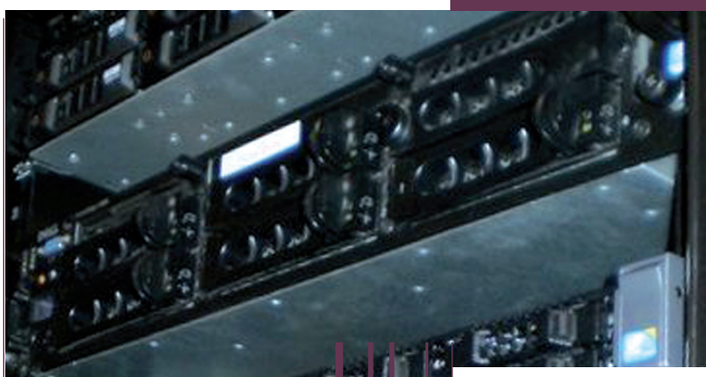
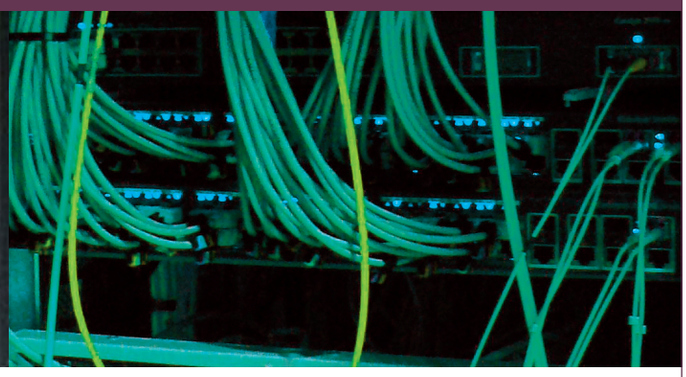
Sup Galilée ingénieurs

UNIVERSITÉ PARIS 13

Sciences, Technology and Health

Apprenticeship Education Program Ingénieur diplômé (Engineering Master Degree) Major in Computer Science and Networks





ADMISSION REQUIREMENTS

> Admission in first year is opened to:

• Undergraduate in Science (equivalent to French "L2 scientifique")

• Graduate from equivalent to French "Institut Universitaire de Technologie" (IUT) in Computer Science, Networks and Telecommunication, SRC, Electric and Industrial Computing engineering, Physical Measurement Technologies

• Students from equivalent to French "Classes préparatoires" ATS (Adaptation Technicien Supérieur")

• Students from equivalent to French "Classes préparatoires" to "Grandes Écoles" or to "études supérieures"

• Students who have successfully completed an accredited Engineering school integration program.

In case you are not sure your situation meets these requirements, please contact the School office for further information (phone and e-mail below).

How to apply?

> Application files are directly available on www.sup-galilee-paris13.fr. Admission will be approved after file examination and interviews. In case of approval, admission is not final until the candidate has signed an apprenticeship contract with a company.

> Admission in second year is possible after a first year of studies in Sup Galilée or in a "École d'Ingénieurs" in computer science or Networks and Telecommunication.

The program will take only 24 engineer-apprentices per year.

Sup Galilée is the engineering school of Université Paris 13. Since 1974, the school has trained more than two thousand engineers. It provides advanced education in a high level scientific environment with its seven top performance laboratories in direct contact with major companies.

Since September 2010, the School provides a "sandwich" program to train Engineers that will specialize in Computer and Network systems, alternating working sessions in a real professional environment with courses at the University.

WHAT IS AN APPRENTICESHIP EDUCATION PROGRAM?

The apprenticeship agreement is regular work contract signed with a company where the apprentice works in normal conditions. He or she follows courses at Sup Galilee where the professional experience is confronted to a more theoretical approach. The title of engineer is awarded after three successful years during which the student benefits from all the social advantages (pay, social security, etc.) than does a normal employee. Potential employers consider the professional experience acquired by the students during their program as a valuable asset. The title of "Ingénieur en Informatique, parcours informatique et réseaux" is fully accredited by the French "Commission des titres d'ingénieurs" (CTI).

