# **COURSE DETAIL**

### **MEDICAL IMAGE PROCESSING**

Country

Spain

Host Institution Carlos III University of Madrid

**Program(s)** Carlos III University of Madrid

**UCEAP Course Level** Upper Division

UCEAP Subject Area(s) Bioengineering

**UCEAP Course Number** 109

UCEAP Course Suffix

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UCEAP Official Title MEDICAL IMAGE PROCESSING

UCEAP Transcript Title MED IMAGE PROCESS

**UCEAP Quarter Units** 5.00

**UCEAP Semester Units** 

#### **Course Description**

This course provides an introduction to medical image processing and approaches to visual perception. It covers image sampling and quantization, interpolation and geometrical transformations, image enhancement in the spatial domain (point processing and filtering), color and image file formats, image enhancement in the frequency domain and image compression. Other topics include medical image segmentation and morphological processing and medical imaging modalities (conventional radiology, CT, nuclear imaging, MR and US). Previous coursework in bioengineering and systems and signals is required.

#### Language(s) of Instruction

English

Host Institution Course Number 14158

Host Institution Course Title MEDICAL IMAGE PROCESSING

#### **Host Institution Campus**

Escuela Politécnica Superior. (Leganés)

**Host Institution Faculty** 

#### **Host Institution Degree**

## Host Institution Department

Bioingeniería e Ingeniería Aeroespacial

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