

1st Year: Core Curriculum

Sem 1: Sept to Feb (S5)

Title	ECTS	Student hours
UE_1501 - Chemistry 1	5	46
GENERAL CHEMISTRY 1		16
ORGANIC CHEMISTRY		30
UE_1502 - Chemistry 2	5	45
INSTRUMENTAL ANALYSIS		45
UE_1503 - Physics 1	5	52
FLUID MECHANICS 1		16
THERMODYNAMICS 1		16
MATERIAL RESISTANCE 1		20
UE_1504 - Engineering Science 1	5	77
PREREQUISITES		7
SCIENTIFIC ENGINEERING BASES 1		43
IT AND NUMERICAL TOOLS FOR ENGINEERS		27
UE_1505 - Engineer in a company 1	5	67
ECONOMICAL ENVIRONMENT, ENTERPRISES AND MARKETS		14
HEALTH AND SAFETY		11
ACCOUNTING MANAGEMENT		21
INTRODUCTION TO SDSR		12
CONTRACT AND COMPANY RIGHTS		9
UE_1506 - Engineer in a company 2	5	68
ENGLISH 1		31
SOFT SKILLS		4
SEXIST AND SEXUAL VIOLENCES		3
COMMUNICATION		12
DOCUMENT RESEARCH 1		9
SUSTAINABLE DEVELOPMENT		4
HUMANITIES MEETING		6

1st Year: Core Curriculum

Sem 2: Feb to June (S6)

Title	ECTS	Student Hours
UE_1601 - Polymer Science 1	5	70
MATERIAL ANALYSIS		32
INTRODUCTION TO POLYMERS		22
INTRODUCTION TO SPECIALISATION TRADES		16
UE_1602 - Chemistry 3	5	54
MATERIAL PROPERTIES		20
PHOTOCHEMISTRY		20
GENERAL CHEMISTRY 2		14
UE_1603 - Physics 2	5	72
FLUID MECHANICS 2		20
THERMODYNAMICS 2		18
MATERIAL RESISTANCE 2		20
HEAT TRANSFER		14
UE_1604 - Engineering Science 2	5	72
STATISTICS		22
SCIENTIFIC ENGINEERING BASES 2		23
EXPERIMENTAL RESOLUTION METHODOLOGY		18
INDUSTRIAL DRAWING 1		9
UE_1605 - Engineer in a Company 3	5	44
WORK LEGISLATION		9
CHEMICAL NORMS AND REACH PROGRAMME		4.50
MARKETING		15
NEGOCIATION		15.50
UE_1606 - Engineer in a Company 4	5	78
HUMANITIES 1: ASPECTS OF INNOVATION		26
EMOTIONAL INTELLIGENCE		4
ENGLISH 2		29
DOCUMENT RESEARCH 2		14
PREPARATION FOR INTERNATIONAL EXPERIENCES		4
SEMESTER ABROAD BRIEFING		1

2nd YEAR: Sem 1: Sept to Jan (S7)

Core Curriculum

Exchange Semester with 1 of 4 Partner Universities

Faculty of Chemical Engineering and Technology (FCET)

University of Zagreb (Croatia)

Title	ECTS	Student Hours
UE_1711 - Polymers Science 2	5	135
POLYMERS AND POLYMERIZATION PROCESSES		45
POLYMER PHYSICS AND MORPHOLOGY		60
ADDITIVES FOR POLYMER MATERIALS		30
UE_1712 - Physical Chemistry 1	5	50
POLYMER MATRIX COMPOSITES		15
INTRODUCTION TO NANOTECHNOLOGY		15
APPLIED RHEOLOGY		20
UE_1713 – Physical Chemistry 2	5	61
SURFACE ENGINEERING		30
COLORIMETRY		11
COLLOIDS		20
UE_1704 - Research and Innovation 1	5	70
TECHNOLOGY WATCH / BIBLIOGRAPHY		70
UE_1715 - Engineer in a company 5	5	54
HUMANITIES 2 : GLOBALISATION AND DIVERSITY		24
PROJECT MANAGEMENT		30
UE_1706 - International Experience	5	1
INTERNATIONAL INTERNSHIP EXPERIENCE		1

2nd YEAR: Sem 1: Sept to Jan (S7)

Core Curriculum

Exchange Semester with 1 of 4 Partner Universities

Atlântica University (Portugal)

Title	ECTS	Student Hours
UE_1721 - Polymers Science 2	5	90
POLYMERS MORPHOLOGY AND ADDITIVES		30
POLYMER PHYSICS AND MORPHOLOGY		60
UE_1723 - Physical Chemistry 1	5	80
COMPOSITE MATERIALS		30
INTRODUCTION TO NANOTECHNOLOGIES		10
MECHANICS OF POLYMER MATERIALS		40
UE_1723 – Physical Chemistry 2	5	71
INTERFACE PHENOMENA		40
COLORIMETRY		11
APPLIED RHEOLOGY		20
UE_1704 - Research and Innovation 1	5	70
TECHNOLOGY WATCH / BIBLIOGRAPHY		70
UE_1725 - Engineer in a company 5	5	54
HUMANITIES 2 : GLOBALISATION AND DIVERSITY		24
PROJECT MANAGEMENT		30
UE_1706 - International Experience	5	1
INTERNATIONAL INTERNSHIP EXPERIENCE		1

2nd YEAR: Sem 1: Sept to Jan (S7)

Core Curriculum

Exchange Semester with 1 of 4 Partner Universities

Engineering School of East-Barcelona (EEBE)

