Block view of the study programme

		Or	Th	Pr	Au	Cr
Bloc 1 du programme de l'année						
Compulsory courses						
NANO0001-1	*Seminars on the ethnical and socio-economic aspects of nanotechnology* - COLLÉGIALITÉ	TA	15	15	-	**3**
SMEM0038-1	*Final thesis* - COLLÉGIALITÉ	TA	-	-	-	**27**
Optional courses						
With the approval of the jury, choose courses totalling 30 ECTS from :						
[...]	Depending on the student's previous training and with the agreement of the jury, choose, if necessary, courses for a maximum of 9 credits among the course programme for the institutions organising the complementary masters :					
A. Fundamental phenomena at the nanoscale						
Courses organised at the UCL						
HULG2105-1	*Nano-electronics* - Vincent BAYOT, Denis FLANDRE, JeanPierre RASKIN	Q1	30	30	-	**5**
HULG2106-1	*Physics of nanostructures* - JeanChristophe CHARLIER, Xavier GONZE, Luc PIRAUX	Q1	37,5	22,5	-	**5**
Courses organised at the ULB						
HULG0437-1	*Chemistry of interfaces and nanostructures* - N...	Q1	24	12	-	**3**
HULG0438-1	*Nanochemistry and nanotechnology* (english language) - N...	Q1	24	24	-	**4**
HULG2079-1	*Molecular motors and stochastic processes* - Pierre GASPARD	Q1	-	-	-	**3**
HULG2107-1	*Nanophysics* - Pierre GASPARD, Marc HOU	Q2	24	24	-	**5**
Courses organised at the ULg						
CHIM0646-1	*Physical chemistry of nanostructures* (english language) - AnneSophie DUWEZ	Q1	15	-	-	**2**
BIOC0724-1	*Chemistry of biological macromolecules* - Moreno GALLENI, André MATAGNE	Q2	20	-	-	**2**
PHYS0096-1	*Physics of superconductors* (english language) - Alejandro SILHANEK	Q1	30	-	-	**4**
ELEN0069-1	*Nanoelectronics / Optoelectronics* (english language) - Benoît VANDERHEYDEN - [40h Proj.]	Q2	30	-	[+]	**5**
PHYS3003-1	*Functional Materials : theory and modeling* (english language) - Philippe GHOSEZ	Q1	20	10	-	**4**
Course organised at the UMons						
HULG0439-1	*Morphogenesis and instability* - N...	Q2	30	15	-	**5**
Courses organised at the UNamur						
HULG0440-1	*Supramolecular chemistry* - N...	Q1	22,5	-	-	**3**
HULG0441-1	*Advanced theoretical chemistry* - N...	Q1	37,5	30	-	**6**
B. Nanofabrication, nanomanipulation, nanosynthesis						
Course organised at the UCL						
HULG2108-1	*Techniques of micro-and nanofabrication* - Vincent BAYOT, Denis FLANDRE, Laurent FRANCIS, JeanPierre RASKIN	Q2	30	30	-	**5**
Courses organised at the ULB						
HULG2115-1	*Microfabrication processes* - N...		24	12	-	**3**

HULG2094-1	*Nanostructured materials* - MariePaule DEPLANCKE, Stéphane GODET	Q2	-	-	-	**2**
Courses organised at the ULg						
CHIM0088-1	*Nanomaterials, principles of synthesis and application* - Christophe DETREMBLEUR	Q1	15	-	-	**2**
MECA0009-2	*Introduction to microtechnology* (english language) - Tristan GILET - [8h Labo., 22h Proj.]	Q2	12	12	[+]	**5**
CHIM0072-1	*Nanomaterials and divided materials Ingeneering* - Benoît HEINRICHS, Stéphanie LAMBERT	Q1	20	15	-	**3**
Course organised at the UMons						
HULG2095-1	*Polymer nanocomposite materials* - N...	Q2	15	15	-	**3**
C. Characterization of nanostructures						
Courses organised at the UCL						
HULG0442-1	*Advanced transitors* (english language) - N...	Q2	30	30	-	**5**
HULG2096-1	*Characterization of materials surface* - Yves DUFRÈNE, Christine DUPONT, Eric GAIGNEAUX	Q2	52,5	-	-	**5**
HULG2097-1	*Analysis and processing of solid surfaces* - Patrick BERTRAND, Bernard NYSTEN	Q2	37,5	15	-	**5**
Courses organised at the ULB						
HULG0443-1	*Surface analysis of materials* (english language) - N...	Q2	36	-	-	**4**
HULG2082-1	*Microscopy and microanalysis, high resolution* - Norbert KRUSE		24	-	-	**2**
Courses organised at the ULg						
NANO0002-1	*Atomic force microscopy and related techniques* - AnneSophie DUWEZ	Q1	10	-	-	**2**
PHYS3013-1	*Physical characterization of materials and interfaces* - Ngoc Duy NGUYEN	Q1	15	15	-	**4**
CHIM9266-1	*Characterization of nanostructures by scanning probe techniques* (english language) - AnneSophie DUWEZ	Q1	15	-	-	**2**
CHIM9231-1	*Characterization of Biomaterials* (english language) - Edwin DE PAUW, MarieClaire GILLET	Q1	15	15	-	**4**
PHYS3012-2	*Electronic and vibrational spectroscopy* (english language) - Matthieu VERSTRAETE	Q1	15	15	-	**4**
Course organised at the UMons						
HULG2083-1	*Local probe microscopy* - Roberto LAZZARONI, Philippe LECLÈRE	Q2	15	15	-	**3**
Courses organised at the UNamur						
HULG0444-1	*Optical spectroscopies of surfaces and nanostructures* - N...	Q1	22	8	-	**4**
HULG2081-1	*Electron microscopy, diffraction and EELS at the nanoscale* - N...	Q1	7,5	7,5	-	**3**
D. Simulation at the nanoscale						
Course organised at the UCL						
HULG2117-1	*Atomistic and nanoscopic simulations* - JeanChristophe CHARLIER, Xavier GONZE	Q2	30	30	-	**5**
Courses organised at the ULg						
CHIM0090-1	*Theory and modeling of hybrid molecular complexes* - Françoise REMACLE	Q1	15	-	-	**3**
PHYS0046-2	*Quantum physics and applications to Condensed Matter* -	Q1	30	30	-	**5**

