FAME AIS MASTER

Master's programme on Functional Advanced Materials Engineering with Artificial Intelligence for Sustainability

Co-funded by the Erasmus+ Programme of the European Union

What is FAME^{AIS} Master?

Master's programme on Functional Advanced Materials Engineering with Artificial Intelligence for Sustainability

Labelled as an Erasmus Mundus Joint Master

Duration: 2 years, full-time (120 ECTS)

Degrees awarded: Double Master Degree in Materials Science, Engineering, Physics or Chemistry

Language of instruction: English

Teaching Universities:

Belgium: University of Liège
UC Louvain

France: Grenoble INP-UGA (coordinator)
University of Bordeaux

Germany: Technical University of Darmstadt
University of Augsburg

Portugal: University of Aveiro

FAME^{AIS} Consortium:

FAME^{AIS} is built with 7 leading European Universities in Materials Sciences and is composed of 6 industrial partners, 7 European Research and Technology Organisations and 13 worldwide academic partners.

How to apply for FAME^{AIS} Master?

Applicants should hold a relevant first cycle degree: in Science or Technology or Engineering (Physics, Chemistry, Metallurgy, Materials Science, Electrochemistry and related fields).

Proof of English language: applicants must attach an official language test report to their application.

When to apply?

- From Mid-November to Mid-January for an EMJM Scholarship
- From Mid-November to Mid-April for self-funded students

OBJECTIVE:

Its main objective is to train high-level Master graduates in the field of Advanced Materials, proactive in mobilising artificial intelligence methods and addressing sustainability challenges, while immersing in an international and interdisciplinary dimension of modern Materials Science.

Curriculum:

Based on solid teaching of Physics and Chemistry of Materials, FAME^{AIS} curriculum also includes training in Artificial Intelligence and sustainability considerations.

The teaching assets rely on innovative learning practices based on learning-by-doing approach, virtual exchanges and blended mobility.

Associated partners from industry, RTOs, worldwide universities and alumni are strongly involved in student mentorships, e-seminars, plant visits, internships and master theses.

Semesters 1 & 2

GRENOBLE — **DARMSTADT**

Semester 3 - Specialisation

DARMSTADT	Functional Materials for Sustainable Energy Applications
AUSBURG	Materials Science and Engineering
AVEIRO	Nanomaterials for Sustainable Solutions
LIÈGE	Quantum Materials and Functional Nanostructures
LOUVAIN	Engineering of Materials and Nanostructures
BORDEAUX	Advanced Hybrid Materials and Ceramics by design
GRENOBLE	Advanced Materials and Modeling for micro and nano technologies

Semester 4 - Master thesis

Apply now for FAME^{AIS} Master!

www.fame-master.eu

Programme fees:

For EU countries or Third countries associated to the programme* students:
4 000 € per year
*27 Member States of the European Union, Iceland, Liechtenstein, Norway, Republic of North Macedonia, Serbia, Turkey

For Third countries not associated to the programme students:**
9 000 € per year
**All other countries not listed above

Erasmus Mundus scholarship holders are exempt from the programme fees.

Career:

Academic career/research: at universities and/or research institutions. Trained scientists with independent critical thinking and strong scientific background ready to solve pressing environmental and societal problems related to materials development.

Industry employment: expert employee or manager whose actions and decisions influence the innovation output, value creation, and performance of the company (R&D, product development, production, marketing and sales).

PhD studies: FAME[AIS] prepares you for further studies in materials science

Strengths:

- High-level academic and research-oriented education about the synthesis, characterisation and processing of all classes of materials with special emphasis on Nanomaterials, Hybrids and ceramics.
- Improved integration capacity into either academic or industrial R&D teams.
- Enhanced employability thanks to innovative learning practices that help students develop a creative thinking mindset and leadership skills, along with awareness of social and industrial needs.
- Strengthening of an international culture, including fluency in English, mobility as well as experience of the languages and culture of the countries visited.
- Active alumni network

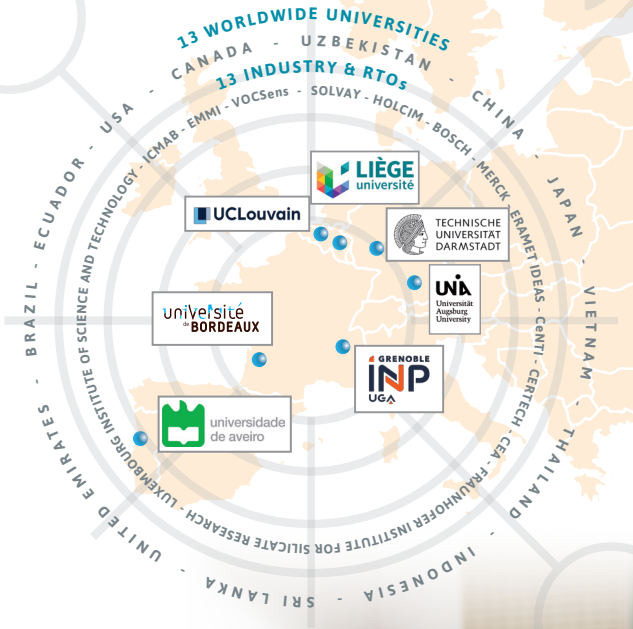
Testimonials:

Alumni:
« The FAME+ (former name of FAME[AIS]) program offers a wealth of knowledge and resources, and it's important to take advantage of them. »
« These experiences help you to be a strong yet soft person. Combining the mobility and the research experiences, you become a solution finder. »
« Joint programs should not be viewed solely as a means to acquire additional degrees, but rather as opportunities to develop valuable skills, increase confidence, foster compassion, and broaden one's perspective. »

Excepts from External Quality Assessment Board (EQAB):
« The EQAB was impressed by the wide variety of interdisciplinary research subjects presented at the workshop[s]. It considered some of the presented work excellent or even outstanding, and often at the frontier of the science and technology of functional materials and devices. The EQAB takes this as label of high quality and merit of the program. »

Key figures:

300+ graduates | 50+ nationalities | 13 Industry & RTOs | 13 Worldwide universities.



Associated partners:

Industries, Research and Technology Organisations and Academic institutions

Industries: ERAMET IDEAS (FR), HOLCIM INNOVATION (FR), MERCK (DE), Robert Bosch (DE), SOLVAY-Rhodia operations (FR), VOCSens (BE)

Research & Technology Organisations: CEA (FR), CeNTI (PT), CERTECH (BE), EMMI (BE), Fraunhofer Institute for Silicate Research (DE), LIST (LU), ICMAB-CSIC (ES)

Worldwide Associated Universities: Beijing Institute of Technology (CN), Chiang Mai University (TH), Drexel University (US), VNU Hanoi University of Science (VN), King Mongkut's University of TechnologyThonburi (TH), OKAYAMA University (JP), SHARJAH University (AE), Soochow University (CN), Turin Polytechnic University in Tashkent (UZ), University of Sao Paulo (BR), Universitas Negeri Surabaya (ID), University of WATERLOO (CA), Universidad Central del Ecuador (EC).

Contact:

FAME[AIS] Master coordination: master.fame@grenoble-inp.fr