

# BIOMEDICAL TECHNOLOGY

Biomedical technology deals with innovation in biomedical technologies especially trends in the development of new devices or solutions that solve specific unmet needs.

- > ECTS credits: 2
- > Dates: 27 June to 1 July 2022

## Meet Our INSTRUCTORS



**María J. Ledesma Carbayo** is full professor at UPM and researches at the Biomedical Research Networking Center, where she leads several research lines in the Biomedical Imaging Technologies group. She holds a BS in Telecommunication Engineering, and MS in Biomedical Engineering (Patras University and UNED (Spain)). She holds a PhD from Universidad Politécnica de Madrid in 2003. Her main research motivation relates to improving health care delivery through advances in biomedical imaging technologies. She is currently leading the Madrid Hub of Catalyst Europe program.



**Juan José Gómez Valverde** is assistant professor at UPM and a researcher in the Biomedical Research Networking Center in Bioengineering, Biomaterials and Nanomedicine. He graduated in Telecommunication Engineering and completed a BS in Biomedical Engineering at UPM. He received his PhD from UPM for his contribution with new image processing methods for computer-aided screening. His main research interests are related to screening for diseases, biomedical image processing, artificial intelligence, optical image analysis and telemedicine.



**María García de Pablo** holds an MSc in Telecommunications Engineering from UPM and an MSc in Biomedical Engineering from the University of Patras in Greece and an Executive MBA from the IE Business School. Maria joined Medtronic in 2002 as sales manager and product specialist in CRDM (Cardiac Rhythm Disease Management). In 2008, Maria assumed leadership of the Clinical Science Department at the national level. Since 2011, she has managed the Therapy Development Department. In 2015 María joined the Integrated Health Solutions Division as Head of the Business Development Department for Iberia. Since 2019 she has been Iberia Diabetes Business Director at Medtronic promoting the adoption of Diabetes products working together with the different stakeholders.

## LEARNING OUTCOMES

### Learn

Design and development issues



Medical devices

### Understand

Unmet clinical needs



Development innovative health technology

### Gain

Insight



Practical real-world technological applications

## SYLLABUS

### MODULES

01

I Introduction to the biomedical technologies field

II Current technologies and future trends in the biomedical imaging field

02

I Biomedical technologies social and environmental risks. Global social impact

II A workshop to identify and design new biomedical technology by teams

03

I Industry Talk by María García de Pablo, Medtronic: The role of biomedical engineering in a Medtech company. Innovation in healthcare solutions and in business development