For more information and registration

https://www.u-cergy.fr/fr/formations/programms-taught-in-english/du-international-chimie-physique.html








Information needed for candidature

- 1 CV
- 1 letter of motivation
- 1 birth certificate, plus official French translation*
- 1 of each - photocopies of obtained degrees, originals plus French translation*
- 1 academic record (marks) for the last three years*
- 1 proof of English language level (IELTS, TOEFL) *
- 1 passport photographs

*The originals of documents mentioned above are only necessary at the time of registration in September.` **Please send candidature to staff.iud-chemistry-and-physics@ml.u-cergy.fr**

UNIVERSITÉ de Cergy-Pontoise

Contact
Dr. Gilberte Dosseh, Director,
(LPPI, Chemistry Department)
tel: (33) 134 25 70 36
mail : staff.iud-chemistry-and-physics@ml.u-cergy.fr
DU Diploma Team :
Dr. Florian Gallier, Dr. Maud Larregola, Dr. Elisa Peroni, Dr. Clément Santa Maria

Service communication UCP - Janvier 2016 -
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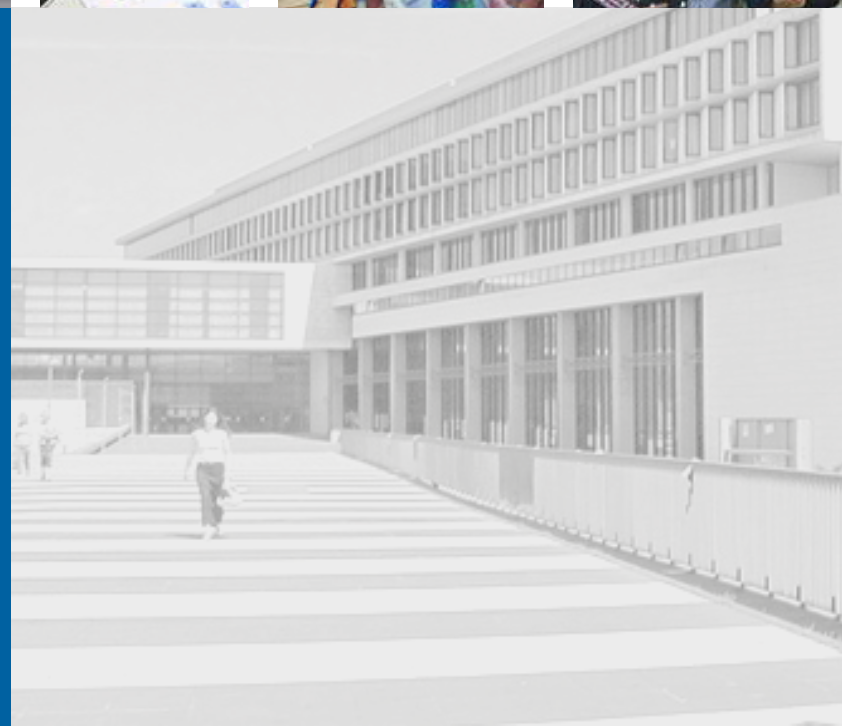
UNIVERSITÉ de Cergy-Pontoise

UFR Sciences et Techniques

1 Year International University Diploma in Chemistry and Physics

1st year of a 3 year Bachelor degree in Science and Technology



Presentation

This International University Diploma (IUD) is taught in English and leads to a National Licence 3 year Degree. This IUD in Chemistry and Physics enables the student to study science totally in English for the first year while taking French language classes. In addition, scientific French will be taught by teaching staff from both Physics and Chemistry departments. In the second year, the students that have successfully passed their year enter into a second year French National Licence program leading to a National Licence 3 year Degree. An additional support in French is also offered in the second year.

There are several advantages to this program :

- The student studies Mathematics, Chemistry, Physics and Computer Science in 1st year totally in English.
- The student learns French while studying. In this way, the student does not lose a year in order to study French.
- In second year, the student integrates directly into a 2nd year French program (Chemistry and Physics, Chemistry, Physics, Computer Science or Engineering sciences in either Physics or Chemistry).

- The student learns scientific terms in French and in English which is important for future employment.
- Small groups for lectures and tutorials.

Practical Information :

- English proficiency – IELTS 5.5 or equivalent.
- Proof of good academic performance.
- Acceptance of candidatures by admission committee.
- Registration deadline : 1st June for entry in September (exceptions are possible).
- Registration fees of 5000 euros for the year and 91 euros of governmental taxes.
- Registration fees include the following services: tuition for program, science and French courses.

1st Semester : 30 credits

UE	Contents	Credits	Hours
UE1	**Maths for science 1** - Functions : limits, continuity, derivative - Calculus integrals - real and complex numbers - 2 variables functions - Scalar and vector products	6	Lecture : 18 h Tutorials : 36 h
UE2	**Introductory chemistry** - Atoms : Emission and absorption, wave functions, periodic table - Molecules : Lewis and VSEPR models, covalent and ionic bonds, weak bonds - Solution chemistry : Acids and bases in aqueous solutions, Redox equilibria	6	Lecture : 24 h Tutorials : 36 h Laboratory class : 9h
UE3	**Introductory physics** Kinematics - Dynamics : Newton laws - Mechanical energy - Introduction to thermodynamics : 1st Law - **Laboratory classes 1 :** mechanical oscillators, free fall, friction	6	Lecture : 24 h Tutorials : 24 h Laboratory class : 18 h
UE4	**Introductory computer science** Introduction to algorithms and program languages	4	Lecture : 12 h Pratical class : 12 h
UE5	**General French language**	4	Tutorials : 48 h
UE6	**Scientific French**	4	Tutorials : 15 h

2nd Semester : 30 credits

UE	Contents	Credits	Hours
UE1	**Maths for science 2** Taylor expansions - Differential equations - Vector spaces, linear applications, Matrices - Complex numbers	6	Lecture : 18 h Tutorials : 36 h
UE2	**Chemistry 2** **Solution, organic and thermochemistry** - Conductimetry- pH and Redox titrations - 1st and 2nd laws of thermochemistry : Application to chemical reactions Chemical potential - Phase changes in pure substances Introductory organic chemistry - Electronic structure of organic compounds. Stereochemistry	6	Lecture : 27 h Tutorials : 32 h Laboratory class : 12 h
UE3	**Physics** Thermodynamics : 2nd law and heat engines - Fluid mechanics : hydrostatics, hydrodynamics, viscosity - Kinetic momentum - Central forces : application to planet motions - **Laboratory classes 2 :** Fluids - **Laboratory classes 3 :** Rotations, stellarium, collisions	6	Lecture: 24 Tutorials : 32 Laboratory class : 21 h
UE4	**Computer science** Introduction to programming	4	Lecture : 12 h Practical class : 12 h
UE5	**General French language**	4	Tutorials : 48 h
UE6	**Scientific French**	4	Tutorials : 15 h