

Field of study **Sciences and engineering**  
**Management, Economy,**  
**Communication**

Training available in

Apprenticeship

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 Copernic 5 Boulevard Descartes 77420 Champs-sur-Marne

#### Calendar :

Work-study format from the start of M1 (1st year) (24 months) or in M2 (2nd year) (12 months) Thesis defence at the end of M1 (1st year): end of June or July Thesis defence at the end of M2 (2nd year): end of June or July or early September

#### Contacts :

MERLEVEDE Florence (M1)  
Academic coordinator

JEANTHEAU Thierry (M1)  
Academic coordinator

TRAN Viet-chi (M2)  
Academic coordinator

BARTOLI Brigitte (M1-M2)  
Academic secretary  
Brigitte.Bartoli@univ-eiffel.fr  
Phone number : 01 60 95 77 03  
Office : 2B185

#### 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

## Master's degree Actuarial Science Actuarial Science



UFR de Mathématiques (MATHS)

Master's degree M1 M2

#### TO GET THERE

Hold a degree in Mathematics, Mathematics-Computer Science or Mathematics Applied to the Humanities and Social Science. Applications are examined by a committee.

#### ACQUIRED SKILLS

Acquisition of knowledge in Actuarial Mathematics, Random Modelling, Probability, Statistics and Computer Science for data processing.

#### YOUR FUTURE CAREER

Students wishing to continue their studies in Actuarial Science can go on to ENSAE (a school with which we have an agreement) or other programmes. Most go on to the professional world as Actuarial research officers. They will then be able to obtain the title of Actuary through lifelong learning (CNAM) or the CEA.

#### BENEFITS OF THE PROGRAM

The programme is run as a work-study programme from the start of M1 (1st year). Students have a 2-year work-study contract, which in most cases takes the form of either an apprenticeship contract or a professional contract. This work-study programme gives students not only a theoretical grounding in probability theory and statistics, but also sound professional experience favouring their employability.

More information



# PROGRAM

## SEMESTER 1

**Analyse des données et SAS** (ECTS:6)  
**PROBABILITES AVANCEES** (ECTS:6)  
**Statistique inférentielle** (ECTS:6)  
**SERIES TEMPORELLES** (ECTS:4)  
**Assurance vie** (ECTS:6)  
**BASE DE DONNEES** (ECTS:2)

## SEMESTER 2

**Calcul stochastique pour la finance** (ECTS:6)  
**Assurance des biens** (ECTS:5)  
**Gestion actif passif** (ECTS:2)  
**Enterprise Risk Management** (ECTS:2)  
**ANGLAIS** (ECTS:2)  
**Apprentissage statistique et optimisation** (ECTS:6)  
**HACKATHON** (ECTS:1)  
**FORMATION EN ENTREPRISE** (ECTS:6)

## SEMESTER 3

**Simulation et copules** (ECTS:6)  
**STATISTIQUE EN GRANDE DIMENSION** (ECTS:6)  
**Architecture big data** (ECTS:5)  
**Estimation empirique - Valeurs extrêmes** (ECTS:5)  
**ANGLAIS** (ECTS:3)  
**ANONYMISATION ET EQUITE ALGORITMIQUE** (ECTS:5)

## SEMESTER 4

**Théorie de la ruine** (ECTS:3)  
**SERIES TEMPORELLES MULTIVARIEES, MODELES DE DUREES ET CYBER-RISQUE** (ECTS:2)  
**Comptabilité des assurances** (ECTS:4)  
**Assurance collective** (ECTS:1)  
**REASSURANCE** (ECTS:2)  
**Droit** (ECTS:3)  
**Hackathon** (ECTS:1)  
**Formation en entreprise** (ECTS:14)