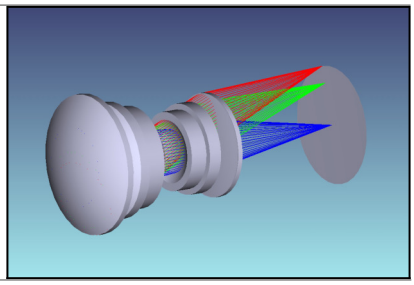
INSTITUT d'OPTIQUE GRADUATE SCHOOL | Continuing Education
Formation Continue

CO1 | Optical design with Zemax®-OpticStudio - Introduction



LEVEL: BASIC

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

Prerequisites: Basic knowledge in geometrical optics

Pedagogical manager(s): Thierry Lépine - Enseignant-chercheur à l'Institut d'Optique

Language of the training: French

Maximum capacity: 12

Price: 1380€ HT - **Duration:** 3 days - 21 h

Objectives

- 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

Next sessions

- 20 may 2019 au 22 may 2019 - Saint-etienne

Addressed topics

Optical aberrations
Image quality criterion
What is an optical computing software?
Specification, starting point, optimization, tolerancing
Design methods

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The program

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

Methodology and assessment

Lectures
Hands on with Zemax®-OpticStudio® software

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