

CES9AJ BIOMIMICRY

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Biomimicry: From Life to nanotechnology innovations

Crédits : 4 ECTS

Semestre : S7 + S9

Durée : 36 heures

Person(s) in charge:

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Keywords :

Prerequisites :

Objectives:

Program and contents:

- Introduction : Biomimetic and bioinspired
- Bioinspiration: fracture and impact resistance
- Armor and Defense
- Aero and Fluid dynamics
- Attachement
- Sensors and optical devices
- Biomedical applications
 - Bioglass*
 - Tissue engineering scaffolds*
 - Vesicles for drug delivery*
- other interesting bioinspired or biomimetic applications
- Bioinspiration from the molecular level
- Conclusions and perspectives

Abilities:

Levels	Description operational verbs
Know	
Understand	
Apply	
Analyse	
Summarize	
Assess	

Assessments:

☐ Written Test	☐ Continuous Control	☒ Oral Report	☐ Project	☐ Written Report
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