

2nd YEAR OF THE ENGINEERING DEGREE

= Equivalent to a 1st year of Masters degree

All students may follow management and multicultural oriented **common courses**. In addition to these courses, **all students must choose only one option out of four**:

- Analytical and Biological Chemistry
- Molecular Chemistry
- Materials
- Processes

The exchange offer **corresponds to** the second half of the academic year, **spring semester (from January to March/June)**.

A minimum of **12 ECTS** (European Credit Transfer and Accumulation System) are **required** for the **learning agreement**.

For information on the **requirements of each course**, please check the **syllabus on our [website](#)**.

Please note that **courses** are **place-limited**.

All courses take place at the Chimie ParisTech-PSL Campus, located at: **11 Rue Pierre et Marie Curie, 75005 Paris**

MULTICULTURAL COURSES

- MH24TC.ANG-**Scientific and business english** (2 ECTS)
- MHXBLV.FLE-**French as Foreign Language (FLE)** (1 ECTS)
- MH24ES.SI-**Five-month internship** (~ *from April to July*) in a laboratory or in a company)(**12 ECTS**, language: FR or ENG)

OPTION: ANALYTICAL AND BIOLOGICAL CHEMISTRY

All courses are eligible for selection. From 1 onwards, with the possibility of attending all courses.

Only **one** course from the list below can be selected.

- MH24OP.CBI- **Bioinorganic chemistry** (1 ECTS,teaching language: ENG)
- MH24OP.MOM- **Molecular Modeling** (1 ECTS,teaching language:ENG)
- MH24OP.BIA- **Modern analytical chemistry for biotechnology and clinical diagnostics** (2 ECTS,teaching language: ENG)
- MH24OP.CHE- **Chemistry probes for bioimaging** (2 ECTS,teaching language: ENG)
- MH24OP.BIC- **Basic concepts of cellular biology** (2 ECTS,teaching language: ENG)

- MH24MO.PRF- **Solid Materials : from formulation to service life** (1 ECTS,teaching language:ENG)

or

- MH24OP.COM- **Organometallic Chemistry** (1 ECTS,teaching language: ENG)

OPTION: MOLECULAR CHEMISTRY

All courses are eligible for selection. From 1 onwards, with the possibility of attending all courses.

Only **one** course from the list below can be selected.

- MH24OP.CBI- **Bioinorganic chemistry** (1 ECTS,teaching language: ENG)
- MH24OP.MOM- **Molecular Modeling** (1 ECTS,teaching language:ENG)
- MH24OP.MHC- **Mastering Heteroelements and Catalysis for Applied Molecular Synthesis** (2 ECTS,teaching language:ENG)
- MH24OP.BIS- **Basics in Synthesis: Strategies and Approaches** (2 ECTS,teaching language:ENG)

- MH24MO.PRF- **Solid Materials : from formulation to service life** (1 ECTS,teaching language:ENG)

or

- MH24OP.COM- **Organometallic Chemistry** (1 ECTS,teaching language: ENG)

OPTION: MATERIALS

All courses are eligible for selection. From 1 onwards, with the possibility of attending all courses.

Only **one** course **per sub-section** can be selected.

- MH24OP.NOR- **Inorganic chemistry: from molecules to materials** (1 ECTS,teaching language:ENG)
- MH24OP.PES- **Electronic Properties of Solids** (2 ECTS,teaching language:ENG)
- MH24OP.MM- **Surface properties and endurance of materials** (2 ECTS,teaching language:ENG)
- MH24OP.ELA- **Inorganic materials elaboration** (2 ECTS,teaching language: ENG)

- MH24OP.MOD- **Modeling** (1 ECTS,teaching language:ENG)
- or**
- MH24MO.BIF -**Biointerfaces-At the interface of biomaterials** (1 ECTS,teaching language: ENG)

- MH24OP.COR- **Corrosion (Electrochemical Stability of Materials)** (1 ECTS,teaching language:ENG)

or

- MH24MO.PRF- **Solid Materials : from formulation to service life** (1 ECTS,teaching language:ENG)

OPTION: PROCESSES

All courses are eligible for selection. From 1 onwards, with the possibility of attending all courses.

Only **one** course **per sub-section** can be selected.

- MH24OP.NOR- **Inorganic chemistry: from molecules to materials** (1 ECTS,teaching language:ENG)
- MH24OP.SP- **Process simulation** (2 ECTS,teaching language: FR)
- MH24OP.OCP-**Optimization and process control** (2 ECTS,teaching language: FR)
- MH24OP.FLC-**Flow chemistry** (2 ECTS,teaching language: FR)

- MH24OP.MOD- **Modeling** (1 ECTS,teaching language:ENG)

or

- MH24MO.BIF -**Biointerfaces-At the interface of biomaterials** (1 ECTS,teaching language: ENG)

- MH24OP.COR- **Corrosion (Electrochemical Stability of Materials)** (1 ECTS,teaching language:ENG)

or

- MH24MO.PRF- **Solid Materials : from formulation to service life** (1 ECTS,teaching language:ENG)