Innovating in a digital world

Télécom ParisTech

The leading French graduate engineering school in Information and Communication Technologies (ICT)

Master of Engineering – Master of Science – PhD – Advanced Master
Télécom ParisTech: The French leading graduate school in ICT Information & Communication Technology

- Is the 1st innovative graduate engineering school in ICT under the aegis of the minister for Industry

- Situated in Paris, France with an English speaking campus in Nice in the 1st European Technopole; it also shares a campus in China (Shanghai)

- Provides Engineering training at the highest standards: Master of Sc. In Engineering – Master of Science – Post-master degrees – PhD

- Research and teaching at the highest international level in the ICT

- Holds the 1st ICT Incubator in France, with 2-3 start-up created per month

- a distinctive ambition: Innovating in a Digital World! Aim to educate leaders and entrepreneurs in all fields of digital science and technology, in France and beyond
Some of our records

- Founded in **1878**
- The word *Telecommunications* invented here (1904)
- **Digital exchanges** (in the 70’s)
- **Turbocodes, golden codes** (Titanic; NASA ..)
- **Telecom ParisTech graduates … did it !**
- **Founding successful start-up**
  - Linked In : 400 million+ members
  - Netvibes, bought by Dassault Systems
  - Leetchi.com, 4 millions Euros fund raising
  - Deezer, 100 millions Euros fund raising
- **Becoming CEO of major companies:**
  Thales, Alcatel Lucent, Dior Couture, … , McKinsey France, Facebook Mobile, ..
Telecom ParisTech…

*to Innovate in a digital world*

- **ICT major factor of Innovation**, worths **25%** of the French **GDP growth**

- **Telecom ParisTech deals with all sciences & technologies for ICT**: Computer Science, Networks, Communications, Electronics, Signal and Image Processing, Social and Human Sciences as well as the study of the economic and social aspects associated with modern technology

- **French “Ingénieur”**: MEngineering, MScience: 3 years curriculum with high scientific level (maths, physics) **together with strong teaching in economics, humanities and personal development**

- **Highly international**: 48% international students, **160** partner universities abroad

- **High faculty Ratio**: 1/7 (>160 full-time professors / 1,540 students)

- **Highly Innovative**: >300 sustainable companies & **2,700** jobs created in 18 years – 3 start-up per month – **20** patents/year – Research of International excellence (A+)

- **Closely connected to industry & economy**: Research contracts with industry Among the 66,4 Millions Euros operating Budget, **1/3** is **self driven**

**Graduates**: hired with high salary they reach top positions in various companies.
Some famous alumni

- Patrick Drahi, president of Altice (Numericable, SFR, HOT…)
- Jean Bernard Lévy, chairman and CEO of Electricité de France (EDF)
- Michel Combes, CEO of Alcatel Lucent
- Eric Labaye, director of Mc Kinsey Europe
- Jean Beunardeau, director of HSBC Europe

In the past:
- Alain Glavieux, co-inventor of turbo-codes
- Maurice Lauré, creator of the Value Added Tax
Some alumni success in ICT innovation

- They succeeded in the US:
  - Jean-Luc Vaillant & Yan Pujante (co-founders of LinkedIn)
  - Vincent Dureau & Barbara Coppola (in charge of Google TV)
  - Henri Moissinac (former head of Facebook Mobile)
  - Luc Julia (owner of a majority of Apple SIRI patents)
  - Fred Potter (Founder of NetAtmo, awarded at CES Las Vegas)

- They Succeeded in France:
  - Tariq Krim (creator of Netvibes, sold 50 M€ to Dassault Systemes)
  - JC Dufourd (cofounder of Streamezzo, sold to Vodafone for its portal Vodafone Live)
  - Diaa Elyaacoubi (founder of Streamcore)
  - Corentin Raux (founder of « Pretty Simple » and creator of the game « Criminal Case » on Facebook, n°1 worldwide for games on FB in 2013)
Telecom ParisTech moving to Palaiseau in 2019

A new building of 46 200 m² for Institut Mines-Telecom HQ, Telecom ParisTech and some laboratories of Telecom SudParis
Rankings

International

- In 2017, U-Multirank, the largest global university ranking web tool: Telecom ParisTech is ranked 3rd in the world in the Informatics field
- In Paris, the 2nd best student city (QS ranking – 2017)

National

- 1st academic incubator in ICT in France
- At the top of the national rankings of engineering schools: 3rd (Usine Nouvelle, 2017), 5th (L’Etudiant – 2017)
- Best French higher education institution in knowledge transfer (u-Multirank 2017)
Our strong partnerships with industry

- Governance
  - Representatives from industry in boards, working groups, etc.

- Teaching
  - > 500 part-time lecturers from companies
  - Internships and study projects in companies

- Research
  - 18 Teaching and research chairs or Joint Laboratories
  - Member of Competitive Clusters
  - Joint projects

- Entrepreneurship

- Continuing education
Teaching and Research Fields

Computer science & Networking

- Systems, software and services
- Information, communications and computing mathematics
- Networks, mobility and security
- Interaction, cognition and complexity

Economics, Management & Social Sciences

- Interactions, Technology Activity
- Mutations of Cultural Industries in a Digital World
- Regulation and Innovation
Communication & electronics

- Digital Communications
- System On Chip ; Digital Electronic Systems
- Antennas, Microwave & Radiofrequencies
- Circuits and Communication Systems
- Optical communications

Signal & Image

- Statistics and Applications
- Audio, Acoustics and Optics
- Image processing and interpretation
- Multimedia
How to apply for Télécom ParisTech Education programmes?

