

# Branch: Mechanical Engineering



**Code :** MTSSYS

**Option :** Medical technology and support systems

**level :** Master

**Prerequisites :**

**Opportunities :**

As a graduate, you will have opportunities in the research and development departments of medical technology companies.

In addition, you will have interesting career opportunities in the following areas: At universities and research institutes, with public authorities, in the service sector.

Did you develop a business idea during your studies and would you like to start a company? We will also support you in this process!

**Description :**

Technology for people! Would you like to develop devices to improve the quality of life or new methods of medical treatment, develop exoskeletons or manufacture implants with the 3D printer? Learn everything you need to work interdisciplinary in the field of medical technology! What does this degree programme consist of?

The Master's degree in Medical Technology and Assistive Systems provides you with a comprehensive interdisciplinary education to develop future solutions in the field of medical technology and assistive systems. You will delve into the following areas: minimally invasive surgery, biocompatibility and resorbability,

and sterilizability of new materials with which implants can be made from the 3D printer. You will learn how systems and exoskeletons are being developed for rehabilitation or physical assistance for carers and the elderly, and what regulatory requirements exist to be able to commission medical technology products.

**Quality and competences :**

Graduates will

understand how devices work, know the basic algorithms for programming them and be able to apply them to the problems encountered,

develop solutions in the field of plastics technology, are able to critically evaluate issues of materials technology and appreciate the approval and legal requirements in the manufacture of medical devices,

are able to design software-aided kinematic processes for gears and robots using Matlab calculation libraries and Catia design methods.

are able to independently approve medical devices or at least consult appropriate bodies.