

Field of study **Sciences and engineering**

Training available in

Apprenticeship

Initial training

Continuing education

#### 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: Work placement - from early May to September M2: Work  
placement - from early February to September

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



## Master's degree Industrial Engineering Industrial Engineering



Institut Francilien des Sciences Appliquées (IFSA)

Master's degree M1

#### TO GET THERE

First year: 80% internal recruitment (L3 of the UGE Engineering Sciences Licence), as well as some students with a Licence in the field of science and technology (Engineering Sciences, Mechanics, etc.).

Second year: 90% internal recruitment (M1 of the UGE Industrial Engineering degree), external recruitment (Campus France, first-year Master's in Industrial Engineering from other French universities).

#### ACQUIRED SKILLS

Executive skills.

"Technical projects" for the environment: planning a project in terms of quality/cost/deadlines, studying the feasibility of the services required, checking the strength of the scenario, coordination and management, etc.

"Sizing": quantifying the behaviour and interactions of a mechanical system, validating calculations, sizing industrial equipment, etc.

"Production": producing the methods and validating the processes needed to put a mechanical system into production, designing parts, etc.

"Materials": choosing materials based on their suitability for shaping using a given process, etc.

"Functional design": drawing up functional specifications with the client, building a functional surface model, specifying the parts of a system, etc.

"Information system": building and managing a technical database, training users, project data administration, etc.

Certifying services and approving products, etc.

#### YOUR FUTURE CAREER

Graduates very quickly find employment related to their studies in a range of fields (see statistics at [www.u-pem.fr/ofipe/](http://www.u-pem.fr/ofipe/)) Sectors:

Metallurgy-Mechanical industry; Automobile-Aeronautics-Shipbuilding-Transport; Nuclear industry; Energy conversion industry

Careers:

design and consultancy (excluding information systems security); design, research and project development; production-related services (development / studies, business manager / project manager, methods / quality, maintenance, energy control, etc.)

#### BENEFITS OF THE PROGRAM

- Innovative teaching methods with a professional focus - project-based teaching: students are organised into groups representing different roles in a company (design office, methods office, quality department, IT department, etc.) and work on concrete projects. - workshops on writing CVs and covering letters, applying for work placements and preparing for interviews. - workshops on documentary research using different media and in different locations - strong ties with the professional world - emphasis on English language teaching

# PROGRAM

## SEMESTER 1

**ANGLAIS TECHNIQUE (ECTS:3)**

**BLOC CONCEPTION DIMENSIONNEMENT**

**CONCEPTION-DIMENSIONNEMENT / DYNAMIQUE DES STRUCTURES (ECTS:3)**

**CONCEPTION-DIMENSIONNEMENT / TRANSFERT DE CHALEUR (ECTS:2)**

**CONCEPTION-DIMENSIONNEMENT / METHODES NUMERIQUES (ECTS:3)**

**CONCEPTION-DIMENSIONNEMENT / GESTION DES DONNEES (ECTS:2)**

**CONCEPTION-DIMENSIONNEMENT / SPECIFICATION FONCTIONNELLE (ECTS:2)**

**CONCEPTION-DIMENSIONNEMENT / ERGONOMIE (ECTS:2)**

**BLOC PRODUCTION MATERIAUX**

**PRODUCTION-MATERIAUX / FAO REJOUABILITE NUMERIQUE (ECTS:3)**

**PRODUCTION-MATERIAUX / PROCEDES DE MISE EN FORME (ECTS:4)**

**PRODUCTION-MATERIAUX / SCIENCE DES MATERIAUX (ECTS:3)**

**PRODUCTION-MATERIAUX / GESTION DES RISQUES-AMDEC (ECTS:3)**

## SEMESTER 2

**MANAGEMENT (ECTS:6)**

- Droit social
- Conduite du changement des organisations
- Tehcniques de communication

**GESTION DE PROJET (ECTS:9)**

- Ingénierie simultanée
- Continuité numérique
- Approfondissement expert - Séminaires

**STAGE (ECTS:15)**