Maintenance

Language requirements

Students for whom English is not the mother language require a minimum level of:
- Test of English as a Foreign Language (TOEFL): 85
- International English Testing System (IELTS): 6.5
- Pearson Test of English (PTE): 59
- Duolingo English Test certification: 110

Admission requirements
- Hold a US Bachelor degree from an ABET accredited program
- Or hold a European Bachelor degree or a European Professional Bachelor degree within a College of Science along with three years of professional experience
- Or hold a European Master degree within a College of Science

Tuition fees
- DUI (fall semester): 5000 to 8000€
- MEng (spring semester): 6000 to 9500 US$

Employment market
- Examples of jobs from former AESOP students: flight test engineer, maintenance engineer, manufacturing engineer, processes engineer, project engineer, structure engineer, test engineer...
- Examples of companies: Akka Technologies, Amazon Prime Air, Axiom Space, Expleo Group, Honeywell, Safran, United States Air Force, University of Dayton Research Institute...

Program

A one-year international program

Fall semester at University of Bordeaux

Core curriculum – 9 USC	
Introduction to Aircraft Systems, Regulations and Maintenance - Project	3 USC
Regulation	1,5 USC
Maintenance Repair and Overhaul	1,5 USC
Maintenance Program	1,5 USC
Continuous Airworthiness Maintenance Organization	1,5 USC
Specialization courses – 6 USC (choose 1 out of 2)	
Structural aircraft maintenance (Technical documentation, NDT, composite, CAD, finite element modeling...)	6 USC
Avionics maintenance (Fault detection, technical documentation, NDT, test bench, ARINC data bus...)	6 USC

Spring semester at University of Cincinnati

Project / Task Management - 3 USC (choose 1 out of 4)
Engineering Project Management
Supply Chain Cost Modeling
Quality Control
Lean Six Sigma
Interpersonal Skill Development - 3 USC (choose 1 out of 4)
Innovation And Design Thinking
Applied Leadership for Project Teams
Fundamentals of Leadership
Effectiveness in technical organizations
Capstone - 3 USC
Capstone project
Technical specialty - 6 USC (choose 2 out of 13)
Advanced Aircraft Performance
Soft Computing Based AI
Flight Test Engineering
Occupational Safety Engineering
Advanced Strength of Materials
Introduction to Additive Manufacturing
Introduction to Robotics
Principles of Material Science
Probability and Estimation Methods for Engineering systems
Advanced Flight Mechanics
Advanced Finite Element Method
Turbomachinery Flows
Rotordynamics, Theory and Applications

Program outline

The **AESOP program offers a practice-oriented training** to those with an aerospace, mechanical or electrical engineering background who are interested in orienting their career towards the aeronautical and maintenance market. The first semester in Bordeaux provides:

- an overview of the aeronautical maintenance (regulation, design and implementation of maintenance program, technical documentation...)
- technical skills associated to either structural maintenance (CAD design, composite material manufacturing and repair, non-destructive testing...) or avionics maintenance (fault detection, design of test benches, aeronautical data bus...)

The second semester in Cincinnati provides:

- professional skill courses to develop the capacity to manage tasks and projects, lead teams...
- courses to develop aerospace or mechanical engineering skills through a choice of technical specialties
- a capstone project

Strengths of the AESOP program

- **One-year program** offering career opportunities in aerospace engineering and maintenance
- Gain an **international graduate study experience**
- Wide choice of teaching units in UC semester to **specialize your skills profile**
- Get a **unique hands-on experience** thanks to Evering institute facilities

Human powered aircraft among other technical projects |

Simulators lab |

Non destructive testing lab |

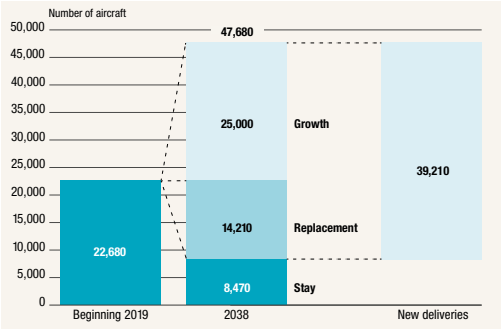
Manufacturing / repair of composite materials lab |

Aeronautical maintenance, a booming industry

- AIRBUS forecasts a doubling of MRO activity in the next 20 years
- Managers and engineers: 42% of the workforce and 42% of recruitment in the aerospace industry

Sources : AIRBUS press release 06/2017 & Key Numbers 2017-2018 from GIFAS

› Evolution of the MRO market (in billion US$) :



AIRBUS Global Market Forecast 2019-2038

Notes

Contacts

University of Cincinnati

Eugene Rutz, Assistant Dean
› eugene.rutz@uc.edu

University of Bordeaux

Christophe Farges, in charge of AESOP program
› christophe.farges@u-bordeaux.fr

Isabelle Sand, in charge of lifelong training at Evering Institute
› ftlv.evering@u-bordeaux.fr

How to apply?

› First contact both program coordinators **admissions.uc.edu/apply**
› Application deadline: March

More information online

› **AESOP page on University of Bordeaux's website:** evering.u-bordeaux.fr/Nos-formations/Formation-professionnelle-continue/DUI-MEng-AESOP

AESOP page on University of Cincinnati's website:
ceas.uc.edu/academics/departments/aerospace-engineering-mechanics/graduate-programs/aero-system-operations-aesop

University of Bordeaux / Evering Institute |

University of Cincinnati Campus |

More information
evering.u-bordeaux.fr

@univbordeaux school/evering institut.evering

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