Continuing Education
Formation Continue

EF3 | Radiometry and photometry

NIVEAU : DÉBUTANT

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

Prérequis :

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

Langue de la formation : Français

Capacité maximum : 12

Prix : 2150€ HT - **Durée :** 5 days - 35 h

Objectifs

- 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...)

Dates et lieu des prochaines sessions

- 13 mai 2019 au 17 mai 2019 - Palaiseau

Thèmes abordés

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

EF3 | Radiometry and photometry

Le programme

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

Méthodologie et évaluation

Courses and exercices
Interactive demonstrations
Labwork