



Présentation

Seules les trois premières années sont ouvertes au titre de l'année 2023-2024.

Programme

1ere annee

Semester 1

Transversal and languages disciplines

- Comprehensive English 4 ECTS

Biology chemistry

- Introduction to life sciences and health 1.5 ECTS
- Inorganic and analytical chemistry 4.5 ECTS
- Experiments in inorganic and analytical chemistry 2.5 ECTS

Support disciplines

- Calculus (IV) 5.5 ECTS
- Fundamentals of Object-oriented Programming in C++ 2.5 ECTS

Semester 2

Transversal and languages disciplines

- Methodology (I) 1.5 ECTS

Biology chemistry

- Organic chemistry 3.5 ECTS
- Experiments in organic chemistry 2.5 ECTS
- Experiment in general biology (I) 2.5 ECTS
- General biology (I) 4 ECTS

Support disciplines

- Probability Theory 3 ECTS
- Medical physics 4.5 ECTS
- Experiment of physics (I) 2.5 ECTS

2eme année

Semester 3

Transversal and languages disciplines

- PIX digital skills 1.5 ECTS

Biology chemistry

- Chemistry biology : at the origins of life 1.5 ECTS

- Biochemistry (I) 3.5 ECTS
- Experiments in biochemistry (I) 2 ECTS
- Cellular biology 4 ECTS
- Experiments in cellular biology 2 ECTS

Support disciplines

- Thermochemistry 2.5 ECTS
- Structure of matter 1.5 ECTS
- Mathematics for biology (MSV10-I) 1.5 ECTS

Semester 4

Support disciplines

- Bioinformatics 2.5 ECTS

PPEI (Personal study and integration project)

- PPEI (Personal study and integration project) 2 ECTS

Transversal and languages disciplines

- Methodology (II) 1 ECTS

Biology chemistry

- Genetics 3 ECTS
- Experiments in genetics 2.5 ECTS
- Microbiology 3 ECTS
- Experiments microbiology 1.5 ECTS
- Biochemistry (II) 3 ECTS
- Molecular Biology 4 ECTS
- Laboratory for Molecular Biology 2 ECTS
- Experiments in biochemistry (II) 2 ECTS

3eme année

Semester 5

Support disciplines

- Mathematics for biology (MSV10-II) 1.5 ECTS

Transversal and languages disciplines

- History of science 1.5 ECTS

Biology chemistry

- Plant physiology (I) 2.5 ECTS
- Immunology lab 2 ECTS
- Anatomy and physiology 4 ECTS
- Immunology 3 ECTS
- Laboratory for anatomy and physiology 2.5 ECTS
- Virology 4 ECTS
- Laboratory for molecular biology 2 ECTS

Semester 6

Transversal and languages disciplines

1 option(s) au choix parmi 2

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|---------------|----------|
| - French (I) | 2.5 ECTS |
| - Chinese (I) | 2.5 ECTS |
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Biology chemistry

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|-------------------------------------|----------|
| - Principale of gene engineering | 2.5 ECTS |
| - Plant physiology (II) | 2.5 ECTS |
| - Genomics | 3 ECTS |
| - Introduction to synthesis biology | 2.5 ECTS |
| - Animal physiology (II) | 3 ECTS |
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PPEI (Personal study and integration project)

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|---|--------|
| - PPEI (Personal study and integration project) | 2 ECTS |
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Support disciplines

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| - Bio computing (sequence analysis) | 2.5 ECTS |
| - Optics and radiation | 2.5 ECTS |

4eme année

Semester 7**Biology chemistry**

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| - Neurobiology | 2.5 ECTS |
| - Regulation of gene expression | 3.5 ECTS |
| - Principle of cell engineering | 2.5 ECTS |
| - Comprehensive experiments in bioscience | 2.5 ECTS |
| - Stem cells & regenerative medicine | 2.5 ECTS |
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Transversal and languages disciplines

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| - Experimental processes | 2 ECTS |
| - Choix langues | |
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PPEI (Personal study and integration project)

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| - PPEI (personal study and integrative project) | 2 ECTS |
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Semester 8**PPEI (Personal study and integration project)**

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| - PPEI (Personal study and integration project) | 2 ECTS |
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Transversal and languages disciplines

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| - English for European certification | 3.5 ECTS |
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Biology chemistry

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| - Undergraduate thesis (16w) Chinese and French management | 20 ECTS |
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