INSTITUT d'OPTIQUE GRADUATE SCHOOL | Continuing Education
Formation Continue

EF3 | Radiometry and photometry



LEVEL: BASIC

Audience: Engineers or technicians wishing to master radiophotometry for applications in metrology, materials, aeronautics, surveillance, defense, medical biology, transportation...

Prerequisites:

Pedagogical manager(s): Isabelle Ribet - Experte Onera, enseignante à l'Institut d'Optique

Language of the training: French

Maximum capacity: 12

Price: 2150€ HT - **Duration:** 5 days - 35 h

Objectives

- Understand and deepen the basics of radiometry and photometry
- Know how to choose and to use commercial instruments (luxmeters, luminancemeters, spectroluminancemeters, colorimeters)
- Know how to develop dedicated test benches (characterisation of lighting sources or optical components, metrology, instruments calibration...)

Next sessions

- 13 may 2019 au 17 may 2019 - Palaiseau

Addressed topics

Basics of radiometry and metrology
Spectrophotometry
Sources, surfaces/media, detectors
Colorimetry
Industrial and commercial applications

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The program

Radiometry

- Basics of radiometry: general laws, physical quantities, sets of units
- Metrology and main types of photometers
- Spectrophotometry
- Sources
- Surfaces and media
- Detectors: principles of operation and main characteristics
- Colorimetry
- Exercices
- Applications
- Détectors

Labwork

- Luminance and intensity measurements
- Lighting sources characterisation
- Photometric characterisation of two objectives

Methodology and assessment

Courses and exercices
Interactive demonstrations
Labwork

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