MASTER'S DEGREE IN CIVIL ENGINEERING

Postgraduate degree

estp

CONSTRUCTORS OF A NEW WORLD

ENGLISH TAUGHT PROGRAM
IN CIVIL ENGINEERING

A « Grande école d'ingénieur », a French private university, leader in the construction sector in France, ESTP is offering a 3-year Engineering curriculum (years 3 to 5 in Higher Education) entirely taught in English and dedicated to international students seeking a Master's Degree in Civil Engineering.

This program deals with all fundamental subjects of the built environment including a specialization and a 6-month internship. Through technical courses and soft skills development, ESTP strives to train global civil engineers, ready to work all over the world.

A "study-abroad student" may attend a semester only or a full academic year as an exchange student without graduation. Students attending this program will be able to complete 30 ECTS (European credits) per semester and 60 ECTS per year.

Additionally, French Language classes are organized for non-French speaking students throughout the program.

Courses will be led by teachers or professors from ESTP and our best visiting professors from our partner universities abroad.

WHO CAN APPLY?

- International students with a scientific background holding an equivalent of a Bachelor's degree
- International students from partner institutions
- French students admitted to ESTP

WHERE?

On our campus in Cachan, near Paris. Access RER B, Arcueil-Cachan.
ESTP Paris – 28 avenue du Président Wilson, 94230 Cachan.

WHEN TO APPLY?

- Applications are due by June 30th for degree seeking students and Fall semester applicants and by October 15th for Spring semester applicants:

internationaladmission@estp.fr

- For students admitted after examinations, specific instructions will be sent by the admission department.

WHAT WOULD YOU STUDY?

1ST YEAR

FALL SEMESTER | SEPTEMBER - JANUARY — LAST YEAR - BACHELOR'S DEGREE

INTEGRATION SEMINAR .... **1 ECTS**

SUSTAINABLE CONSTRUCTION CHALLENGES .... **6 ECTS**
Climate Change and Its Impacts, Challenges for cities and territories, Engineering Project and Transitions, Stakeholders and Challenges of the construction project, Business Economics

MATHEMATICS & MODELING .... **3 ECTS**
Mathematics : Analysis and Algebra, Digital Programming – Data Analysis

MECHANICS & MATERIALS **8 ECTS**
Materials Science, Construction Materials Engineering, Vibration Mechanics, Continuum Mechanics

CONSTRUCTION SCIENCES & TECHNIQUES **8 ECTS**
Eurocodes and Technical Design of Structures, Planning and Networks, Thermodynamics, Energy of Electrical Systems

COMMUNICATION & PROFESSIONAL PROJECT **4 ECTS**
Leadership & Communication 1, ESTP Professional Conferences, Portfolio Soft Skills 1, English, French as a Foreign Language, Other Foreign Language

SPRING SEMESTER | JANUARY - MAY

MANAGEMENT & INNOVATION .... **6 ECTS**
General Accounting, Labour Law, Organisation of Construction Sites, Occupational Health & Safety, Design Thinking & Innovation

MATHEMATICS & MODELING .... **7 ECTS**
Digital Analysis, Digital Modeling Project, Probability & Statistics, Digital Signal Processing, Parametric Modeling and BIM

MECHANICS & MATERIALS .... **6 ECTS**
Fluid Mechanics and Hydraulics, Soil Mechanics, Performance of Concrete Materials, Introduction to Research (project)

CONSTRUCTION SCIENCES & TECHNIQUES **7 ECTS**
Strength of Materials, Heat Transfer, Urban Topometry, Production, transmission and distribution of electrical energy, Road Innovation

COMMUNICATION & PROFESSIONAL PROJECT **4 ECTS**
Leadership & Communication 2, ESTP Professional Conferences, Portfolio Soft Skills 2, English, French as a Foreign Language, Other Foreign Language

2ND YEAR

FALL SEMESTER | SEPTEMBER - JANUARY — FIRST YEAR - MASTER'S DEGREE

ENGINEERING FUNDAMENTALS & METHODOLOGY **9 ECTS**
Structural Mechanics, Reinforced Concrete, Research Exposure, Environmental & Sustainable Engineering

SCIENCES & TECHNICAL SKILLS **11 ECTS**
Conceptual Design of Building Structures, Civil Engineering Project 1, Geographic Information Systems (GIS)/City Information Modelling (CIM), Geotechnical Engineering

CORPORATE ENVIRONMENT **6 ECTS**
Business Game, International Law, Project Management, Health and safety at work II

SOFT SKILLS & LANGUAGES **4 ECTS**
English, Intercultural Communication, Professional Skills, Portfolio Soft Skills 3, French as a Foreign Language / Other Foreign language

SPRING SEMESTER | FEBRUARY - MAY

ENGINEERING FUNDAMENTALS & METHODOLOGY **11 ECTS**
Prestressed Concrete, Finite Element Methods, Steel Construction, Geotechnical Engineering II, Research Project

SCIENCES & TECHNICAL SKILLS **9 ECTS**
Civil Engineering Project 2, Smart City, Grid & Building, BIM – Team Work, Structure Dynamics (structure calculus, seismic structure)

CORPORATE ENVIRONMENT **6 ECTS**
Financial Accounting and Organizational Management, Project Management Hackathon, Ethics, Quality Management.

SOFT SKILLS & LANGUAGES **4 ECTS**
English, Public Speaking, Portfolio Soft Skills 4, French as a Foreign Language/ Other Foreign language

3RD YEAR

FALL SEMESTER | SEPTEMBER - FEBRUARY — SECOND YEAR - MASTER'S DEGREE

SCIENCES & TECHNICAL SKILLS .... **9 ECTS**
Hydraulic Design and Experiments, Pathology of Structures, Bridge Design, Roads and Methods.

CORPORATE ENVIRONMENT .... **3 ECTS**
Climate Change Challenges in Civil Engineering, International Major Infrastructure Projects, Lean Management.

SOFT SKILLS & LANGUAGES **3 ECTS**
Internship Report, Portfolio Soft Skills 5, French as a Foreign Language / Other Foreign Language.

MINOR **15 ECTS**
To choose from : Real Estate Development, International Engineering, BIM, Entrepreneurship, Building & Sustainable Cities, Nuclear Civil Engineering

SPRING SEMESTER | MARCH – AUGUST

FINAL PROJECT/ 6-MONTH INTERNSHIP .... **30 ECTS**

estp

CONSTRUCTORS OF A NEW WORLD

CACHAN

28, avenue du Président Wilson, 94 234 Cachan Cedex
+33 1 49 08 56 50
✉ **accueilcampus@estp.fr**

CONTACT

International Admission
Carlos VEGA
✉ **internationaladmission@estp.fr**

JOIN THE FRENCH ENGINEERING SCHOOL COMMITTED TO SUSTAINABLE CONSTRUCTION

OUR ACCREDITATIONS