

## List of courses taught in English

2<sup>nd</sup> year - Master of Science in Engineering (Diplôme d'ingénieur) - Telecom Paris

### Link to our catalogues:

- Exchange (non-degree seeking) students: <https://synapses.telecom-paris.fr/catalogue/2025-2026/diplome/1/PEI-echange-international-non-diplomant>
- Double Degree students: <https://synapses.telecom-paris.fr/catalogue/2025-2026/diplome/4/ING-diplome-d-ingenieur>

### Remarks:

- **Please note that this list is valid for the year 2025-2026 only and may be subject to changes every year.**
- **For exchange students: It is important to check the prerequisites of each course (available on the catalogue) before registering for it.**
- **A minimum of 20 ECTS credits (included language courses) have to be taken**

### MACS : Stochastic processes and scientific computing (Time slot A) – Track fully taught in English



- APM\_4MA01\_TP : Conditional distributions, mathematical statistics and Martingales (Fall semester)
- APM\_4MA02\_TP : Markov chains and time series (Fall semester)
- APM\_4MA03\_TP : High-dimensional probability, with applications in data science (Fall semester)
- APM\_4MA04\_TP : Numerical analysis (Spring semester)
- APM\_4MA06\_TP : Brownian motion and applications (Spring semester)
- APM\_4MA07\_TP : Poisson process and applications (Spring semester)

### ACCQ: Applied Algebra: Cryptography, Quantum information, Coding theory (Time slot C) - Track fully taught in English



- APM\_4AC02\_TP : Information Theory for networks (Fall semester)
- APM\_4AC04\_TP : Error Correcting Codes (Fall semester)
- CSC\_4AC06\_TP : Introduction to Quantum Information and Computation (Spring semester)
- CSC\_4AC07\_TP : Selected Topics in Mathematical Cryptography (Spring semester)
- FMA\_4AC01\_TP : Finite Algebraic Structures (Fall semester)
- FMA\_4AC03\_TP : Algorithms for algebra (Fall semester)
- FMA\_4AC05\_TP : Introduction to Algebraic Curves (Spring semester)
- FMA\_4AC08\_TP : Algorithms for arithmetic (Spring semester)

### DSAI : Data Science & Artificial Intelligence (Time slot C) - Track fully taught in English



- APM\_4AI08\_TP : Statistics: linear models (Fall semester)
- APM\_4AI09\_TP : Advanced Statistics (Spring semester)
- APM\_4AI10\_TP : Machine Learning (Fall semester)
- APM\_4AI11\_TP : Optimization for Machine Learning (Fall semester)
- APM\_4AI12\_TP : Machine Learning for Text Mining (Spring semester)

- CSC\_4AI07\_TP : Introduction to deep learning (Spring semester)
- PRJ\_4SD06\_TP : Project in Data Science and Artificial Intelligence (Spring semester)
- CSC\_4SD02\_TP : Data Bases (Fall semester)
- CSC\_4SD04\_TP : Graph Mining (Spring semester)

**SLR : Distributed Software Systems (time slot A) - Track fully taught in English**



- CSC\_4SL01\_TP : Advanced Programming and Project Management (Java-based) (Fall semester)
- CSC\_4SL02\_TP : Software System Modelling and Design (Spring semester)
- CSC\_4SL03\_TP : Introduction to technologies of distributed software development (Fall semester)
- CSC\_4SL04\_TP : Introduction to formal verification of Distributed Software and Systems (Spring semester)
- CSC\_4SL05\_TP : Distributed algorithms - Part A (Fall semester)
- CSC\_4SL06\_TP : Distributed algorithms – Part B (Fall semester)
- CSC\_4SL07\_TP : Technologies of large-scale parallel computing (Spring semester)
- CSC\_4SL08\_TP : Blockchain: algorithmic basics (Spring semester)

**SPAI : Signal Processing for Artificial Intelligence (time slot C) - Track fully taught in English**



- APM\_4AI01\_TP : Representation of signals - (Spring semester)
- APM\_4AI04\_TP : Speech and audio processing (Spring semester)
- APM\_4AI08\_TP : Statistics: linear models (Fall semester)
- APM\_4AI09\_TP : Advanced Statistics (Spring semester)
- APM\_4AI10\_TP : Machine Learning (Fall semester)
- APM\_4AI11\_TP : Optimization for Machine Learning (Fall semester)
- APM\_4AI12\_TP : Machine Learning for Text Mining (Spring semester)
- CSC\_4AI05\_TP : Introduction to multimedia processing and delivery (Spring semester)
- CSC\_4AI07\_TP: Introduction to deep learning (Spring semester)
- APM\_4AI02\_TP : Time series, part 1 (Fall semester)
- APM\_4AI03\_TP : Time series, part 2 (Spring semester)

