

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 :

M1 in initial training, with completion of a research dissertation, M2 in apprenticeship, 3 weeks at the university then 3 days a week with a company Several training sites: - Cité Descartes: Bois de l'Étang, Camus and Esiee buildings; - Paris: Institut des Systèmes Complexes (several days)

Contacts :

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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 Engineering Sciences Environmental Process Engineering



Institut Francilien des Sciences Appliquées (IFSA)

Bachelor's degree L2 L3

TO GET THERE

The Master's programme is open to two types of student: those with a Licence degree in social sciences and those with a Licence degree in computer science or applied mathematics. In addition to the knowledge and skills specific to each of these Licence degrees, students are required to have an aptitude for digital technology, computer and statistical data processing, and the analysis of social behaviour and processes.

ACQUIRED SKILLS

Know how to use data science methods (machine learning, data mining, network analysis, text analysis) applied to the study of social phenomena, and undertake research in computational sociology.

Conduct technical and organisational audits of data infrastructures.

Understand the social and ethical issues at stake, and know how to analyse the transformations brought about by the development of digital technology, the algorithmic use of massive data, artificial intelligence, etc.

YOUR FUTURE CAREER

Employment opportunities: Data scientist in the public or private sector, Chief data officer in the public or private sector, pursuing a PhD in social sciences, analyst in the web analytics and social listening sector, analyst in a polling institute...

All students benefit from personalised support in their search for employment. Apprenticeships are supervised by a teacher and are designed to prepare students for the world of work. Regular meetings with the professional and research communities are organised (conferences, workshops, study trips).

BENEFITS OF THE PROGRAM

The programme is multi-disciplinary, and offers training open to two types of complementary profiles: students with a background in data science (computer science and applied mathematics) or social science. Some courses are shared with ESIEE engineering students. A combination of technical skills and social analysis, backed by social science and IT research laboratories. Enrolment in the Digital Studies & Innovation for Smart Cities Graduate Programme, which offers merit-based research grants from M1. Organisation of a study trip abroad as part of a data sprint.

More information



PROGRAM

SEMESTER 3

Mathématiques pour les SPI (ECTS:6)
Mécaniques des fluides (ECTS:3)
Mécaniques des solides (ECTS:6)
Communication (ECTS:3)
Economie d'entreprise (ECTS:3)
Gestion de production (ECTS:3)
Anglais (ECTS:3)
Thermodynamique (ECTS:1)

SEMESTER 4

Statistiques pour les SPI (ECTS:3)
Dessin Technique (ECTS:5)
Résistance des matériaux (ECTS:3)
Informatique (ECTS:3)
Ingénierie et enjeux environnementaux (ECTS:3)
Propriétés des matériaux et structures (ECTS:3)
Génie de la réaction chimique 1 (ECTS:3)
Phénomène de transport de chaleur et de matière (ECTS:3)
Thermodynamique appliquée au génie des procédés (ECTS:2)
Physico-chimie des polluants (ECTS:2)

SEMESTER 5

UE Science pour l'Ingénieur 1 (ECTS:10)
- Outils mathématiques 1
- Qualité Sécurité Environnement - Développement Durable
- Mécanique des fluides - Approche énergétique
- Organisation des entreprises
UE Anglais (ECTS:4)
UE Génie de la réaction chimique 2 (ECTS:3)
UE Hydrologie, Hydraulique (ECTS:5)
UE Opérations unitaires pour l'environnement 1 (ECTS:8)

SEMESTER 6

UE Science pour l'Ingénieur 2 (ECTS:6)
- Outils mathématiques 2
- Génie de la réaction biologique
UE Stage Industriel (ECTS:6)
UE Technique de communication (ECTS:2)
UE Automatismes et Système de régulation (ECTS:3)
UE Opérations unitaires pour l'environnement 2 (ECTS:7)
UE Réacteurs réels appliqués à la dépollution (ECTS:4)
UE Outils informatiques pour le GPE (ECTS:2)