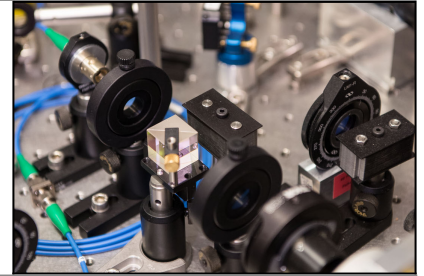


SC1 | Optomechanics



NIVEAU : BASIC

Publics : Engineer or technician in design office, R&D, wishing to get specialized in optomechanics

Prérequis : Basic knowledge in optics and mechanics

Responsable(s) pédagogique(s) : Sébastien De Rossi - Enseignant-chercheur à l'Institut d'Optique

Langue de la formation : French

Capacité maximum : 12

Prix : 1820€ HT - **Durée :** 4 days - 28 h

Objectifs

Learn the methods and means to specify, design and characterize an optomechanical system

Thèmes abordés

Optics

Optical surfaces and mechanical manufacturing

Mechanics

Optomechanics



SC1 | Optomechanics

Le programme

Optics

- ▶ Basics concepts of ray optics
- ▶ Image formation (paraxial approximation)
- ▶ Principles, description and characteristics of the fundamental optical instruments (pupils and stops)
- ▶ Introduction to aberrations
- ▶ Introduction to photometry
- ▶ Optical surface manufacturing; optical metrology

Mechanics

- ▶ General mechanics
- ▶ Thermics
- ▶ Mechanical properties of materials
- ▶ Motorization

Optomechanics

- ▶ From specifications to the optomechanical definition
- ▶ Stages of optomechanical design
- ▶ Materials
- ▶ Modeling and dimensioning
- ▶ Implementation plan

Méthodologie et évaluation

General lectures

Tutorials

Optical workshop visit