

**FIRST SEMESTER (SEPT->JANUARY)**

Codes	Coursename	ECTS
<b>PCI .1.1</b>	<b>Physico-chemistry and interfaces</b>	<b>2</b>
<b>CPA.1.1</b>	<b>Physical and analytical chemistry</b>	<b>3</b>
CPA.EC.1.1	Electrochemistry	
CPA.CS.1.1	Chemistry of solutions	
CPA.PS.1.1	Separation Methods	
<b>GRC.1.1</b>	<b>Chemical engineering and risk</b>	<b>4</b>
GRC.RC.1.1	Chemical risk	
GRC.GC.1.1	Chemical engineering	
GRC.PGC.1.1	Project of chemical engineering	
<b>MPQ.1.1</b>	<b>Mathematics and quantum physics</b>	<b>4</b>
MPQ.MMP.1.1	Mathematical methods of physics	
MPQ.PQ.1.1	Quantum physics	
<b>IP.1.1</b>	<b>Computer sciences &amp; programming</b>	<b>2</b>
<b>FE.1.1</b>	<b>Laboratory work</b>	<b>8</b>
FE.CP.1.1	Laboratory work in p physics and chemistry	6
FE.GC.1.1	Laboratory work in chemical engineering	2
<b>SHSCE.1.1</b>	<b>Management, communication and careers</b>	<b>2</b>
SHSCE.1.1	Professional project	
	Human sciences in business	
<b>PTD.1.1</b>	<b>Transdisciplinary project (105h)</b>	<b>3</b>
<b>PDPerson.1</b>	<b>Personal development (validation at the 2<sup>nd</sup> semester-optional)</b>	<b>Bonus on average</b>
LC.1.1	<b>Foreign Languages</b>	<b>2</b>
LC.ANG.1.1	English (compulsory)	
LC.LV2.1.1	French for foreigners or second foreign language	

30

**SECOND SEMESTER (JANUARY->JUNE /courses  
and JUNE->JULY or AUGUST / optional trainee)**

Codes	Coursename	ECTS
<b>CMB.1.2</b>	<b>Molecular and biological chemistry</b>	<b>6</b>
CMB.SR.1.2	Fonctional groups: synthesis and reactivity	3
CMB.OAI.1.2	Analytical and computer tools for molecular chemistry	3
<b>SM.1.2</b>	<b>Structure of materials</b>	<b>4</b>
SM.CDS.1.2	Cristallography, diffraction and symetries	
SM.CS.1.2	Solid chemistry	
<b>MI.1.2</b>	<b>Materials and interactions</b>	<b>4</b>
MI.IRM.1.2	Matter-radiation Interaction	
MI.LC.1.2	Chemical bond	
<b>MN.1.2</b>	<b>Digital Methods</b>	<b>2</b>
<b>FE.1.2</b>	<b>Laboratory work</b>	<b>8</b>
FE.CMB.1.2	Laboratory work in molecular chemistry	5
FE.SM.1.2	Laboratory work in material sciences	3
<b>SHSCE.1.2</b>	<b>Management, communication and careers</b>	<b>2</b>
SHSCE.1.2	Introduction to business	
	Chemical industry for chemical engineers	
<b>LC.1.2</b>	<b>Foreign Languages</b>	<b>2</b>
LC.ANG.1.2	English (compulsory)	
LC.LV2.1.2	French for foreigners or second foreign language	
<b>PTD.1.2</b>	<b>Transdisciplinary project</b>	<b>2</b>
<b>SDE.1.2</b>	<b>Internship in industry (optional) 1 or 2 months</b>	<b>(2)</b>

30 (32)