

First Year

Compulsory courses

General Education

DROI0724-2 *law and engineering* - Pascale LECOCQ 15 - - 2

Engineering Sciences

ELEC0431-1 *Electromagnetic energy transformation* - Christophe GEUZAINÉ 30 30 - 5,5

MECA0002-2 *Applied Thermodynamics and Introduction to Heat Engines* - Jean LEBRUN 20 20 - 3,5

MECA0007-1 *Fuel Use* - Albert GERMAIN, Angélique LÉONARD 20 - - 2,5

MECA0011-1 *Fluid Mechanics: Basics* - André LEJEUNE 30 30 - 5,5

MECA0014-1 *Introduction to Hydraulic machines and Compressors* - Olivier LÉONARD 20 20 - 3,5

MECA0019-2 *Heat Transfers* - Michel HOGGE 10 10 - 2

META0002-1 *Metallic Materials* - Jean-Pierre COHEUR 24 12 - 3

Basics of Chemical Engineering

CHIM0009-1 *Applied chemical thermodynamics* - Georges HEYEN 30 30 - 5,5

CHIM0012-1 *Chemical Kinetics* - Jean-Paul PIRARD 30 35 - 5,5

CHIM0080-1 *Energy carriers and sustainable development* - Albert GERMAIN 30 - - 3

CHIM0022-1 *Introduction to Chemical Engineering* - Michel CRINE 20 10 - 3

Chemical Sciences

CHIM0082-2 *Analytical chemistry (chemical methods)* 30 80 - 6

CHIM0604-1 *Chemistry and organic materials* - Christophe DETREMBLEUR 30 60 - 5,5

CHIM0034-1 *Inorganic chemistry* 26 24 - 4

Second Year

Compulsory courses

General Education

GEST0106-1 *Elements of Corporate Management* - Pierre-Armand MICHEL 30 - - 4

Chemical Engineering

CHIM0083-1 *Chemical Engineering (Unit Physical Operations and Non-Specific Aspects of Apparatuses)* - Michel CRINE 45 60 - 9

CHIM0023-1 *Chemical Engineering (Reactor Study)* - Dominique TOYE 45 45 - 8

CHIM0024-1 *Applied Physical Chemistry* - Benoît HEINRICHS, Jean-Paul PIRARD 30 45 - 6

Industrial Chemistry procedures

CHIM0016-1 *Scientific and Technical Aspects of Silicate Material Manufacturing (Including Glass)* - Rudi CLOOTS 24 - - 3

CHIM0018-1 *Advanced Inorganic Products and Materials* - Rudi CLOOTS 24 - - 3

CHIM0081-1 *Industrial Chemistry Processes* - Albert GERMAIN 45 30 - 6,5

CHIM0040-1 *Atelier de conception de procédés* - Georges HEYEN - 45 - 3

CHIM0073-1 *Macromolecular Chemistry Processes* - Jean-Marie LIÉGEOIS 15 - - 2

SYST0004-1 *Modelling of large chemical systems* - Georges HEYEN 30 45 - 6,5

Chemistry Complement

CHIM0015-3 *Analytical chemistry II, physical methods* - Bernard GILBERT 30 60 - 6

CHIM0019-2 *Macromolecular chemistry* - Anne-Sophie DUWEZ 20 20 - 3

Third Year

Compulsory courses

CHIM0074-1 *Process Security* - Albert GERMAIN 15 15 - 3

ATFE0001-1 *Travail de fin d'études* - - - 27

Optional courses

Choose one of the following courses :

GEST1069-1 *Introduction to entrepreneurship* - Bernard SURLEMONT 30 - - -

ECON0878-1 *Microeconomy applied to the engineering science* - Jean-Pierre HANSEN 30 - - -

ECON0099-1 *Industrial strategy: economic case analysis* - Jean-Pierre HANSEN 30 - - -

[...] One General education course to chosen from the University programme and approved by the President of the Board of Studies.

Three groups of courses chosen from the following five :

Biotechnology and Chemistry

CHIM0055-1	<i>Chemical Engineering of Polyphase Systems</i> - Pierre MARCHOT	18	24	-	3
CHIM0059-1	<i>Industrial Microbiology</i> - Philippe THONART	15	-	-	2
CHIM0063-1	<i>Introduction to general principles in biology and biochemistry</i> - Jean-Marie FRÈRE	15	-	-	2
CHIM0067-1	<i>Biochemical Reactors II</i> - Michel CRINE	15	-	-	2

Energetics

CHIM0039-1	<i>Chemical Upgrading of Coal</i> - Jean-Paul PIRARD	15	-	-	2
CHIM0056-1	<i>Energy Aspects of Unit Physical Operations</i> - Michel CRINE	15	15	-	3
CHIM0071-1	<i>Reduction of pollutants during combustion</i> - Albert GERMAIN, Angélique LÉONARD	15	15	-	4

Materials

CHIM0038-1	<i>Physics of Polymer Materials</i> - Jean-Marie LIÉGEOIS	18	24	-	3,5
CHIM0051-1	<i>Applied Chemistry (Polymers)</i> - Jean-Marie LIÉGEOIS	15	15	-	2,5
CHIM0072-1	<i>Interface Physical Chemistry</i> - José MARIEN	15	15	-	3

Environment

CHIM0011-1	<i>Environment Chemical Engineering</i> - Michel CRINE, Michel CRINE	18	24	-	3
CHIM0028-1	<i>Industrial and Domestic Pollution</i> - N... - Suppl : Stoyan GAYDARDZHIEV	30	15	-	4
CHIM0078-1	<i>Applied environmental chemistry, physico-chemical, analytical and regulation-related aspects</i> - Edwin DE PAUW	15	-	-	2

Procedures

CHIM0054-1	<i>Process design workshop : economic optimization</i> - Georges HEYEN	-	45	-	3
META0005-1	<i>Extractive Metallurgy Principles</i> - Stoyan GAYDARDZHIEV	20	-	-	3
SYST0011-1	<i>Dynamics and control of chemical systems</i> - Georges HEYEN	15	15	-	3

Optional Free courses in the 3rd year (level)

CHIM0008-1	<i>Advanced general and physical chemistry</i> - Rudi CLOOTS	40	40	-	-
CHIM0064-2	<i>Aerospace Materials (Composites)</i> - Jean-Marie LIÉGEOIS	20	-	-	-
CHIM0069-1	<i>Porous Material Physical Chemistry</i> - Jean-Paul PIRARD	15	-	-	-
CHIM0070-1	<i>Computer aided process engineering</i> - Georges HEYEN	15	15	-	-