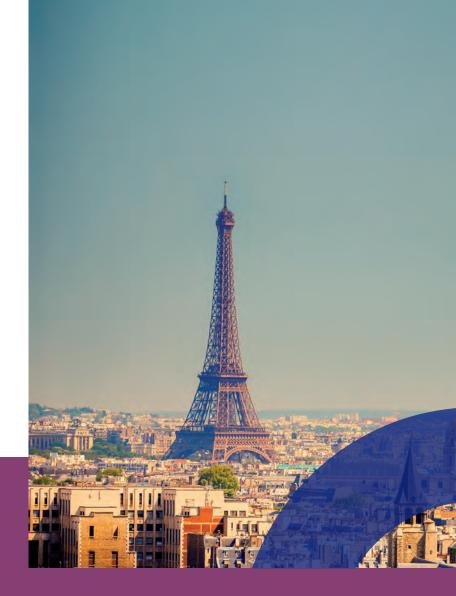


THE SCHOOL OF
TECHNOLOGICAL INNOVATION



ESIEE PARIS PROGRAMMES

- Computer science, cybersecurity, artificial intelligence
- Industry 4.0: industrial engineering, mechanical engineering and industrial maintenance
- Electronic, communicating and embedded systems
- Energy transition, civil and construction engineering
- Digital and connected health
- Arts and Sciences





ESIEE Paris trains general engineers equipped to meet the challenges of digital and environmental change and offers 20 specialist programmes in the fields of: Computer Science, Cybersecurity, Artificial Intelligence - Industry 4.0: Industrial engineering, mechanical engineering and maintenance - Electronic, communicating and embedded systems - Energy transition, civil engineering and construction - Digital and connected health - Arts and sciences.

All programmes lead to the ESIEE Paris engineer degree. It is a 5-years postgraduate degree equivalent to a Master's degree, and it is accredited by the "Commission des Titres d'Ingénieurs (CTI)", which is the national committee that regulates the French engineer degrees. ESIEE Paris also offers Master of Science in Management of technology – information systems.

Computer science, Cybersecurity, Artificial Intelligence

The aim is to acquire skills related to the bases of informatics (language, algorithm, physical and distributed architecture). Computer science (full time / partly in English) Career opportunities: Software analyst/developer, IT project manager, Study and development engineer, Research engineer, Consultant, etc. The aim is to help us meet the needs of companies by training engineers who are experts in end-to-end security: from hardware to software, including data protection. Cybersecurity (full time / in French) Career opportunities: Security Architect, Intrusion Testing Expert, Security Developer, Security Analyst / Consultant, ISS Expert, Post-Auditor, Cyber-Security R&D, etc. The aim is to teach future engineers how to transform data into a format suitable for analysis (Data Engineer), and to participate in the development of algorithms that translate the data into useful and Data science and exploitable information (Data Scientist). Artificial intelligence Career opportunities: Data-analyst, Data-scientist, IT project manager, Architect Internet of Things, (full time / partly in English) Consultant, Analyst, etc. Computer science and The aim is to train computer engineers with a very good knowledge of the industrial applications of 3D applications - 3D applications. Graduates will have in-depth knowledge of the various production chains (CAD, engineering & media animation, virtual reality) and technological media (PC, smartphones, Web, etc.). technologies Career opportunities: software architect and applications developer, 3D and multimedia project (apprenticeship / in French) manager, PLM engineer for concurrent engineering. The aim is to design and implement applications to meet the needs of a company or organisation. Computer science -Computer engineers have solid operational skills in design and development, applied to a specific Design, architecture & business area through an option in geomatics, software or networks. Attentive to customers and development business specialists alike, they incorporate performance, reliability and security parameters into their (apprenticeship / partly in functional and technical choices. In order to implement applications that are consistent with systems English) and infrastructure. They master the management and steering of these IT projects, from design to operation. The aim is to train engineers capable of designing/managing/administering/ensuring the reliability/ Network and security security of new-generation networks deployed within companies (large groups, SMEs, institutions, - Architecture & Internet etc.). of Things Career opportunities: network engineer security engineer (CISO), systems and network administrator (apprenticeship / in French)



Electronic, communicating and embedded systems

Embedded system

(full time / partly in English)

The aim is to train engineers that are able to conceive technological objects, both material and software, while integrating adapted, safe and optimized engineering solutions and also, respecting the embedded constraints (expense, congestion and energy use).

Career opportunities: Onboard systems architect, Real time onboard application development engineer, Distributed control/command systems designer, Research and development engineer, Applications engineer, After sales engineer etc.

