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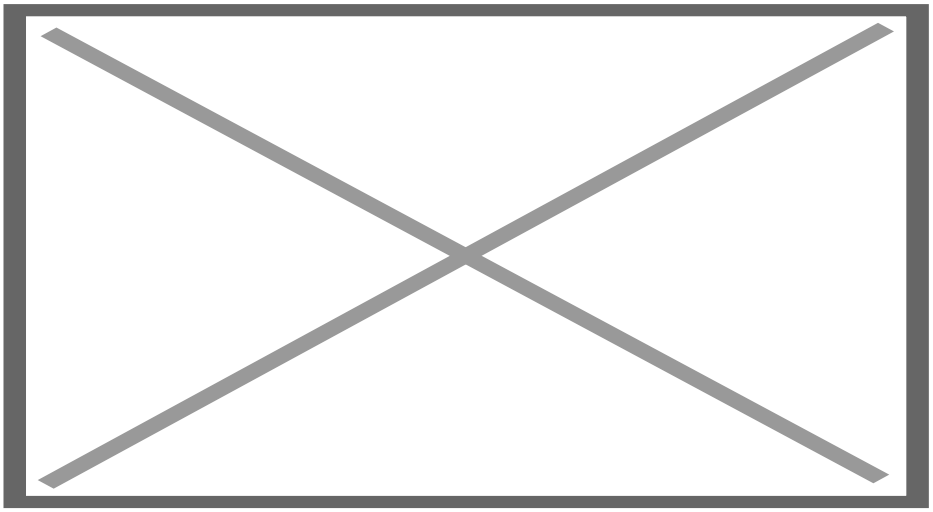
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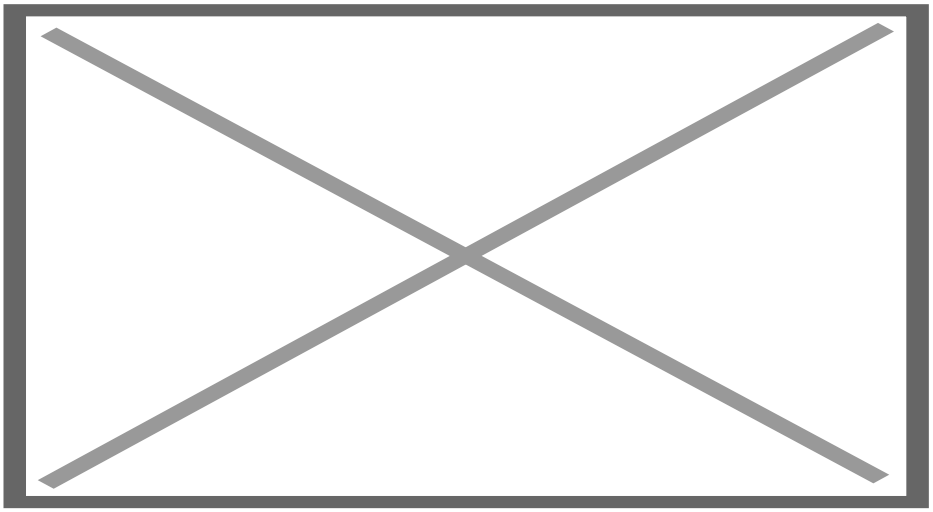
M2 Computer and Network Systems (CNS)-Systèmes Autonomiques (SA)

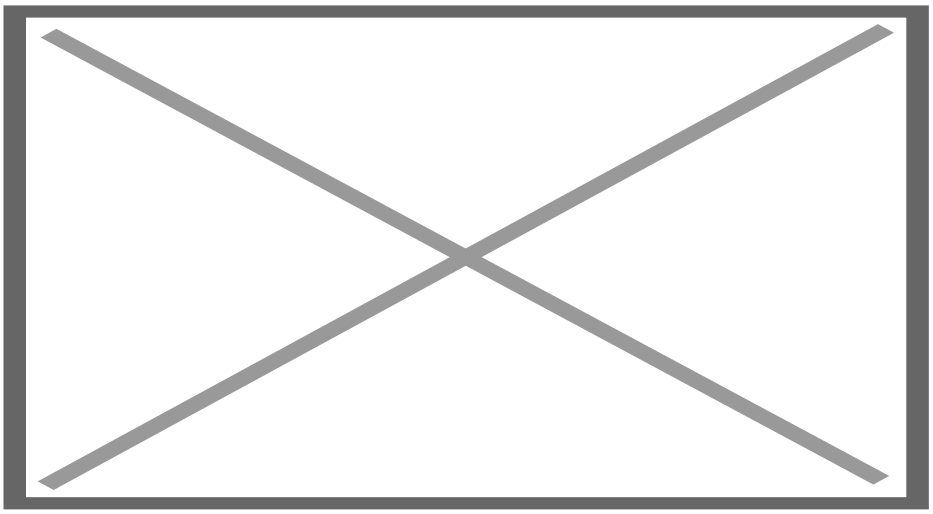
Master's degree
Specialisation Computer Science
Enrolment type
Formation initiale
Language(s) of instruction
English
French

