



## INGÉNIERIE TISSULAIRE ET BIOMATÉRIAUX

### TISSUE ENGINEERING AND BIOMATERIALS

Lecturers: Emmanuelle LAURENCEAU, Vincent FRIDRICI

| Lecturers : 24.0 | TC : 0.0 | PW : 0.0 | Autonomy : 4.0 | Study : 0.0 | Project : 0.0 | Language : FR

#### Objectives

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The objective of this course is to address the problems of repair and replacement of biological tissues, as well as to give the bases and principles of tissue engineering through different examples (orthopedics, vascular, dental, skin)

**Keywords :** Material-living interactions, biomaterials, tissue reconstruction, prostheses

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#### Programme

Cells and extracellular matrix  
Biocompatibility and biomaterials  
Biomaterials in dentistry  
Bone tissue engineering and mechanical behavior  
Vascular prostheses, orthopedic ...  
Skin tissue engineering and tribology

#### Learning outcomes

- Know the basics of cellular functioning - Explain the principles of tissue engineering - Select a biomaterial for a given application - Evaluate a scientific publication

#### Independent study

Objectifs :

Méthodes :

#### Core texts

#### Assessment

Final mark = 100% final written exam