After 2 or 3 years in “Classes préparatoires” or 3 years in French University

After 4 years in University

Competitive examination and qualification

Entrance on qualification

Bachelor level

"Baccalauréat” level (French Universities entrance exam)

Year 1

Year 2

Year 3

Year 1

Year 2

Year 1

Year 2

Year 3

PhD Level

Doctorate

Master level

Ingénieur

Master of Science

Ingénieur

Doctorate

> 1,500 students

436 in Advanced Master

270 in Doctorate

70 in Masters

780 in Master of Sc. in Engineering "Diplôme d'Ingénieur"

55 Others

270 in Bachelor level

55 Others

270 in Master level

270 in Ingénieur

70 in Masters
Degrees offered at Telecom ParisTech in partnership with TUM

- **French Engineer (Master of Science in Engineering):** *Ingénieur Grande Ecole Télécom ParisTech*
  - Engineer Double-degree (1 year and 6 months in France)

- **Master of Science from Technical University of Munich**
2 campuses for the same Engineer degree

Paris downtown

Sophia Antipolis, French Riviera;
1 year and a half in Paris or Eurecom

- **2 semesters of courses**
  - 120 scientific teaching units gathered into 14 learning tracks (Paris)
  - 4 learning tracks (Eurecom)
  - more than 100 non-scientific courses
    - Languages
    - Social sciences
    - Culture

- **1 semester of internship (professional thesis)**
  - Most often in a company
  - Sometimes in an academic research lab.
Which study tracks at Telecom ParisTech?

14 Options:
- ENT-3A - Entrepreneurship
- ICSOC-3A - Integration Circuits Systems and Communicating Objects
- IGR-3A - Human-Computer Interaction and 3D Computer Graphics
- IMA-3A - Image
- IMOC-3A - Microwave Engineering for Internet of Things and Mobile & Satellite Communications
- MACS-3A - Stochastic processes and scientific computing
- QSCRYP'T-3A - Quantum Safe Cryptography
- RES-3A - Networks
- SD-3A - Data Science
- SE-3A - Embedded Systems
- SR2I-3A - Infrastructures and Networks Security
- TSIA-3A - S1- Signal Processing for Artificial Intelligence
- SLR-3A - Advanced Distributed Software Systems
- TIR-3A - Information Processing in networks

Mainly in French

4 tracks:
- Data science and engineering
- Smart objects
- Communication systems
- Communication system security

And also:
- foreign languages and cultures
- the personal skills and human relations
Doctoral programme

- 3 years
  - cross-disciplinary scientific courses, professional training, etc.

- 4 specializations
  - Electronics and Communications
  - Computing and Networks
  - Signal and Image Processing
  - Information System Economics

- 70 theses awarded each year

- Strong links with industry

- Doctorate School from Paris-Saclay University:
  - Information and Communication Science and Technology - STIC
  - Humanities – SHS
  - Mathematics - MH
Reference Center in Europe for Pluridisciplinary Research in the Digital Field

Big Data: Dynamics of Data & Knowledge
Very Large Networks & Systems
Digital Trust: Safety, Reliability & Risks
Interactions Human - Virtual
Pluridisciplinary Approach to Innovation
Modelization

6 Strategic Axes
94.5 % of graduates have signed their contract within four months after leaving school.
Inside Student life at Telecom ParisTech

- A library
- A language resource center
- WiFi everywhere;
- > 100s of free access PC (7:30 – 00:00)

- School’s restaurant

- Student accommodation
  530 beds located nearby, across three sites
  affordable students rents: ~ 380 €/month. Students may be eligible for an accommodation allowance. Life cost in Paris: from 600 €/month.
- Nice Neighbourhood
  attractive Paris area, rich environment and culture
- Local accommodation, tennis, student facilities…
- Intense student life
  sports, nights, concerts, techno clubs, students trips, industrial Forum, Junior-Entreprises, challenge,…
More information?

- **web sites**
  - [www.telecom-paristech.fr/](http://www.telecom-paristech.fr/)
  - [international.telecom-paristech.fr/](http://international.telecom-paristech.fr/)
  - [www.paristech.fr/](http://www.paristech.fr/)
  - [www.mines-telecom.fr/](http://www.mines-telecom.fr/)
  - FACEBOOK, twitter, youtube
  - Newsletters

- **Contact us**
  - Information: [international@telecom-paristech.fr](mailto:international@telecom-paristech.fr)
  - PhD: [phd@telecom-paristech.fr](mailto:phd@telecom-paristech.fr)
  - Post-master’s degree: [masteres@telecom-paristech.fr](mailto:masteres@telecom-paristech.fr)
  - Research: [research@telecom-paristech.fr](mailto:research@telecom-paristech.fr)