Light Sciences and Technologies



The international Graduate Program in Light Sciences and Technologies is an integrated, interdisciplinary Master and Doctoral Program combining physics, chemistry and biology, provided by both academic and industrial experts.

In partnership with the "Grande Ecole" Institut d'Optique Graduate School, this program focuses on knowledge, innovation and entrepreneurship in light sciences and technologies.







Fields of expertise

- > Extreme regimes of light
- Light generation manipulation and detection
- Light imaging and biophotonics

Career prospects

Upon completion, graduates may pursue positions in both the public and private sectors in the following domains:

- Communications, information processing and data storage
- Defense and national security
- > Energy
- › Health and medicine
- Advanced manufacturing
- Advanced photonics measurements and applications
- Strategic materials for optics
- Displays

Facts and figures

- A history of excellence in lasers, photonics and light bio-imaging starting with the construction of the Megajoule Laser in 1995.
- Presence of the ALPHA -RLH (Route des Lasers & des Hyperfréquences), a technology cluster specializing in photonics, lasers, microwave and digital technologies, launched in 2005.
- High-quality, specialized research and training provided in the sciences and technologies of light with the establishment of an Institut d'optique "Grande Ecole" antenna in 2011.
- "Laser, Photonics and Medical Imagery" selected as one of the 10 smart specializations of the Nouvelle-Aquitaine region in 2015, further boosting investments in research and training.

For more information: contact.light-st@u-bordeaux.fr

