

Admission requirements

The AI4CI Master admits students with at least a bachelor in computer science, computer engineering, electrical engineering, software engineering, telecommunications engineering at the M1 (first year of master). Admission is also possible at the M2 (second-year) level in case of 4 years of university studies.

Le master est accessible aux étudiants possédant au moins une licence niveau L3 ou un diplôme d'ingénieur en informatique ou électronique. Les enseignements étant en anglais, un certificat d'anglais de niveau minimum B1 pour le M1, et de niveau minimum B2 pour le M2 est demandé, sauf pour les citoyens de pays avec l'Anglais parmi les langues officielles ou ayant effectué la licence (bachelor) en anglais (une attestation de l'université d'origine certifiant ceci est néanmoins demandée). L'admission en M2 est possible avec un niveau bac+4 en fonction des formations suivies en 4^e année universitaire.



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Depuis décembre 2021, le Cnam est certifié Qualiopi pour l'ensemble des entités de formation de l'établissement public, et pour les quatre types d'actions couvertes par cette certification.

le cnam



La certification qualité a été délivrée
au titre des catégories d'actions suivantes:
ACTIONS DE FORMATION
BILANS DE COMPETENCES
ACTIONS DE VALIDATION DES ACQUIS DE L'EXPERIENCE
ACTIONS DE FORMATION PAR APPRENTISSAGE



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Fiche

formation

VAE
disponible

le cnam

Artificial Intelligence for Connected Industries

International Master (Initial training) — MR11601D

Objectives

The AI4CI master is a European master opened at Conservatoire national des arts et métiers (Cnam), Paris downtown, France, as well as at partner universities in Germany, Romania, Spain, Ukraine.

The master training program covers:

- ◆ fundamentals of artificial intelligence and machine learning applied to networked systems ;
- ◆ automatics and advanced automation, for industrial networks and robotics ;
- ◆ advanced network architectures, IoT and computer systems.

The master teachers include world-class academics from our european partners and industry experts active in the master technical areas on international, European and national collaborative industrial research projects (H2020, ANR), standardization and open-source bodies (ONF, IETF, ETSI).

Evaluation

- ◆ Examens / Exams
- ◆ Travaux Pratiques / Labs
- ◆ Projets / Project

en bref

Responsable de la formation
Stefano Secci

Niveau d'entrée Niveau 6 (bac+3 et 4)

Compétences

Smart factories, Industry 4.0 |
datacenter and cloud providers |
IoT software editors | embedded systems
manufacturer | internet and mobile
application editors | telecommunication
network operators | smart-city
and smart-grid network providers | artificial
intelligence start-ups | Security and Defense

Lieu Centre Cnam Paris

Tarifs Se rapprocher du centre Cnam Paris

Program M1		
UE	Course	ECTS
USEEN6	Artificial Intelligence and Machine Learning for Connected Systems	6
USEEN3	Operations Research	4
USEEN2	Operating Systems and Computer Architecture	6
USEEK7	Network security	6
USEES3	Distributed and Federated Learnings	5
USEEJ8	Wireless Mobile Networks	6
2 US to choose		
USRS2H	Refresh in C & Bash Programming	3
USEES5	Sustainable IoT Architectures	3
USEES6	Next Generation IEEE 802.11 standards	3
USEES7	Data Management and Digital Transformation in Industrial Process Automation	3
USEES8	Big Data Technologies for Connected Industries	3
USEES9	Robot Predictive Maintenance	3
USRS78	Advanced Python Programming	3
USEET1	Integration of Virtual and Augmented Reality Technologies in Connected Industries	3
USEEV5	FPGA Platforms: Programmable Embedded Systems	3

21 ECTS to choose		
USEET2	Complex Networks : Data Analysis and Network Science	6
USEEJ7	Performance Evaluation for Connected Systems	6
USEEJ6	Network Architecture	6
USEEN1	Computer Systems Modeling and Verification	6
USEET5	Datacenter Design and Operations	6
USEET6	Seminars from the Industry	3
USEET7	Ethics and Sovereignty of Digital Infrastructures	3
USEET3	Parallel and Distributed Systems	6
USEEJ9	FLE - French as foreign language	6
USEEJ8	Wireless Mobile Networks	6
USEES2	Control System Theory and Engineering	6

Program M2		
UE	Course	ECTS
USEET8	Reinforcement Learning	3
USEET9	Learning Robots	3
USEEU1	Robot Operating Systems	3
USEEW2	Generative Artificial Intelligence for Advanced Automation	3
2 US to choose		
USEEW1	Business Process Modeling	6
USEEW3	Industrial Internet of Things	6
USEEN5	Embedded Systems : Applications and Cybersecurity	6
USEET4	Peer-to-Peer Systems and Blockchain	5
USEEK8	Advanced Experimental Projects	6
USEEN4	Network Virtualization and Automation	6
USEEU8	Smart Industry 4.0 Systems	3

15 ETCS to choose		
USEEJ9	FLE – French as foreign language	6
USEEU6	Applied Artificial Intelligence	3
USEEU7	WiFi and 5G Convergence in 6G	3
USEEU8	Smart Industry 4.0 Systems	3
USEEU9	Green AI Computing for Connected Industries	3
USEEV1	Communications for Precision Agriculture and Farming	3
USEEV2	Applications of AI and Cyber-threat Management	3
USEEV3	Programming and Communication of a Robotic Arm	3
USEEV4	AI4CI Activities : from research to business	3
USRS78	Advanced Python Programming	3
USEEV5	FPGA Platforms : Programmable Embedded Systems	3
UAEE2B	Master thesis – Internship	21

Volume horaire de référence (+/- 10%) :
6 ECTS = 50 heures