	HOSEZ, Matthieu VERSTRAETE					
PHYS3004-1	*Nanomaterials : theory and modeling* (english language) - JeanYves RATY	Q1	20	10	-	**4**
Course organised at the UMons						
HULG0445-1	*Molecular modeling in chemistry* - N...	Q2	15	15	-	**4**
Course organised at the UNamur						
HULG0446-1	*Simulation in materials physics* - N...	Q1	15	15	-	**4**
E. Miscellaneous						
Courses organised at the UCL						
HULG2085-1	*Nanobiotechnology* - N...	Q2	30	-	-	**3**
HULG0447-1	*Special electronic devices* (english language) - N...	Q1	30	30	-	**5**
HULG2111-1	*Design of Micro and Nanosystems* - Denis FLANDRE, Laurent FRANCIS, Thomas PARDOEN, JeanPierre RASKIN	Q1	30	30	-	**5**
HULG2086-1	*Macromolecular Nanotechnology* - Sophie DEMOUSTIER, JeanFrançois GOHY, Alain JONAS, Bernard NYSTEN	Q2	45	15	-	**5**
HULG2112-1	*Transport phenomena in solids and nanostructures* - JeanChristophe CHARLIER, Xavier GONZE, Luc PIRAUX	Q2	30	30	-	**5**
HULG2113-1	*Lasers and Applications* - N...	Q2	45	15	-	**6**
HULG2090-1	*Chemometrics* - Bernadette GOVAERTS	Q1	22,5	15	-	**3**
HULG2104-1	*Principles of heterogeneous catalysis* - Eric GAIGNEAUX	Q1	52,5	-	-	**5**
HULG2091-1	*Statistical Quality Control* - Anne DE FRENNE, Bernadette GOVAERTS	Q1	15	5	-	**3**
Courses organised at the ULB						
HULG0448-1	*Solid state properties of polymers* (english language) - N...	Q2	36	-	-	**4**
HULG0449-1	*Micro- and nanobiotechnology* (english language) - N...	Q2	13	26	-	**3**
HULG0450-1	*(Multi)functional polymers* (english language) - N...	Q2	12	24	-	**3**
HULG2114-1	*Quantum theory of solids and surfaces* - N...	Q2	24	-	-	**2**
HULG0451-1	*Molecular engineering applied to the biomedical field* - N...	Q1	24	-	-	**2**
HULG0452-1	*Molecular and biomolecular engineering* (english language) - N...	Q2	24	12	-	**3**
HULG2116-1	*Micro tech components* - N...		24	24	-	**4**
Courses organised at the ULg						
PHYS0945-1	*Complex fluids* - Nicolas VANDEWALLE	Q1	20	10	-	**4**
CHIM9217-1	*Application of nanotechnology to develop new medicine* - Brigitte EVRARD, Géraldine PIEL		10	-	-	**1**
MECA0008-1	*Microfluidics* (english language) - Tristan GILET - [16h Labo., 14h Proj.]	Q1	22	8	[+]	**5**
PHYS3023-1	*Theory of magnetism* (english language) - Eric BOUSQUET	Q1	20	10	-	**4**
CHIM0654-1	*Molecular devices and molecular machines* - AnneSophie DUWEZ	Q2	15	-	-	**2**
ELEN0038-1	*Microsystems* (english language) - Michael KRAFT - [20h Labo., 40h Proj.]	Q2	30	5	[+]	**5**
CHIM9233-1	*Molecular logic* (english language) - Françoise REMACLE	Q1	15	-	-	**2**
CHIM0433-1	*Proteomics* - Marianne FILLET, Pierre LEPRINCE, Gabriel MAZZUCCHELLI	Q2	20	10	-	**3**
CHIM9216-1	*The contribution of electrochemistry to macromolecular chemistry* - Christine JÉRÔME	Q2	10	-	-	**1**
BIOC0720-1	*Structure of biological macromolecules* - Paulette CHARLIER - [5h Mon. WS]	Q1	15	20	[+]	**4**

CHIM0637-3	*Chemistry of materials, Inorganic materials* (english language) - Bénédicte VERTRUYEN	Q1	20	-	-	**2**

Courses organised at the UMons

HULG0453-1	*Nanotechnology of the controlled-release formulations* - N...	Q2	15	-	-	**2**
HULG2089-1	*Introduction to Nanotechnology* - Michel WAUTELET	Q1	15	-	-	**2**

Course organised at the UNamur

HULG2084-1	*Intermolecular interactions* - N...		7,5	7,5	-	**3**