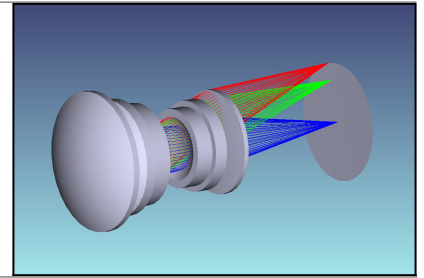


C01 | Optical design with Zemax®-OpticStudio - Introduction



NIVEAU : BASIC

Publics : Technician, engineer, researcher, teacher, PhD student, led to design an optical system from a given specification

Prérequis : Basic knowledge in geometrical optics

Responsable(s) pédagogique(s) : Thierry Lépine - Enseignant-chercheur à l'Institut d'Optique

Langue de la formation : French

Capacité maximum : 12

Prix : 1380€ HT - **Durée :** 3 days - 21 h

Objectifs

- ▶ Be able to design and/or analyze a simple optical system
- ▶ Know about optical aberrations, quality criteria for an optical system, optical design methods
- ▶ Know how to use Zemax®-OpticStudio® in sequential mode

Thèmes abordés

Optical aberrations

Image quality criterion

What is an optical computing software?

Specification, starting point, optimization, tolerancing

Design methods



CO1 | Optical design with Zemax®-OpticStudio - Introduction

Le programme

Academic reminders: geometrical optics, theory of aberrations

Case studies with Zemax software

- ▶ Getting started with the software: study of a simple lens
- ▶ The doublet and its tolerancing
- ▶ The Newton or Cassegrain telescope, associated field correctors
- ▶ The Cooke triplet
- ▶ Choice from: 3-mirror anastigmat telescope (TMA) including freeform surfaces, or: study of stray light using non-sequential Zemax mode

Méthodologie et évaluation

Lectures

Hands on with Zemax®-OpticStudio® software