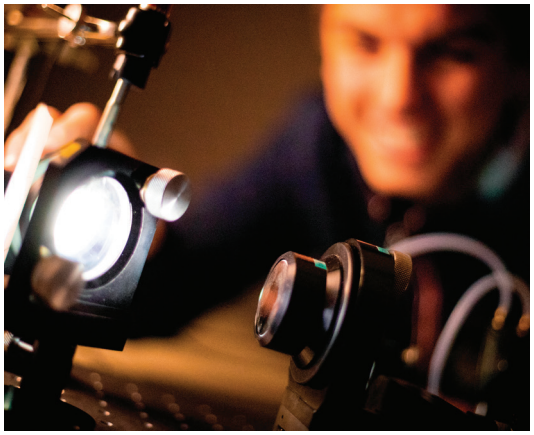
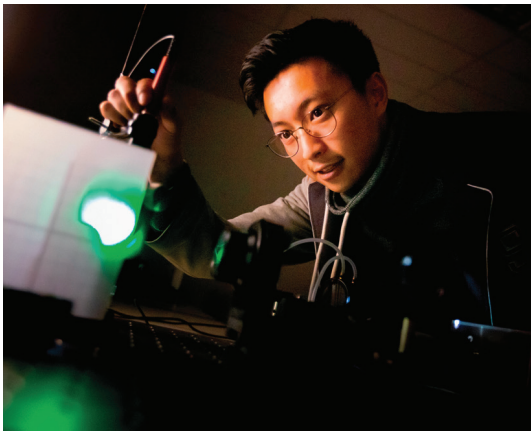
PHOTONICS & OPTRONIC SYSTEMS

Our lecturers from the world of research and business are experts in teaching advanced technologies.

In addition, our students benefit from a work placement (or exchange) abroad: at least 12 weeks for students and 8 for apprentices.

AREAS OF TRAINING

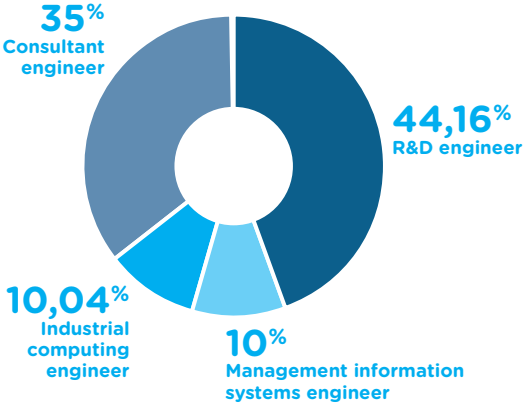
- Source and laser technology.
- Optical engineering and photonics.
- Detectors and sensors.
- Data processing, analysis and representation.
- Tools for optronics engineering.
- Applications of optronics.

AREAS OF APPLICATION

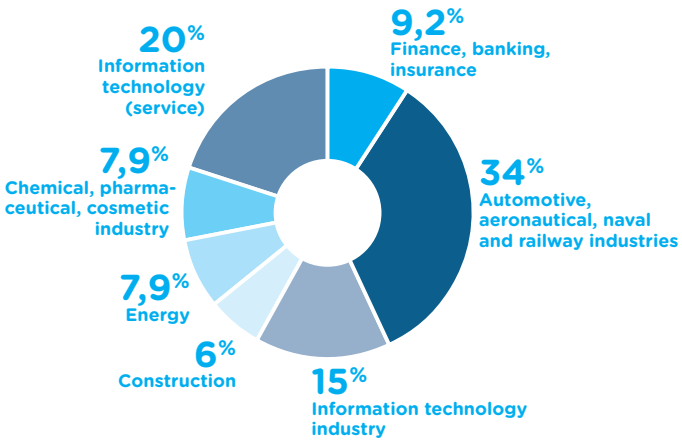
- Optical and optronic systems.
- Image processing.
- Optical telecommunications.
- Optics/photonics for the medical sector.
- Optics/photonics for the environment.

SCHOOL'S FIGURES FOR INTEGRATION INTO THE WORKPLACE

GRADUATES' OCCUPATIONS*



AREAS OF ACTIVITY*



PERCENTAGE EMPLOYED

Since 2017, over 90% in employment within 6 months of graduating.

*From the 3-year average of the professional integration surveys.

POLYTECH®
PARIS-SACLAY

PHOTONICS & OPTRONIC SYSTEMS

THE MAIN COURSES

Apprentices

Years 1 2 3

Languages and communication
English, second foreign language, theory and practice of communication.

Professional project and professional integration

Management of projects, information, people and economic factors
Economics, strategy, marketing, project management, cost management, business games, law, sustainable development, entrepreneurship, business creation, human resources management, Innovation management:

Basic sciences
Analysis, probability, electromagnetic waves, physics, basic programming, numerical calculation.

Electronic and IT tools
Analogue electronics, programmable logic and FPGA, drives, CAD, digital signal processing, microcontrollers, algorithms, C language, UML, databases, digital computing.

Optics and photonics
Instrumental optics, Fourier optics, light sources and detectors, lasers, fibre optics, nonlinear optics, semiconductor physics, photometry, image processing.

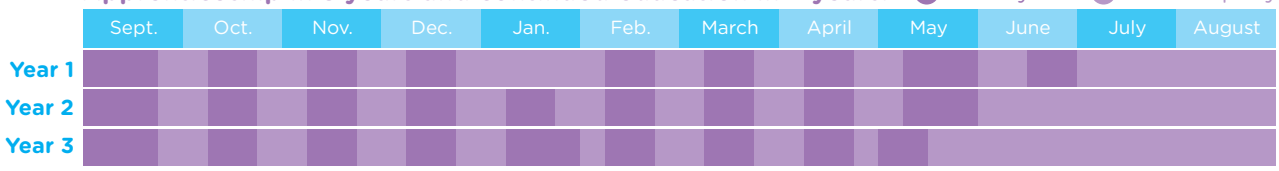
Optical and optronic systems.
Optical design, sensors and optronic systems, laser and advanced instrumentation practical work, industrial projects.

Applications of photonics and optronics
- Biomedical photonics: biophotonics, biomedical optics.
- Photonics for the environment: lighting, atmospheric optics, photovoltaic systems.
- Optical telecommunications: telecommunications media, HF transmission technology.

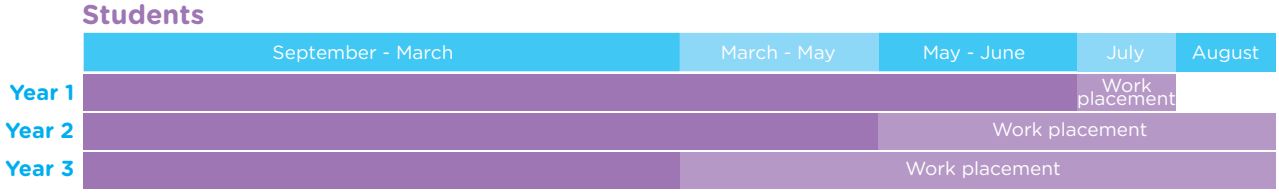
Projects

THE ENGINEERING CYCLE TIMETABLE AT POLYTECH PARIS-SACLAY

Apprenticeship in 3 years and continued education in 2 years. At Polytech / In a company



Students



Our students benefit from an international work placement (or exchange) with our partners (12 weeks for students and 8 for apprentices).

POLYTECH PARIS-SACLAY

Contacts

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