Universitat Politécnica de Catalunya (UPC)
(Spain)

Title	ECTS	Student Hours
UE_1731 - Polymers Science 2	5	85
POLYMER PROCESSING AND COATING TECHNOLOGIES		20
EXPERIMENTATION AND INSTRUMENTATION		20
CHEMISTRY OF POLYMERIZATION		45
UE_1732 - Physical Chemistry 1	5	85
POLYMER PHYSICS		45
APPLIED RHEOLOGY		20
NANOTECHNOLOGY		20
UE_1733 – Physical Chemistry 2	5	71
ADVANCED MATERIALS		60
COLORIMETRY		11
UE_1704 - Research and Innovation 1	5	70
TECHNOLOGY WATCH / BIBLIOGRAPHY		70
UE_1735 - Engineer in a company 5	5	64
HUMANITIES 2 : GLOBALISATION AND DIVERSITY		24
TECHNOLOGICAL INNOVATION – MANAGEMENT AND ORGANIZATION		40
UE_1706 - International Experience	5	1
INTERNATIONAL INTERNSHIP EXPERIENCE		1

2nd YEAR: Sem 1: Sept to Jan (S7)

Core Curriculum

Exchange Semester with 1 of 4 Partner Universities

Université de Sherbrooke (Canada)

– courses in French

Title	ECTS	Student Hours
UE_751 – Science des Polymères 2	5	95
CHIMIE ET PHYSICO CHIMIE DES POLYMERES		45
CHIMIE DE LA FORMULATION DES POLYMERES		50
UE_752 – Physico-Chimie 1	5	65
INTRODUCTION AUX NANOSCIENCES : ASPECTS PHYSICO-CHIMIQUES		20
METHODES CHIMIQUES DE CARACTERISATION DES POLYMERES		45
UE_753 – Physico-Chimie 2	5	81
INTRODUCTION A LA CHIMIE DES COMPOSITES		30
COLLOIDES ET PHYSICOCHIMIE DES SURFACES		40
COLORIMETRY		11
UE_704 – Recherche et Innovation 1	5	70
INITIATION A LA VEILLE TECHNOLOGIQUE		70
UE_755 – INGENIEUR EN ENTREPRISE 5	5	64
ISH 2 : GLOBALITE ET DIVERSITE		24
GESTION DE PROJET		40
UE_706 – EXPERIENCE A L'INTERNATIONAL	5	1
STAGE A L'INTERNATIONAL		1

2nd YEAR: Sem 2: Feb to May (S8)

Specialisation

FORMULATION CHEMISTRY

Title	ECTS	Student Hours
UE_1801 - Research and Innovation 2	3	30
RESEARCH PROJECT 1		30
UE_1802 - Engineer in a Company 6	4	95
FUNCTIONAL ANALYSIS		10
BUSINESS MODEL SIMULATION		18
ENGLISH 3		28
INDUSTRIAL PROPERTY (PATENTS)		9
LIFE CYCLE ANALYSIS		13
PRODUCTION MANAGEMENT		17
UE_1803 – English Language Level Validation	3	3
ENGLISH TEST		3
UE_1821 - Formulation Chemistry 1	8	84.5
CREATION OF A PAINT		30
ADDITIVES AND PHYSICAL CHEMISTRY OF FORMULATED PRODUCTS		16
RAW MATERIALS (FORMULATION CHEMISTRY)		28.5
UE_1822 - Formulation Chemistry 2	7	73.5
CREATION OF AN ADHESIVE		41,5
INDUSTRIAL PAINTS 1 AND DECORATIVES		32,5
UE_1823 - Formulation Chemistry 3	5	80.5
COLOUR ANALYSIS FC		12
SKIN BIOLOGY		11
CARE PRODUCTS		21
COSMETIC REGULATION		7
COSMETIC CONFERENCES 1		11.5
CREATION OF A COSMETIC		18

3rd YEAR: Sem 1: Sept to Jan (S9)

Advanced Specialisation

FORMULATION CHEMISTRY

Title	ECTS	Student Hours
UE_1901 - Engineering Internship	8	1
ENGINEERING INTERNSHIP		1
UE_1902 - Engineer in a company 7	3	42
HUMANITIES 3 : WORK ENVIRONMENT OF ENGINEERING		14
PROFESSIONAL ENGLISH		20
PREPARATION FOR A PROFESSIONAL CARREER - EMPLOYMENT		8
UE_1903 - Engineer in a company 8	4	43
QUALITY		14
GENDER EQUALIY AT WORK AND DISCRIMINATIONS		6
HR MANAGEMENT		23
UE_1904 - Research and Innovation 3	4	120
RESEARCH PROJECT		120
UE_1921 - Formulation Chemistry 4	4	73.5
MANUFACTURING PROCEDURES		11
APPLICATION PROCEDURES		7.5
INDUSTRIAL PAINTS 2		36
SPECIFIC PAINTS		19
UE_1922 - Formulation Chemistry 5	4	75
MAKE-UP PRODUCTS		33
OTHER ADHESIVES		23
INKS		11
OTHER FORMULATION PRODUCTS		8
UE_1923 - Formulation Chemistry 6	3	54
HEALTH PRODUCTS		19
SD&SR APLIED TO FORMULATION CHEMISTRY		13
COSMETIC CONFERENCES 2		15
PAINTS AND ADHESIFS REGULATION		7

Sem 2: Feb to Aug (S10)

Title	ECTS
UE_1949 - Engineering Project	30
FINAL YEAR INTERNSHIP	