Smart electronic System

(full-time / partly in English)

The aim is to train electronic engineers that can work in various sectors and always more with the development of the Internet of Things: computer science, telecommunications, aeronautics, automobile, etc. From the idea to the manufacture, multiple stages are necessary and he can supervise the follow-up.

Career opportunities: Designer of electronic systems on boards, SoC Digital Systems on FPGA, microwave systems, micro-nanotechnology sensors, Research and development engineer, Field engineer, Product manager, Sales engineer etc.

Embedded system Transports & smart objects

(apprenticeship / in French)

The aim is to train systems engineers capable of analysing specifications, understanding the technical and financial issues involved, modelling the solutions adopted and developing systems.

Career opportunities: Transport systems engineer embedded electronics development engineer, Software development engineer, Operating safety engineer.

Electronic & Computer science - Communicating systems

(apprenticeship / partly in English)

The aim is to train engineers capable of designing a complete system, from the sensor and its conditioning electronics for measurement to the design of HMI interfaces for the user, including IT development, architectures and protocols for wired/wireless communications networks, test and measurement.

Career opportunities: software development engineer, Design engineer, Consultant engineer, Electronics engineer, Test bench engineer, Embedded systems engineer.

Industry 4.0: industrial engineering, mechanical engineering and industrial maintenance

Industrial Engineering

(full time / in French)

The aim is to master the scientific knowledge and technological tools needed to design, analyse and manage goods services production systems and the associated supply chain, in order to optimise their performance.

Career opportunities: Consultant research and development engineer, Production engineer, Studies engineer, Supply chain manager, Production manager, Project manager, Plan manager.

Industrial Engineering -

Supply Chain & digital (apprenticeship / in French)

The aim is to train engineers specialised in the production systems of goods and services and in the supply chain management. The programme integrates a managerial and socio-economic component necessary to optimise business performance.

Career opportunities: quality engineer, planning manager, supply chain manager, production engineer, maintenance engineer, purchasing manager, lean project manager. Analyst / Consultant, ISS Expert, Post-Auditor, Cyber-Security R&D, etc

Maintenance and industrial process reliability

(apprenticeship / partly in English)

The aim is to design and implement maintenance solutions that guarantee the operation of the equipment and infrastructure of a company or its customers. They incorporate the concept of CSR (Corporate Social Responsibility) into their day-to-day maintenance work.

Career opportunities: Maintenance design and organisation engineer, Reliability engineer, Maintenance methods engineer, CMMS engineer, Maintenance manager, Maintenance project manager engineer, SLI/ASL engineer, Asset Management Engineer.

Mechanical engineering

(apprenticeship / partly in English)

The aim is to acquire solid theoretical and technical skills in the field of mechanical engineering. The programme offers two options: Design and Production. Materials Science and Engineering.

Career opportunities: Research and development engineer, Test engineer, Calculation engineer, Methods engineer, Production engineer, Quality engineer, Project manager.

Energy transition, civil and construction engineering

Renewal energy & energy efficiency

(full time / partly in English)

The aim is to meet the challenges posed by the energy transition in industrialised countries: increased use of renewable energies, technological, economic and regulatory energy savings.

Career opportunities: Consulting engineer, Business engineer, R&D engineer, Energy efficiency engineer, Energy network operations engineer, Project manager in renewable energies, Building energy design engineer (design office), Public works, Energy Manager, etc.

Energies – energy transition engineering (apprenticeship / in French)

The aim is to train engineers to master energy production-distribution-storage systems (fossil or renewable; electrical or thermal). These engineers will also master the tools of numerical modelling and optimisation tools to tackle energy efficiency concepts

Career opportunities: Design office engineer, energy audit manager, production engineer, R&D engineer, consulting engineer, business engineer, quality engineer etc.

Civil engineering - designing and monitoring in construction (apprenticeship / partly in English)

The aim is to train engineers with solid skills and technical knowledge in the field of building (structural calculations, structural work, enclosed and covered areas, etc). Management training will enable them to manage a site or projects and supervise construction teams. These are multi-skilled engineers capable of working at all stages in the life of a building project, from design to maintenance, and in all the positions held by an engineer.

Digital and connected health

Biotechnologies and e-health

(full time / partly in English)

The aim is to analyse the needs associated with the development of products or processes in the life sciences and to master technical issues involved. Acquire knowledge of biological and medical systems, as well as the processing and management of health information.

Career opportunities: Study engineer, Project engineers, Consultant engineers, Application engineer, Telemedicine and IoT engineer, R&D engineer, Product manager.

