Ceramics & ICT
TACTIC Graduate School

MASTER MOC

Smart Internet of Things training path

Level	Program duration	Credits
Master	**2 years**	**120 credits**

Program outline

This master's degree allows you to develop operational capabilities through active involvement in the design, implementation, choice, identification and implementation of connected object ecosystems.

The objective is to train students in new multidisciplinary engineering professions in IOT (Internet Of Things). The skills developed in this training meet the current needs of software and hardware architects across the entire transmission and processing chain dedicated to connected and intelligent objects. The modules for data acquisition, analysis and processing, vision, artificial intelligence, electronics and embedded computing, wireless technologies, networks and cyber security illustrate this approach.

Admissions requirements

Holders of a Computer Science degree or equivalent.

Organization

- Internship in M1 (international mobility)
- End-of-study internship in M2
- Scientific project in M2

How to apply

Students residing in France or the EU: www.monmaster.gouv.fr

International students from outside the EU: www.campusfrance.org/fr

Key info

- Selective course (limited places)
- No repetition possible in TACTIC course
- Scholarships 6000€ (4000€ in M1, 2000€ in M2)
- Financial assistance for incoming and outgoing mobility

Study place

Campus du Futuroscope, Poitiers

Program contact

M1 : clency.perrine@univ-poitiers.fr

M2 : david.helbert@univ-poitiers.fr

Graduate school contact

tactic-gradschool@unilim.fr

What's next ?

- ## Continuation of study

Continuation in thesis possible.

- ## Job opportunities

Jobs: IoT architect, IoT engineer, embedded electronics engineer, machine vision engineer, AI engineer, IoT radio engineer, digital systems engineer, manager - IoT project manager, researcher, assistant professor

Sectors: IT companies, IT services to businesses, large IT groups, start-ups, research organizations.

Program

Semester 1

Course name	Course unit (UE or component)	Nbr h Lecture	Nbr h Tutorial	Nbr h Practice	Credits
Programming practices and tools	UE				6
Acquisition & sensors	U				3
Vision	UE				3
Embedded systems	UE				6
Data analysis	UE				6
Practice of data analysis	Component				3
Data analysis methods	Component				3
Soft skills	UE				3
Laboratory research project at XLIM	UE				3

Semester 2

Course name	Course unit (UE or component)	Nbr h Lecture	Nbr h Tutorial	Nbr h Practice	Credits
Supervised learning	UE				4
Network and security	UE				3
Wireless technologies	UE				4
Communicating embedded systems	UE				4
Smart energy	UE				3
Language (English or French)	UE				3
Soft skills	UE				3
Laboratory research project at XLIM	Project				3
Abroad internship	Internship				3

Semester 3

Course name	Course unit (UE or component)	Nbr h Lecture	Nbr h Tutorial	Nbr h Practice	Credits
Machine learning	UE				6
Neural networks	Component				3
General machine learning principles and algorithms	Component				3
Computer vision	UE				6
Smart systems and networks	UE				6
Elective courses (1 out of 2)					
• Energy harvesting	UE				3
• Watermarking	UE				3
Bio medical data analysis	UE				3
Language (English or French)	UE				3
Research or entrepreneurial project	Project				3

Semester 4

Course name	Course unit (UE or component)	Nbr h Lecture	Nbr h Tutorial	Nbr h Practice	Credits
5G and beyond	UE				3
Research or entrepreneurial project	Project				3
End of study internship (master's thesis)	Internship				24

The information on this page is for information purposes and is not contractual

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