

Field of study **Human and social
sciences, architecture, sport**

Training available in

Apprenticeship

Initial training

Continuing education

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 Bois de l'Étang 5 Boulevard Descartes 77420 Champs-sur-Marne BOIS-DE-L'ETANG, BATIMENT ALBERT CAMUS ;ESIEE

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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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



UFR de Sciences Humaines et Sociales (SHS)

Master's degree M1 M2

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."

PROGRAM

SEMESTER 1

Sciences sociales 1

- Sociologie des mondes numériques (ECTS:3)
- Sociologie des sciences et de l'innovation Choix 1 (ECTS:2)
- Sociologie des réseaux Choix 2 (ECTS:2)
- Analyser en sciences sociales 1
- Enquêter en sciences sociales (ECTS:5)
- Méthodologie du mémoire (ECTS:15)
- Traiter les données 1
- Programmation en Python (ECTS:4)
- Statistique pour les SHS (ECTS:3)
- Bases de données (ECTS:3)
- Élargissement des connaissances 1
- Culture juridique (ECTS:2)
- Anglais (ECTS:3)

SEMESTER 2

Analyser en sciences sociales 2

- Méthodologie du mémoire (ECTS:15)
- Enquêter par les données (ECTS:5)
- Traiter les données 2
- Formats de données (ECTS:2)
- Visualisation de données (ECTS:3)
- Élargissement des connaissances 2
- Le numérique en entreprise (ECTS:2)
- Anglais (ECTS:2)
- Atelier pré-pro (ECTS:1)
- Stage facultatif

SEMESTER 3

Sociologie (ECTS:6)

- Problèmes sociologiques
- Quantification et action publique

Data science appliquée aux SHS (ECTS:9)

- Analyse de réseaux
- Data sprint

Statistique et informatique (ECTS:6)

- Programmation
- Machine learning 1

Méthode et mémoire (ECTS:9)

- Conduite du projet de recherche
- Anglais

SEMESTER 4

Sociologie (ECTS:6)

- Politique des algorithmes
- Sociologie et éthique des algorithmes

Data sciences appliquées aux SHS (ECTS:9)

- Traces numériques et espace public
- Analyse de larges corpus
- Data sprint

Statistique et informatique (ECTS:6)

- Machine learning 2
- Text mining
- Approches sémantiques de l'IA
- Visualisation de données

Méthode et mémoire (ECTS:9)

- Conduite du projet de recherche
- Mémoire
- Anglais