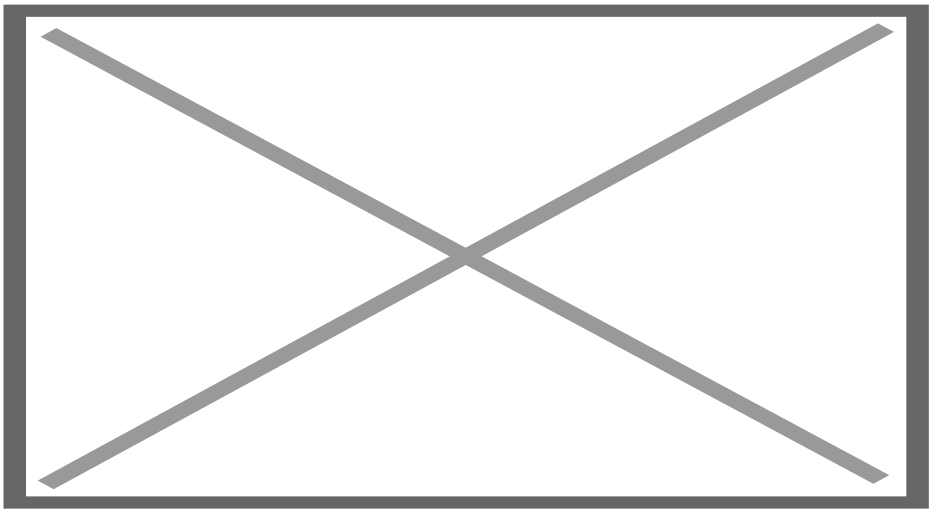
The program aims to provide students with the scientific fondations necessary for the design of autonomous systems, i.e., systems capable of self-management, self-organization, self-protection, and self-optimization. From a scientific perspective, the objective is to present the necessary knowledge regarding performance models (automata, Petri nets, queues, etc.); optimization methods (game theory, multi-criteria optimization including energy, etc.); formal methods for design, verification, and testing; artificial intelligence (machine learning, reinforcement learning, multi-agent systems, etc.).

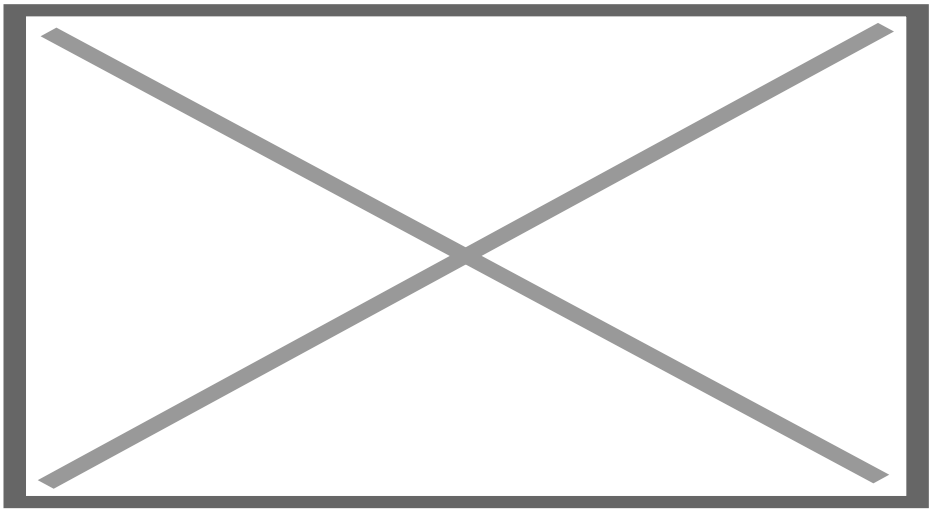
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Information

- Overview
- Application requirements
- Schedule

Présentation

Skills

- Master the basic concepts of computer systems.
- Describe the functional requirements of computer systems in specifications.
- Apply basic concepts to propose architectural and technical solutions.
- Analyze the operation of complex computer systems.
- Propose innovative solutions.
- Justify technical and technological choices.

Objectives

.The Master's degree trains specialists capable of designing and optimizing autonomous, intelligent, and distributed computing systems. It prepares students for careers as systems architects, research and development engineers, or researchers.

