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

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

**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, 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.
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.

### 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 manager/engineer, 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.

**Career opportunities:** 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
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

www.esiee.fr