ECTS INFORMATION PACK YEAR 07-08

1. INFORMATION ABOUT THE MOBILITY COORDINATOR

Name: Dr. Anna Maria Masdeu Bultó
Address: Facultat de Química
C/ Marcel.lí Domingo, s/n
Campus Sescelades
43007 Tarragona
Catalunya, Espanya
Tel: +34 977-558779
Fax: +34 977-559528/ +34 977-558237
E-mail: mobility.fq@urv.net

2. DESCRIPTION OF THE FACULTY

Courses taught at the Faculty Química

- Degree in Chemistry
- Degree in Biochemistry (second cycle)

DEPARTMENTS OF ANALYTICAL CHEMISTRY AND ORGANIC CHEMISTRY / PHYSICAL AND INORGANIC CHEMISTRY / BIOCHEMISTRY AND BIOTECHNOLOGY

Website of the Faculty of Chemistry:

http: //www.quimica.urv.cat

Websites of the Departments:

http://www.quimica.urv.cat/qaqo/
http://www.quimica.urv.cat/~w3qfi/
http://bioquimica.urv.cat/cat/index.jsp

3. DESCRIPTION OF THE PROGRAMME IN CHEMISTRY

Minimum length of the course: 4 years
Number of credits: 321,5 credits (225 compulsory and core, 64,5 optional, 32 free choice)

* Credits are used as units of evaluation in teaching programmes. Each subject in the curriculum is assigned a certain number of credits. Each credit corresponds to ten hours of theoretical or practical classes or their equivalent. The award of credits is subject to the systems of the University for verifying the acquisition of knowledge.

For the University's own subjects adapted to the EHEA system, which follow the teaching methodology of the ECTS system, 25-30 hours of a student's workload are equivalent to 1 credit.

Curricula are divided into:

1. Core subjects. These are set by the Spanish Ministry of Education, Culture, and must be included in all curricula leading to the award of the same official certificate.
2. Compulsory subjects. These subjects are set by each University as an obligatory component of a student's degree course.
3. Optional subjects. These subjects are set by each University. They are included in the University's curricula and students may select from the range of subjects available.
4. Free-choice subjects. Each University includes a percentage of these subjects as part of its total teaching load in each curriculum.

RECOMMENDED SEQUENCE OF COURSES

COMPULSORY AND CORE SUBJECTS

FIRST YEAR

First semester	URV credits	ECTS credits	Second semester	URV credits	ECTS credits
Bonding Chemistry	4.5	4.5	Statistics and Programming	3	3
Mechanics	6	6	Experimental Chemical Synthesis I	7.5	7.5
Algebra	4.5	4.5	Electricity and Optics	7.5	7.5
Principles of Thermodynamics	3	3	Chemical Thermodynamics	4.5	4.5
Basic Operations	6	6	Organic Chemistry I	4.5	4.5
Calculus	6	6	Ionic Equilibrium in Solution	6	6
			Inorganic Chemistry I	4.5	4.5

SECOND YEAR

First semester	URV credits	ECTS credits	Second semester	URV credits	ECTS credits
Physical Chemistry	6	6	Analytic Chemistry	4.5	4.5
Organic Chemistry II	6	6	Inorganic Chemistry II	4.5	4.5
Chemical Engineering	7.5	7.5	Biochemistry	9	9
Experimental Analytical	7.5	7.5			

Chemistry and Physical Chemistry I Physical Chemistry	6	6	Experimental Chemical Synthesis II Experimental Analytical Chemistry and Physical Chemistry II	7.5 7.5	7.5 7.5

THIRD YEAR

First semester	**URV credits**	**ECTS credits**	**Second semester**	**URV credits**	**ECTS credits**
Group Theory	3	3	Separation Techniques	6	6
Structural Determination I	6	6	Advanced Physical Chemistry	6	6
Molecular Spectroscopy	4.5	4.5	Advanced Organic Chemistry	4.5	4.5
Coordination Compounds	4.5	4.5	Structural Determination II	3	3
Instrumental Analysis	4.5	4.5	Experimental Advanced Chemistry	9	9
Experimental Advanced Chemistry I	9	9	Organometallics	3	3
Methodology and Experimentation if Biochemistry I	3	3			

FOURTH YEAR

Annual subjects	**URV credits**	**ECTS credits**
Experimental Work	20	20

First semester	**URV credits**	**ECTS credits**	**Second semester**	**URV credits**	**ECTS**

					credits
Inorganic Solids	3	3	Symmetry and Characterization of Solids	4.5	4.5
Advanced Analytical Chemistry	4.5	4.5	Materials Science	6	6
Natural Products	4.5	4.5	Documentation	3	3
Experimental Analytical Chemistry and Physical Chemistry III	3	3			
Experimental Analytical Chemistry and Physical Chemistry IV	3	3			

OPTIONAL SUBJECTS

FIRST YEAR

First semester	**URV credits**	**ECTS credits**	**Second semester**	**URV credits**	**ECTS credits**
			Mathematical Methods in Chemistry	4.5	4.5
			Experimental Physics	4.5	4.5

SECOND YEAR

First semester	**URV credits**	**ECTS credits**	**Second semester**	**URV credits**	**ECTS credits**
Company Organization	4.5	4.5	Application of Computers to Chemical Problems	6	6

Communication Techniques in Chemistry	1.5	1.5	Industrial Organic Chemistry	3	3
History and Philosophy of the Experimental Sciences	3	3	Physical Fundamentals of Spectroscopic Techniques	4.5	4.5
			Special Topics in Inorganic Chemistry	3	3

THIRD YEAR

First semester	**URV credits**	**ECTS credits**	**Second semester**	**URV credits**	**ECTS credits**
Enzymology	6	6	Quality Assessment and Control	3	3
Environmental Physics	3	3	Environmental Analysis and Control	3	3
Polymer Chemistry	4.5	4.5	Liquid State Physics. Measurement techniques	3	3
Biosynthesis of Macromolecules	3	3	Structural Organic Chemistry	3	3
			Biochemistry and Industrial Microbiology	9	9

FOURTH YEAR

First semester	**URV credits**	**ECTS credits**	**Second semester**	**URV credits**	**ECTS credits**
Heterogeneous	3	3	Physics of New Materials	3	3

Catalysis Reaction Mechanisms	3	3	Nucleation and Crystal Growth	3	3
Homogeneous Catalysis	3	3	Special Topics in Advanced Inorganic Chemistry	3	3
Computer Systems of Chemical Interest	4.5	4.5	Application of Transition Metal Compounds in Organic Synthesis	3	3
Chemical Analysis of Natural Products	3	3	Physics of Polymeric Materials	3	3
Chemical Analysis of Industrial Products	3	3	Special Topics in Advanced Inorganic Chemistry	3	3
Bioinorganics	3	3	Analytical Control of Chemical Processes	3	3
Kinetics of Electrode Processes	3	3	Synthesis Design	4.5	4.5
Computational Chemistry	6	6			