École d'ingénieurs
Télécom Physique Strasbourg

General Engineering Degree

1st Year

13% Engineering mathematics
- Numerical analysis (Python)
- Probabilities and stochastic processes
- Signal processing
- Digital tools (Matlab)

12% Computer science
- Computer systems
- C programming language
- Introduction to Unix

22% Physics
- Quantum mechanics
- Solid physics
- Electromagnetic wave physics
- Experimental physics
- Semiconductors physics
- Radiation and images

26% Engineering sciences
- Analog and digital electronics
- Labview, Microcontroller
- Control theory

7% Computer science and mathematics project

5% Opening courses (2 to be chosen)
- Enterprise
- Electronics and embedded systems
- Images, signals and data science
- Systems engineering, control, computer vision
- Biomedical engineering and health sciences
- Photonics
- Physics and modeling

12% Humanities and social sciences
- Communication
- Professional project (project management, writing resumes and cover letters)
- Foreign language 1 : English
- Foreign language 2 : German, Spanish, Japanese, Chinese

3% Internship (4 weeks)

2nd Year

23% Mathematics, computer science and signal
- Statistics
- Finite elements
- Signal processing
- Object-oriented programming (C++)
- Object-oriented design

17% Engineering sciences
- Embedded systems
- Experimental physics
- Robotics and control
- Image and computer vision
- Programmable electronics

12% Engineering project
- Team of 4-5 students

13% Humanities and social sciences
- Financial management
- Team management, professional project
- Foreign language 1 : English
- Foreign language 2 : German, Spanish...

35% Choice of a department for spring semester

Signal and Systems Engineering
- Digital control / Sustainable engineering
- 2D signal processing / Programming tools for image processing
- Networks protocols (TCP/IP)
- Digital Communications and cybersecurity
- Integrated circuit design
- Wireless Sensor Network (WSN)

Physics
- Experimental physics
- Applied physics
- Fundamental physics
- Photonics
- Instrumental physics

Biomedical Engineering
- Biomedical engineering
- Biomechanics
- Medical imaging and computer vision
- Biomedical devices and clinical procedures
- Control theory

Internship (12 weeks)

3rd Year

30% Humanities and social sciences
- Entrepreneurship
- Economic intelligence
- Quality insurance
- Intellectual property and patents
- Foreign language 1 : English
- Foreign language 2 : German, Spanish, Japanese, Chinese

70% Choosing an option in your department

Signal and Systems Engineering

Electronics and Embedded Systems
Master's degree "Micro and Nanoelectronics" as a double degree

Images, Signals and Data Science
Master's degree IRIV as a double degree

Systems Engineering, Control and Vision
Master's degree IRIV as a double degree

Physics

Physics and Modeling
Physics Master's degree as a double degree

Photonics
Master's degree IRIV as a double degree

Biomedical Engineering

Biomedical Engineering and Health Sciences
Master's degree IRIV as a double degree

3rd Year

Graduation project

Industry or research internship (5-6 months)