Débouchés

Career prospects

After a Master's or Master's + PhD: engineer (R&D, control, production, etc.)
After a Master's or Master's + PhD: researcher or lecturer
Project Manager
Research & Development Engineer
Research or Design Engineer
Research Engineer
Design engineer

Further Study Opportunities

PhD
PhD thesis
Data Scientist, Data Analyst, Ingénieur·e en Machine Learning dans des secteurs innovants (tech, finance, santé, énergie, etc.) ;
R&D researcher or data modelling and analysis expert in leading-edge companies or laboratories.
Head of project/mission
Research officer

Calendar

Start of programme (indicative date)
04/09/2026
Admission

Capacity

Available Places

25

Target Audience and Entry Requirements

The Master 2 is accessible to students holding the Computer Network Systems M1 and, upon consideration of their file, to students holding an M1 in Informatics, an undergraduate degree (over 4 years) or Master's degree in Computer Science, an M2 in foreign Computer Science, or an engineering degree with a substantial informatics component. All applications are reviewed by the admissions panel.

Période(s) de candidature

Inception Platform

From 01/01/2026 to 15/02/2026

From 01/05/2026 to 15/06/2026

Supporting documents

Compulsory supporting documents

Rank of previous year and size of the promotion.

Copy diplomas.

Motivation letter.

All transcripts of the years / semesters validated since the high school diploma at the date of application.

Curriculum Vitae.

Detailed description and hourly volume of courses taken since the beginning of the university program.

Additional supporting documents

2nd letter of recommendation (compulsory for candidates who have already been enrolled in higher education in France before).

Letter of recommendation (compulsory for candidates who have already been enrolled in higher education in France before).

Referring contact information (compulsory for non-international applicants).

Certificate of English level.

Certificate of French (compulsory for non-French speakers).

VAP file (obligatory for all persons requesting a valuation of the assets to enter the diploma).

Document indicating the list of local M2 choices available here : https://urlz.fr/i3Lo.

Supporting documents :
- Residence permit stating the country of residence of the first country
- Or receipt of request stating the country of first asylum
- Or document from the UNHCR granting refugee status
- Or receipt of refugee status request delivered in France
- Or residence permit stating the refugee status delivered in France
- Or document stating subsidiary protection in France or abroad
- Or document stating temporary protection in France or abroad.

Programme

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class
Methodological tools	2.5	Semester 1		18				
Charger le détail								
Masterials	2.5	Semester 1	0	18				
Charger le détail								

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	direct study/pra class
Autonomic Networking	2.5	Semester 1	18					
Charger le détail								
Software Defined Networks	2.5	Semester 1	18					
Charger le détail								
Administration et développement de systèmes pour les centres de calcul et de données	2.5	Semestre 1	18					
Charger le détail								
Cloud Computing	2.5	Semester 1	18					
Charger le détail								
Quality of Service in Networks	2.5	Semester 1	18					
Charger le détail								

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class
Apprentissage profond	2.5	Semestre 1	18					
Charger le détail								
Reinforcement learning and approximation algorithms	2.5	Semestre 1	18					
Charger le détail								
Multicriteria optimization	2.5	Semestre 1	18					
Charger le détail								
PROG1.1 : PREUVE FORMELLE MÉCANISÉE (OUVERT AUX ÉTUDIANTS DE L'ENSIIE EN BICURSUS)	2.5	Semestre 1	18					
Charger le détail								
PROG1.2 : SÉMANTIQUE DES LANGAGES DE PROGRAMMATION (OUVERT AUX ÉTUDIANTS DE L'ENSIIE EN BICURSUS)	2.5	Semestre 1	18					
Charger le détail								

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class
Computational DNA Nanotechnology	2.5	Semestre 1	18					
Charger le détail								
Concurrent and timed processes	2.5	Semestre 1	18					
Charger le détail								

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practica class
Approches formelles pour la vérification de programmes	2.5	Semestre 1	18					
Charger le détail								
Systèmes multi-agents	2.5	Semestre 1	18					
Charger le détail								
Modélisation et analyse formelles	2.5	Semestre 1	18					
Charger le détail								
Game Theory	2.5	Semestre 1	18					
Charger le détail								
UE Libre	2.5	Semestre 1	18					
Charger le détail								
PROG2.1 : ANALYSE STATIQUE DE PROGRAMMES (OUVERT AUX ÉTUDIANTS DE L'ENSIIE EN BICURSUS)	2.5	Semestre 1	18					
Charger le détail								
PROG2.2 : PROJET VÉRIFICATION DE PROGRAMMES (OUVERT AUX ÉTUDIANTS DE L'ENSIIE EN BICURSUS)	2.5	Semestre 1	18					
Charger le détail								
Introduction to Entrepreneurship: Creating Your Deeptech Startup	2.5	Semester 1	20					

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practica class

Charger le détail

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	c
Stage recherche et développement et mémoire professionnel ou de recherche	30	Semestre 2							

Charger le détail

Teaching Location(s)

EVRY

Contact

- **Eric ANGEL**

http://www.universite-paris-saclay.fr/formation/master/informatique/m2-computer-and-network-systems-cns-systemes-autonomiques-sa