DIGITAL TECHNOLOGY

Master's degree (MSc)

Track EMB-AI
Embedded AI

In a world where intelligence is being pushed to the edge, this MSc program prepares a new generation of engineers capable of designing ethical, sustainable, and resource-efficient embedded AI systems. The EMB-AI track combines cutting-edge expertise in AI algorithms and embedded systems with a strong focus on hardware design, edge computing, and smart sensing.

ACADEMIC DETAILS

2-year full time program
> September intake
> Three semesters of courses and projects
> Master's thesis in final semester

Comprehensive curriculum
> In-depth courses & methodology
> Professional and research projects
> French language & culture
> Professional coaching
> Internship

DIPLÔME NATIONAL DE MASTER CONTRÔLÉ PAR L'ÉTAT

Internationally recognized degree
> Master's in Information Technology accredited by the Ministry of Higher Education and Research. No. 20171079

Associated tracks / programs
> AEIOT – Architecture & Eng. for the IoT
> CYSEC – Cybersecurity
> DS – Data Science

Courses are subject to change without notice

M1 - YEAR 1 - Brest campus
> From Algorithm to Chip
> Scientific Tools for Embedded AI
> Interaction Software/Hardware
> From Sensor to Intelligent Processing
> Introduction to AI
> Deep Learning: From Model Design to MLOps
> Architectures and RISC-V ISE
> Efficient Deep Learning
> Parallel Computing for Engineer
> Programming of Robotic Systems
> AI Acceleration: HW and SW Co-Design

M2 - YEAR 2 - Brest campus
> Connectivity and Embedded AI
> Embedded AI: Constraints, Technology and Applications
> Embedded Cybersecurity
> Safety for Critical Embedded Systems
> Designing Intelligent Sensors
> Rapid Prototyping and Agile Development

Fully delivered in English

6-month paid internship in a company or lab

Free application

IMT Atlantique
Bretagne-Pays de la Loire
École Mines-Télécom

#
#**EmbeddedSystems**
#**SW/HWCodesign**
#**MachineLearning** #**DeepLearning**
#**TinyML** #**HardwareSecurity**
#**SafetyForCriticalSysts**
#**ConnectedEmbeddedAI**

"You can shape the future of intelligent technology"

"Embedded AI is transforming our world: from smart sensors and autonomous vehicles to sustainable IoT and edge computing.
In this MSc, you'll master how to design efficient, secure, and ethical AI solutions for constrained environments. If you're excited about building the intelligent systems of tomorrow, this program is for you."

Ali Chamas AL GHOUWAYEL,
Associate Professor in Sustainable Embedded Systems

CAREER OPPORTUNITIES

Embedded Systems Engineer, Hardware Architect, Embedded AI Engineer, Integration Specialist, R&D Engineer, Embedded Cybersecurity Engineer, Test and Validation Engineer. Possibility to continue in PhD.

INDUSTRIAL & RESEARCH EXPOSURE

Backed by STMicroelectronics and AMD Xilinx, the EMB-AI track offers students hands-on experience with advanced platforms and real-world edge-AI challenges from industry. The program is rooted in cutting-edge research at the Mathematical and Electrical Engineering Department. Students benefit from the faculty's strong research background and active participation in national and international research initiatives and industry collaborations, creating a high-impact and innovation-driven learning environment.

Brest ● **Rennes**
● **Nantes**

FRANCE

TUITION FEES AND SCHOLARSHIPS

6,500 Euros / year. Scholarships opportunities for: Excellent profiles, Alumni from our partner universities, European citizens, etc.

BIENVENUE EN FRANCE

> *"Bienvenue en France"* label guarantees the quality of the experience for international students.

IMT ATLANTIQUE

is ranked among the top 3 engineering institutions in France. As a leading Technological University, it is internationally recognized for its excellence in education, research and innovation: Top 400 in the THE World University Ranking, Top 100 in QS ranking for Data Science and AI.

> **On-campus accommodation, restaurants, sports facilities**
> **Orientation Days & French Summer School**
> **A variety of student clubs**

Find out more:
www.imt-atlantique.fr/it

Contact us:
it-apply@imt-atlantique.fr

International students FAQ:
www.imt-atlantique.fr/student-faq

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