

M2 - Systems & synthetic biology

- formation initiale
- formation continue



Présentation

[Consulter la page du Master 2 sur le site de l'Université Paris-Saclay](#)

[Télécharger le règlement des études 2021-2022](#)

Programme

Semestre 3

Elective Modules 12.5 ECTS

- Choix 4

5 option(s) au choix parmi 11

- Network Systems : Modeling and Analysis 2.5 ECTS
- Statistical Analysis of Large Scale Gene Expression Data 2.5 ECTS
- Cell Factory Design 2.5 ECTS
- Environmental Biotech and Upstream Processing 2.5 ECTS
- Computational Inference and Modeling of Biological Networks 2.5 ECTS
- Industrial Biotech and Downstream 2.5 ECTS
- Chips for Molecular Evolution 2.5 ECTS
- Computational Protein Design 2.5 ECTS
- Design of Experiments and Machine Learning in Synthetic 2.5 ECTS
- Nanobiology 2.5 ECTS
- Rational Protein Engineering 2.5 ECTS
- Choix 1

5 option(s) au choix parmi 11

- Network Systems : Modeling and Analysis 2.5 ECTS
- Statistical Analysis of Large Scale Gene Expression Data 2.5 ECTS
- Cell Factory Design 2.5 ECTS
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- Industrial Biotech and Downstream 2.5 ECTS
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- Computational Protein Design 2.5 ECTS
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- Nanobiology 2.5 ECTS
- Rational Protein Engineering 2.5 ECTS
- Choix 3

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- Network Systems : Modeling and Analysis 2.5 ECTS
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- Computational Protein Design 2.5 ECTS
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- Nanobiology 2.5 ECTS
- Rational Protein Engineering 2.5 ECTS
- Choix 5

5 option(s) au choix parmi 11

- Network Systems : Modeling and Analysis 2.5 ECTS
- Statistical Analysis of Large Scale Gene Expression Data 2.5 ECTS
- Cell Factory Design 2.5 ECTS
- Environmental Biotech and Upstream Processing 2.5 ECTS
- Computational Inference and Modeling of Biological Networks 2.5 ECTS
- Industrial Biotech and Downstream 2.5 ECTS
- Chips for Molecular Evolution 2.5 ECTS
- Computational Protein Design 2.5 ECTS
- Design of Experiments and Machine Learning in Synthetic 2.5 ECTS
- Nanobiology 2.5 ECTS
- Rational Protein Engineering 2.5 ECTS
- Choix 2

5 option(s) au choix parmi 11

- Network Systems : Modeling and Analysis 2.5 ECTS
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Core Modules

- Metabolic Engineering 3.5 ECTS
- Biosafety. Sociological Questions on Synthetic Biology 2 ECTS
- Synthetic Biology Practical Course 5 ECTS

- Biological Parts and Devices	3.5 ECTS
- Genome Engineering	3.5 ECTS

Refresher Courses

- Introduction to Biology
- Introduction to Mathematics and Computer Science for Biology

Semestre 4

Research Internship	30 ECTS
- Research Internship	30 ECTS