Arts and Sciences

IMAC - Image, multimedia, audiovisual & Communication

(full time / partly in English)

The aim is to train engineers who combine a creative spirit with scientific and technical training in the fields of IT, multimedia and audiovisual. Scientific managers will be trained to make them capable of leading the study, design, development and implementation of projects in business sectors relating to the processing and management of information and communication. Particularly in the fields of the Internet, multimedia, audiovisual or video games, by combining the arts and new technologies.

International programmes (entirely taught in English)

Artificial intelligence and Cybersecurity

Delivered in English, the program focuses, during the first year, on fundamental courses in computer science, artificial intelligence, and cybersecurity. The second year will be spent strengthening your knowledge in the advanced fields of artificial intelligence and cybersecurity.

Career opportunities: Consultant research and development engineer, Production engineer, Studies engineer, Supply chain manager, Production manager, Project manager, Plan managerengineer, Research engineer, Consultant, etc.

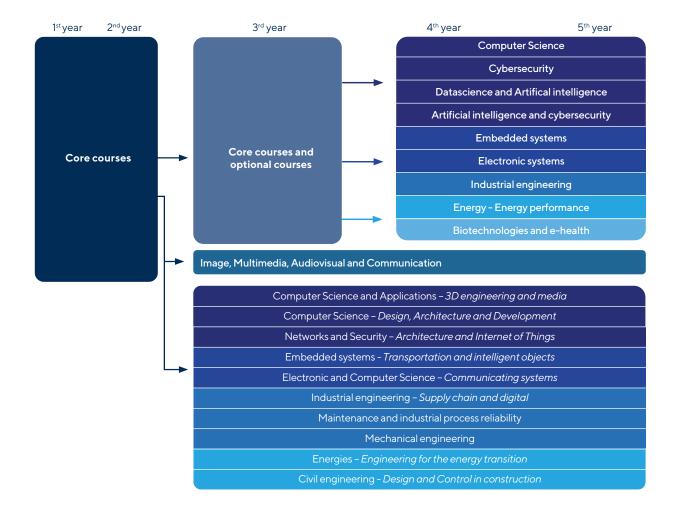
MoTIS- M.Sc. Management of technology

- information systems

The aim is to produce hybrid managers who will have gained the necessary flexibility to successfully manage complex information systems and the required relational skills to manage the development of these systems within an enterprise or organisation.

This answers the demand for internationally-focused project managers working at the interface of Management and Technology.

 $\textbf{Career opportunities:} \ \textbf{Business Analysts, Business/IT consultants, Project Managers etc.}$



ESIEE Paris, the school of technological innovation

Created in 1904 under the name of Ecole Breguet, ESIEE Paris has immediately distinguished itself as an engineering school focused on innovation and entrepreneurship. One of its most renowned former students is Marcel Dassault, founder of one of the very first industrial groups, the Dassault Aviation group. A more recent graduate, Yann LeCun, is behind the current artificial intelligence revolution. He invented the profound learning process and both founded and directed the Facebook laboratory for artificial intelligence. Furthermore, at the Consumer Electronic Show(CES) in Las Vegas, ESIEE Paris was recognized as the first engineering school from which French entrepreneurs graduated.

ESIEE Paris is a founding member of Université Gustave Eiffel, created in January 2020. The ambition of this new university, merging previously existing institutions, is to achieve worldwide visibility and recognition in terms of training and research, around one theme: inventing the cities and regions of tomorrow.

Plus, international opportunities are an important part of education at ESIEE Paris, offering numerous opportunities to go abroad and welcome international students.



Key figures

- 3 000 students
- 120 PhD students and postdoctoral researchers
- 120 permanent research professors
- 1 engineering degree 20 courses, 10 of which are apprenticeships
- 5 technological platforms
- 26 000 m² facilities with 5 technological platforms including Cleanrooms, Virtual reality room, Microwave, Optics and Digital Communications; Embedded Systems Platform; Analysis of database related to innovation
- More than 120 international partner universities around the world



Research fields

ESIEE Paris brings its expertise in the field of:

- Digital technologies through Data Sciences, cybersecurity and Artificial Intelligence for data processing
- The physics of sensors and microsystems for monitoring the environment and people
- Embedded systems and their optimization for the development of autonomous systems and connected objects (IOT)
- · Innovation management to have tools to understand the growing growth brought by the digitization of our world



Location

CAMPUS

ESIEE Paris is located in the eastern part of Greater Paris. Only 20 minutes from the center of Paris, on the regional-express network. Its futuristic building is located in the heart of the Descartes Campus, a stimulating study environment, headquarters of the new Gustave Eiffel University.

ESIEE PARIS LOCATION





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