

## 30263 - Computer Vision

### Syllabus Information

**Academic Year:** 2019/20

**Subject:** 30263 - Computer Vision

**Faculty / School:** 110 - Escuela de Ingeniería y Arquitectura

**Degree:** 439 - Bachelor's Degree in Informatics Engineering

**ECTS:** 6.0

**Year:** 4

**Semester:** Second semester

**Subject Type:** ---

**Module:** ---

### 1.General information

#### 1.1.Aims of the course

#### 1.2.Context and importance of this course in the degree

#### 1.3.Recommendations to take this course

### 2.Learning goals

#### 2.1.Competences

#### 2.2.Learning goals

#### 2.3.Importance of learning goals

### 3.Assessment (1st and 2nd call)

#### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

### 4.Methodology, learning tasks, syllabus and resources

#### 4.1.Methodological overview

#### 4.2.Learning tasks

#### 4.3.Syllabus

The course will address the following topics:

- Image formation and acquisition
- Colour models
- Basic image processing
- 2D image recognition
- Morphology
- Contour detection
- Feature detection
- Feature-based recognition
- 3D Vision

#### 4.4.Course planning and calendar

#### 4.5.Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

<http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=30263&Identificador=15427>

- [BB] 1. Szeliski, Richard. Computer vision : algorithms and applications / Richard Szeliski London : Springer, cop. 2011
- [BB] 2. Forsyth, David A.. Computer vision : a modern approach / David A. Forsyth, Jean Ponce . - 2nd ed. Upper Saddle River : Prentice Hall, 2012
- [BB] 4. Bradski, G. Learning OpenCV: Computer Vision with the OpenCV Library / G. Bradski and A. Kaehler O'Reilly Media, Inc. 2008.
- [BB] González, Rafael C.. Digital image processing / Rafel C. González, Richard E. Woods. . 3rd ed. Upper Saddle River (New Jersey) : Pearson Prentice Hall, cop. 2010.

Listado de URL

- Transparencias y apuntes de la asignatura. Enunciados de prácticas [<http://add.unizar.es>]