EDUCATIONAL OBJECTIVES

Our students receive top education in computer science, with a particular focus on networks and distributed applications. At the end of the program, students will have acquired knowledge and skills that are specifically relevant to the following fields:

> Design and development of architectures for distributed applications (third-party applications, data bases)

> Data transfer management (network programming, security, protocols)

> Software design and development, on all phases of project (analysis, modeling, implementation, certification).

APPLICATION

> Application forms and procedures are available beginning of February on: www.sup-galilee.univ-paris 13.fr

CFA SUP 2000 réunir les compétences pour réussir ensemble

L'Université Paris 13 est membre de :

USPC Université Sorbonne Paris Cité

CAMPUS CONDORCET Paris-Aubervilliers

Science, Technology and Health

Ingénieur diplômé
(Engineering Master Degree)

Apprenticeship Education Program
Major in Computer Science and Networks

Program Organization

1 FIRST YEAR

The goal of this first year is to acquire a strong and broad knowledge in the basis of computer science: mathematics, probability and statistics, numerical signal processing, signal transmission, structured imperative programming, introduction to UNIX and Windows operating systems.

Then, the aim is to build a strong basis in computer science and networks: computer architecture, algorithmic, databases, software engineering. Students are also trained in object programming and JAVA. Tutorials are focused on project management.

2 SECOND YEAR

Courses are focused on technical knowledge in software engineering: programming C++, advanced software engineering, database management, graph algorithms, compilation and theory of languages, XML and algorithm of semi structured documents, Perl for system administration, operating system programming. Also, in the field of networks and data transmission: IP and routing, network sizing and performances, services and protocols. All these skills will be put into practice during tutorials.

3 THIRD YEAR

This year is dedicated to in depth training to the most recent technologies in database systems and in distributed applications and networks development: system and network administration (Windows and Unix), net technologies, security and cryptography, object oriented and distributed database, web servers configuration and administration, web services design and development.
Beyond this specialty, during the whole three-years program, students will receive lectures and training in all disciplines that are part of the "engineering culture": English, presentation and communication skills, law, management, economics, industrial property, business start-up.

> CAREER PROSPECTS

This program entitles students to manage all phases of a software project. They can also handle all dimensions of networks and distributed applications. They are needed in **all major industries** (energy, transport, communication, automotive, bank, insurance...), **in service companies and consulting firms and in small and dynamic companies specialized** in new information technologies.

> ACTIVITIES AND OPERATIONS

- Design and development of new computer systems
- Assembling, consolidating and adapting existing software
- Design and management of database systems
- Design and development of distributed applications
- Configuration and management of networks and large information systems
- Management and administration of computer equipment and networks.

> AN EFFECTIVE AND FAST INTEGRATION IN THE LABOR MARKET

The Engineer Apprenticeship Education Program in Computer Science and Networks is based on longstanding partnerships with major companies, to give students the best opportunities of professional integration.
Our major partners are: Bull, Cap Gemini, EDF, Ilex, Informatique CDC, LCL, Natixis, Orange, SFR, Sogeti.

TRAINING SESSIONS VERSUS WORK SCHEDULE

Apprenticeship in computer science – computers and networks – First Year

September				October				November				December				January				February				March				April				May				June				July				August			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Apprenticeship in computer science – computers and networks – Second Year

September				October				November				December				January				February				March				April				May				June				July				August			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Apprenticeship in computer science – computers and networks – Third Year

September				October				November				December				January				February				March				April				May				June				July				August			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Presence in University | Presence in Company

Director of Institut Galilée Frédéric Roupin • **Associate Director, responsible for Education** Thierry Hamon

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Conception - impression : service de la communication - Université Paris 13 - novembre 2017