

SC10 | Acquisition, perception and image processing



Nouveau Programme

NIVEAU : BASIC

Publics : Senior technician, engineer, project manager

Prérequis : Basic knowledge in physics and mathematics (bachelor)

Responsable(s) pédagogique(s) : Guy Le Besnerais - Ingénieur expert Onera, Matthieu Boffety - Enseignant-chercheur à l'Institut d'Optique

Langue de la formation : French

Capacité maximum : 12

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

Objectifs

- ▶ Acquire quickly and simply the basics of digital imaging
- ▶ Learn about image processing
- ▶ Understand and use vocabulary specific to image processing
- ▶ Allow a better dialogue with experts in the field

Thèmes abordés

Acquisition, visualization and images perception

Digital imaging modes and their applications

Image processing: basic concepts and vocabulary



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Le programme

Introduction

- ▶ The image and its applications

The image chain

- ▶ Acquisition, transmission, visualization, human perception

Model of image formation by an optical sensor

Basic operations of image processing

Vocabulary of computer vision

Introduction to unconventional imaging modes

- ▶ Multispectral, polarimetry, active imaging (lidar, radar)

Méthodologie et évaluation

Lectures

Demonstrations and exercises of application on image processing software