

Field of study **Sciences and engineering**

Training available in

Initial training

Recognition of prior learning

**How to apply :**

<https://www.univ-gustave-eiffel.fr/en/formation/applications-and-enrolment/applications>

**Course venue :**

Campus Marne la Vallée - Champs sur Marne - Bâtiment  
Lavoisier 5 Boulevard Descartes 77420 Champs-sur-Marne

**Calendar :**

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**More information :**

For further details :

<https://www.univ-gustave-eiffel.fr/international/etudiants-internationaux>

Service Information,

Orientation et Insertion Professionnelle (SIO-IP) :

[sio@univ-eiffel.fr](mailto:sio@univ-eiffel.fr) / Tel : +33 1 60 95 76 76



## Bachelor's degree Mathematics



UFR de Mathématiques (MATHS)

Bachelor's degree L1 L2 L3

### TO GET THERE

Target group: high school diploma holders. Expected skills: The high school diploma specialities required are Mathematics and Life and Earth Sciences (possibly Physics-Chemistry). The Complementary Mathematics option is strongly recommended.

### ACQUIRED SKILLS

Acquisition of a sound scientific background in Mathematics and Health Sciences. Ability to apply a scientific approach. Presenting a project orally and in writing. Mathematics: mastering the fundamental concepts of analysis, algebra, probability and statistics. In Health Sciences: mastering the fundamental concepts needed to enter the second year of medical studies.

### YOUR FUTURE CAREER

Admission (subject to selection) to the second year of medical studies (Medicine, Midwifery, Odontology, Pharmacy) at Université Paris-Est Créteil. Continuing on to a Licence in Mathematics, followed by a Master's degree in Mathematics (Teaching Professions, Actuarial Science, Analysis, Probability and Statistics, Finance, etc.)

### BENEFITS OF THE PROGRAM

This programme offers access to medical courses while also enabling students to study for a Licence in Mathematics. During the Licence, students may apply twice for medical courses. The requirement for admission is to have passed the current undergraduate year, in particular the Health module. Candidates from the various Computer Science Health access option programmes are then selected on the basis of their average grade in the current undergraduate year and any oral exams. Health courses are taught by the University of Créteil and delivered online. Other courses take place on the Université Gustave Eiffel campus.

More information



# PROGRAM

## SEMESTER 1

### ANALYSE

Calcul Différentiel et Intégral (ECTS:6)

SEQUENCES AND FONCTIONS (ECTS:6)

### ALGEBRE

Méthodologie (ECTS:6)

LINEAR ALGEBRA I (ECTS:6)

### INFORMATIQUE

Algorithmique et Programmation 1 (ECTS:9)

Algorithmique et Programmation 1 (approche par problèmes) (ECTS:9)

Projet Informatique 1 (ECTS:3)

Remédiation Informatique 1

Algorithmique et Programmation 2 (ECTS:5)

Algorithmique et Programmation 12(approche par problèmes) (ECTS:5)

Programmation Web (ECTS:5)

Projet Informatique 2 (ECTS:2)

Remédiation Informatique 2

### COMPETENCES TRANSVERSES

Anglais 1 (ECTS:3)

Anglais 2 (ECTS:3)

UE Ouverture 1 (ECTS:3)

UE Ouverture 2 (ECTS:3)

## SEMESTER 3

### MATHEMATIQUES

Algèbre linéaire 2 (ECTS:8)

Suites, séries, intégrales (ECTS:8)

Labo math-info (ECTS:3)

Fonctions de plusieurs variables – courbes et surfaces (ECTS:8)

Suites séries de fonctions (ECTS:8)

Travaux pratiques encadrés probabilités ou équation différentielles (ECTS:4)

### COMPETENCES TRANSVERSALES

C2I (ECTS:4)

Anglais 1 (ECTS:4)

Anglais 2 (ECTS:4)

### SANTE

SCIENCES BIOMEDICALES 1 (ECTS:3)

- Les tissus

- Le système immunitaire

- Les infections

SCIENCES BIOMEDICALES 2 (ECTS:3)

- Reproduction

- Pharmacologie

- Exploration et imagerie

HUMANITES EN SANTE (ECTS:3)

- Bioéthique

- Epistémologie de la médecine

- Psychologie médicale

## SEMESTER 5

Introduction à la théorie des espaces vectoriels normes (ECTS:6)

introduction à la théorie de l'intégration et probabilités (ECTS:9)

Mathématiques numériques et Python (ECTS:6)

Analyse numérique matricielle (ECTS:6)

Anglais (ECTS:3)

## SEMESTER 6

Statistiques (ECTS:6)

Optimisation

Equations différentielles ordinaires (ECTS:6)

Algèbre (ECTS:6)

Compléments d'intégration et analyse Hilbertienne (ECTS:6)

Stage (ECTS:6)

TPE (ECTS:6)