

# NUCLEAR ENERGY-FUEL CYCLE

## 2nd year of Master degree - Fall semester

All students may follow **scientific courses from this program**.

The exchange offer **corresponds to** the first half of the academic year, **fall semester (from September to March)**.

A minimum of **18 ECTS** (European Credit Transfer and Accumulation System) are **required** for the **learning agreement**.

All courses are taught in **English**.

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

For information on the **requirements of each course**, please check the **syllabus on our website**.

**Courses** take place at **two campuses**:

- **PSL - Chimie ParisTech-PSL**, located at: **11 Rue Pierre et Marie Curie, 75005 Paris**
- **INSTN- Institut National des Sciences et Techniques Nucléaires** (National Institute for Nuclear Science and Technology), located at: **Route N306, 91400 Saclay** ⚠ (Please note that this campus is located on the outskirts of Paris)

### FUEL CYCLE PROGRAM

COURSE	CAMPUS	SEMESTER
• S3-F-W-D-O-RISK - <b>Risk Management</b> (4 ECTS)	INSTN	Sept - Oct
• S3-C-ENER - <b>PWR Functional Description</b> (3 ECTS)	INSTN	Sept - Oct
• S3-F-W-NPN- <b>Nuclear Physics, Neutronics Basis</b> (2 ECTS)	INSTN	Sept - Oct
• S3-C-RP - <b>Radiation Protection</b> (3 ECTS)	INSTN	Sept - Dec
• S3-C-SAFE- <b>Introduction to Safety / Criticality Safety</b> (3 ECTS)	INSTN	Nov - Dec
• S3-C-SYS - <b>Nuclear Fuel Cycles / Nuclear Reactor Systems</b> (3 ECTS)	INSTN	Nov- Dec
• S3-F-SPEC - <b>Actinides electronic structure and spectroscopy</b> (3 ECTS)	INSTN	Nov - Dec
• S4-C-TRANS - <b>Energy Transition, Flexibility</b> (2 ECTS)	INSTN	Jan - Feb
• S3-F-CMS - <b>Cooling and Molten salt</b> (3 ECTS)	PSL	Jan - Feb
• S3-F-FUEL - <b>Fuel : from mine to the reactor</b> (3 ECTS)	PSL	Jan - Feb
• S3-F-SEPA - <b>Separation and recycling</b> (4 ECTS)	PSL	Jan - Feb
• S4-F-WAST - <b>Waste Containment Materials</b> (3 ECTS)	PSL	Jan - Feb
• S4-F-CODE - <b>Process sim and process control</b> (3 ECTS)	PSL	Feb - March
• S4-F-DISPO - <b>Waste disposal</b> (3 ECTS)	PSL	Feb - March