RESEARCH LABS

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  - Energy Efficient Computing Architectures:
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- **PHOTONICS SYSTEMS** (CNRS-FOTON)
  - Specializing in photonics, a key-enabling technology. Focuses research on optical technologies of information:
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LANNION A HIGH-TECH PARK
- 300 companies in Telecommunications offering Internship opportunities.

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FRENCH GRADUATE ENGINEERING SCHOOL SPECIALIZING IN APPLIED SCIENCE AND TECHNOLOGY

- Master in Engineering
- Master of Science
- PhD

TELECOMS AND EMERGING TECHNOLOGIES

- Master in Engineering
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WHY STUDY AT ENSSAT?
“Ingénieur” with a wide range of skills in electronics, embedded systems, digital communications and multimedia.

**ELECTRONICS ENGINEERING**

- **Software**
  - Fundamental programming concepts
  - Data structures
  - Software engineering
  - Embedded software (Android development)

- **Information Processing**
  - Databases
  - Information systems
  - Artificial intelligence
  - Human-machine interaction

- **Networks & Communication**
  - Networks
  - Distributed systems
  - Multimedia streaming
  - Security

- **Electronic Devices & Circuits**
  - Processor Architecture & Interface
  - Low-Power Electronics
  - VLSI Integrated Circuits Design
  - System-on-Chip

- **Digital Systems**
  - Mobile Communication Systems
  - Wireless Networks
  - Multimedia Communications

**FIELDS**

- **Design and development of digital electronic systems for multimedia transmission**
- **Telecommunications**
- **Aeronautics and automotive systems**
- **Research**

---

**COMPUTER SCIENCE**

“Ingénieur” specialized in human-machine interaction, information management and cloud computing.

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- **Electronics**
  - Analog electronics
  - Digital systems
  - Interfacing
  - Signal processing
  - Electronic feedback control systems

**FIELDS**

- **Defining, modelling and developing complex systems**
- **Distributed environments**
- **Implementing internet of things**
- **Research**

---

**PHOTONICS**

“Ingénieur” able to design, develop and integrate photonics and optoelectronics systems.

- **Optics**
  - Properties of light
  - Propagation
  - Interferences
  - Optical components
  - Fibers
  - Modulation

- **Physics**
  - Light sources
  - Lasers
  - Detection
  - Sensors
  - Amplification
  - Noise

- **Electronics**
  - Analog electronics
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- **Photonics Systems**
  - Telecommunications and networks
  - Instrumentation and metrology
  - Industrial applications
  - Biophotonics

**FIELDS**

- **Telecommunications**
- **Industrial manufacturing**
- **Life sciences and health**
- **Lightening and displays**

---

All Enssat students are required to attend humanities and mathematics courses.
"Ingénieur Grande École" Master in Engineering, Master of Science

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  - Digital electronics
  - Architectures
  - Systems
  - Real-time

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- Security, defence
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Digital Signal Processing
- Digital Audio & Image Processing
- Source & Channel Coding
- Digital Communications
- Adaptive Filter Theory

Software Engineering
- Programming
- Data Structures
- Distributed Systems

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