

## **Molecular Detection, Bioinformatics, Biological Markers**

SCHOOL Polytech Graduate School of Engineering	CAMPUS Santé - Health Campus	Spring (S2)
<ul> <li>&gt; Degree course: Biology and Heat</li> <li>&gt; Teaching unit: Biology</li> <li>&gt; Course language: English</li> <li>&gt; Duration (hours): 63</li> <li>&gt; ECTS: 7</li> <li>&gt; Teacher(s): must be requested</li> </ul>	alth System at Bachelor's degree level	
<ul> <li>Assessment:</li> <li>Continuous assessment</li> <li>Final exam</li> </ul>	<ul> <li>Teaching methods:</li> <li>Lecture course hours</li> <li>Tutorial course hours</li> <li>Practical work hours</li> </ul>	Case study Project

# **COURSE DESCRIPTION**

This course will examine PCR, qPCR, sequencing, pyrosequencing, Molecular biology and computer tools, cell signaling, oncogene, tumor supressor genes, biomarqueurs.

### **OBJECTIVES**

#### Molecular detection:

At the end of the course, students will have in-depth knowledge of the various techniques of molecular identification of microorganisms and will be able to set a PCR experiment by themselves.

Bioinformatics: This course will give a detailed overview of the computer tool in the field of biology.

Biomarkers: Students will analyse and understand the scientific process. They will understand the molecular and physiological mechanisms of the cell in pathological context and they will analyse scientific and clinical studies to understand the new concepts of modern biology.

### **PREREQUISITES**

#### biology