

# The Basics of optics

2 DAYS (14H)

Ref. LSL-02

## OBJECTIVES

- Acquiring or broadening scientific knowledge in the field of optics
- Understanding optical phenomena and their application

## PUBLIC

- Operators
- Technicians, engineers, or other profiles with no prior knowledge of optics

## EVALUATION

- Knowledge check
- Satisfaction evaluation
- Training completion certificate

## INSTRUCTORS

- Experts in optics, photonics, and lasers

## COURSE CONTENT

- Light and light sources:
  - Nature of light
  - Different types of sources
- Fundamentals of geometric optics:
  - Light propagation (ray concept)
  - Reflection, refraction, total internal reflection
  - Associated components: mirrors, lenses, fibers
- Photometry and spectroscopy:
  - Notions of light spectrum (continuous and discrete)
  - Photometric quantities
  - Applications
- Basics of wave optics:
  - Electromagnetic waves
  - Interference
  - Diffraction
  - Polarization
  - Associated components (as needed)

## METHODS & RESSOURCES

- Theoretical input without mathematical formulas
- Illustration of certain optical phenomena through experiments

## More Info

- Location : Campus Universitaire de Bordeaux-Talence (33-France)
- Dates : Contact us.
- Prerequisites : none
- Price 2024 : 1 120 € HT