**MODS : Markets, Organizations, Data, Strategies (time slot B) - Track taught in English and French.**



**Listed courses below are taught in English:**

- ECO\_4MO11\_TP : Econometrics (Fall semester)-**Course subject to a limited number of seats**
- ECO\_4MO10\_TP : Microeconomics and Industrial Organization (Fall semester)-**Course subject to a limited number of seats**
- ECO\_4MO21\_TP : Economics of sustainable development and IT (Fall semester)-**Course subject to a limited number of seats**
- ECO\_4MO14\_TP : Financial markets (Fall semester)
- ECO\_4MO12\_TP : Data analysis in economics: Collection and Visualization (Fall semester)-**Course subject to a limited number of seats**
- ECO\_4MO15\_TP : Economics of innovation and Intellectual property (Spring semester) -**Course subject to a limited number of seats**
- ECO\_4MO13\_TP : Economics and technology of financial innovation (Spring semester)
- IME\_4MO20\_TP : Incubating and supporting an innovative entrepreneurial project (Fall and Spring semesters)-**Course subject to a limited number of seats**

- PRJ\_4MO16\_TP : Applied Projects, part a and b (Spring semester)- **Course subject to a limited number of seats**

**IGR : 3D & Interactive systems (Time slot A) - Track fully taught in English**



- CSC\_4IG01\_TP : Interactive 3D Application Development (Fall semester)
- CSC\_4IG02\_TP : Interaction Application Development: Desktop, Mobile, and Web (Fall semester)
- CSC\_4IG03\_TP : Fundamentals of Computer Graphics (Fall semester)
- CSC\_4IG05\_TP: Human-Computer Interaction (part 1) (Spring semester)
- CSC\_4IG06\_TP: Human-Computer Interaction (part 2) (Spring semester)
- CSC\_4IG07\_TP : Visualisation (Spring semester)
- CSC\_4IG08\_TP : Project Seminar (Spring semester)

**RIO : Wireless networks and IoT (Time slot C) - Track taught mostly in French. Exception of the two following courses taught in English:**



- CSC\_4RI01\_TP : Wireless IoT (Fall semester)
- CSC\_4RI03\_TP : IoT Protocols and Systems (Fall semester)

**SE: Embedded Systems (Time slot B) - Track taught mostly in French. Exception of the following course taught in English:**

- CSC\_4SE06\_TP : Test and Verification (Spring semester)

**The other tracks are fully taught in French;**



- CYBER : Cybersecurity (time slot A)
- IMA : Image (Time slot B)
- GIN : Large Digital Infrastructures (Time slot A)
- MITRO : Mathematics, Theoretical Computer Science and Operation Research (Time slot B)
- SE : Embedded systems (Time slot B)
- TELECOM : From data to systems (time slot A)

**Some additional courses taught in English can be open to exchange students if there are some spots available, however, since exchange students do not have the priority over these courses, these ones are not listed here. They are mentioned in the catalogue as “Additional courses open to non-degree exchange students”**

## 3<sup>rd</sup> year - Master of Science in Engineering (Diplôme d'ingénieur) - Telecom Paris

### Remarks:

- Please note that this list is valid for the year 2025-2026 only and may be subject to changes every year.
- All 3<sup>rd</sup> year options take place during the Fall semester. There is no 3<sup>rd</sup> year class during Spring time
- For exchange students: It is important to check the prerequisites of each course (available on the catalogue) before registering for it.
- Only one study track can be chosen; students cannot choose courses from several study tracks. However, within one study track, it is possible to choose certain courses
- A minimum of 20 ECTS credits (included language courses) have to be taken

**PEI-M2** Master 2: 3rd year study tracks open to non-degree exchange students

- ▶ **IA-3A Interne** Artificial Intelligence - 3rd year program at school, Fall semester 
- ▶ **SD-3A Interne** Data Science, Image and Artificial Intelligence - third year program at school, Fall semester 
- ▶ **IMA-3A Interne** Image - 3rd year program at school, Fall semester 
- ▶ **GIN-RIO-3A Interne** Networks, Large Digital Infrastructures and the Internet of Things - third year program at school, Fall semester 
- ▶ **SE-3A Interne** Embedded Systems - 3rd year program at school, Fall semester 
- ▶ **SLR-3A Interne** Advanced Distributed Software Systems - third year program at school, Fall semester 
- ▶ **CYBER-3A Interne** Cybersecurity - 3rd year program at school, Fall semester 