

Field of study **Sciences and engineering**

Training available in

Apprenticeship

Initial training

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 Copernic 5 Boulevard Descartes 77420 Champs-sur-Marne

Calendar :

Optional work placement in L3: at least two months, outside class periods. Work-study programme in L3: two days per week at a company.

Contacts :

JUGE Vincent (L2-L3)

BONZOM Valentin (L2)
Academic coordinator

DAVID Claire (L3)
Academic coordinator

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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 / Tel : +33 1 60 95 76 76



Bachelor's degree Computer Science Computer science



Institut d'électronique et d'informatique Gaspard Monge (IGM)

Bachelor's degree L2 L3

TO GET THERE

Admission to L2 is possible after a year of L1 in science, preferably in mathematics and/or computer science.

Admission to L3 is possible on the basis of application after a high school diploma and two years of higher education or equivalent.

External candidates for L2 are expected to master the vast majority of the concepts and skills covered in L1 (and L2 for L3 candidates).

ACQUIRED SKILLS

After completing the course, students are expected to be able to:

- choose appropriate data structures in a given setting, design an algorithm and develop an entire piece of software;
- have some knowledge about all stages of programme compilation;
- design a database and website;
- describe and use computer systems and networks;
- conduct mathematical reasoning, analyse, model and resolve a simple problem;
- work in a team, contribute to a project, present their work and undertake a literature review in French and English.

YOUR FUTURE CAREER

Over 80% of graduating students pursue further studies (source: OFIPE), mainly in various fields of computer science (software, networks, image, fundamental computer science, etc.), with the Master's in Computer Science at UGE or other programmes at other universities.

However, the level of expertise acquired is sufficient to work in the industry straight away (as an IT technician or junior developer for example), even if few students choose this option.

After the L2, students can also apply to study computer science at UGE's engineering school, ESIFE.

BENEFITS OF THE PROGRAM

The course covers both theoretical and practical foundations of computer science. The first three semesters also include a strong mathematics curriculum. The fact that the programme covers both disciplines from the very first year sets it apart from other degrees offered by University Technology Institutes (IUTs), preparatory schools and "general" science Licence degrees. It is the only course in the eastern Paris area to offer such in-depth coverage of computer science and mathematics from the first year on.

More information



PROGRAM

SEMESTER 3

Algorithmique et structures de données (ECTS:3)
Algèbre linéaire 2 (ECTS:6)
Base de données (ECTS:6)
PIX (ECTS:1)
Initiation à la programmation en C (ECTS:6)
Labo Math Info (ECTS:5)
Initiation à la programmation en C (ECTS:6)
Suite séries intégrales (ECTS:6)
Anglais (pas de LV2) (ECTS:3)
Anglais LV1 (ECTS:2)
Langue vivante 2 (ECTS:1)

SEMESTER 4

Algorithmique des arbres (ECTS:6)
Architecture des systèmes informatiques (ECTS:5)
Mathématiques pour l'informatique (ECTS:5)
Perfectionnement à la programmation en C (ECTS:6)
Automates et langages (ECTS:5)
Anglais (sans LV2) (ECTS:3)
Anglais (si LV2) (ECTS:2)
Langue vivante 2 (ECTS:1)

SEMESTER 5

Complements in C programming
Complements in automata theory
Object-oriented programming (ECTS:6)
Advanced C programming (ECTS:6)
Syntactic analysis (ECTS:6)
Computer networks (ECTS:5)
English (ECTS:3)
Tutored project (ECTS:4)
Critical thinking (ECTS:4)
Combinatorics (ECTS:4)
UE Libre (ECTS:4)
Communication in the workplace (ECTS:4)
Introduction à l'image (ECTS:4)

SEMESTER 6

Functional programming (ECTS:5)
Compiling (ECTS:5)
Graph algorithms (ECTS:6)
System programming (ECTS:5)
Advanced databases (ECTS:5)
Advanced Web programming (ECTS:4)
Tutored project (ECTS:4)
Advanced computer architecture (ECTS:4)
Free-choice unit (ECTS:4)
Apprenticeship period (ECTS:4)
Short internship (ECTS:4)
Introduction à l'IA (ECTS:4)