

# 1st Year: Core Curriculum

## Sem 1: Sept to Feb (S5)

Title	ECTS	Student hours
<b>UE_551 - Chemistry 1</b>	<b>5</b>	<b>50</b>
GENERAL CHEMISTRY		20
ORGANIC CHEMISTRY		30
<b>UE_552 - Chemistry 2</b>	<b>5</b>	<b>68</b>
CHROMATOGRAPHY ANALYSIS		15
SPECTROSCOPY ANALYSIS		15
PRACTICAL ANALYTICAL CHEMISTRY INSTRUMENTATION		38
<b>UE_553 - Physics 1</b>	<b>5</b>	<b>65,5</b>
FLUID MECHANICS 1		18
THERMODYNAMICS 1		19,5
MATERIAL RESISTANCE		28
<b>UE_554 - Engineering Science 1</b>	<b>5</b>	<b>65</b>
MATHEMATICAL TOOLS		26
IT, ALGORITHMICS AND DATA TREATMENT		19
NUMERICAL MATHEMATICAL METHODS		20
<b>UE_555 - Engineer in a company 1</b>	<b>5</b>	<b>51</b>
ECONOMICAL ENVIRONMENT, ENTERPRISES AND MARKETS		14
HEALTH AND SAFETY		11
ACCOUNTING MANAGEMENT		17
CONTRACT AND COMPANY RIGHTS		9
<b>UE_556 - Engineer in a company 2</b>	<b>5</b>	<b>73</b>
ENGLISH 1		31
COMMUNICATION		16
MICRO-PROJECT AND INTRODUCTION TO BIBLIOGRAPHY		20
SUSTAINABLE DEVELOPMENT		4
HUMANITIES CONFERENCE		6

# 1st Year: Core Curriculum

## Sem 2: Feb to June (S6)

Title	ECTS	Student Hours
<b>UE_651 - Polymers Science 1</b>	<b>5</b>	<b>75,5</b>
MATERIAL ANALYSIS		32
INTRODUCTION TO POLYMERS		22
POLYMER APPLICATIONS		21,5
<b>UE_652 - Chemistry 3</b>	<b>5</b>	<b>61,5</b>
PROPERTIES OF MATERIALS		21
PHOTOCHEMISTRY		20
THERMOCHEMISTRY - KINETICS		20,5
<b>UE_653 - Physics 2</b>	<b>5</b>	<b>56</b>
FLUID MECHANICS 2		18
THERMODYNAMICS 2		22
HEAT TRANSFER		16
<b>UE_654 - Engineering Science 2</b>	<b>5</b>	<b>45</b>
STATISTICS		18
EXPERIMENTAL RESOLUTION METHODOLOGY		18
INDUSTRIAL DRAWING 1		9
<b>UE_655 - Engineer in a Company 3</b>	<b>5</b>	<b>45,5</b>
INTRODUCTION TO BUSINESS START-UPS		2
WORK LEGISLATION		9
CHEMICAL NORMS AND REACH PROGRAMME		4,5
MARKETING		15
NEGOCIATION		15
<b>UE_656 - Engineer in a Company 4</b>	<b>5</b>	<b>59</b>
HUMANITIES 1: ASPECTS OF INNOVATION		24
ENGLISH 2		31
PREPARATION FOR INTERNATIONAL EXPERIENCES		4

# 2<sup>nd</sup> YEAR: Core Curriculum & Specialisation

## FORMULATION CHEMISTRY

Sem 1: Sept to Jan (S7)

Exchange Semester with Partner University

Curriculum and hours vary depending on location

Title	ECTS	Student Hours
<b>UE_751 - Polymers Science 2</b>	<b>5</b>	<b>80</b>
POLYMER CHEMISTRY 2		50
POLYMER PHYSICS AND MORPHOLOGY		17
POLYMERS PRACTICALS		13
<b>UE_753 - Physical Chemistry 1</b>	<b>5</b>	<b>73</b>
ADDITIVES		10
COMPOSITES		15
MECHANICAL PROPERTIES OF MATERIALS		13
APPLIED RHEOLOGY		20
INTRODUCTION TO NANOTECHNOLOGY		15
<b>UE_753 – Physical Chemistry 2</b>	<b>5</b>	<b>56</b>
PHYSICAL CHEMICAL PROPRIETIES OF SURFACES		25
COLLOIDS		20
COLORIMETRY		11
<b>UE_754 - Research and Innovation 1</b>	<b>5</b>	<b>70</b>
TECHNOLOGY WATCH / BIBLIOGRAPHY		70
<b>UE_755 - Engineer in a company 6</b>	<b>5</b>	<b>54</b>
HUMANITIES 2 : GLOBALISATION AND DIVERSITY		24
PROJECT MANAGEMENT		30
<b>UE_756 - International Experience</b>	<b>5</b>	<b>1</b>
INTERNATIONAL INTERNSHIP EXPERIENCE		1

# 2<sup>nd</sup> YEAR: Core Curriculum & Specialisation

## FORMULATION CHEMISTRY

### Sem 2: Feb to May (S8)

Title	ECTS	Student Hours
<b>UE_851 - Research and Innovation 2</b>	<b>3</b>	<b>30</b>
RESEARCH PROJECT 1		30
<b>UE_852 - Engineer in a Company 7</b>	<b>4</b>	<b>90</b>
FUNCTONNAL ANALYSIS		10
BUSINESS MODEL SIMULATION		18
ENGLISH 3		28
INDUSTRIAL PROPERTY (PATENTS)		9
PRODUCTION MANAGEMENT		35
<b>UE_853 – English Language Level Validation</b>	<b>3</b>	<b>3</b>
ENGLISH TEST		3
<b>UE_871 - Formulation Chemistry 1</b>	<b>8</b>	<b>74</b>
CREATION OF A PAINT		28
PHYSICAL PROPERTIES OF FORMUATED PRODUCTS		6
RAW MATERIALS (FORMULATION CHEMISTRY)		40
<b>UE_872 - Formulation Chemistry 2</b>	<b>7</b>	<b>87</b>
CREATION OF AN ADHESIVE		17
ADHESIFS: AQUEOUS PHASE		26,5
INDUSTRIAL PAINTS 1 AND DECORATIVES		43,5
<b>UE_873 - Formulation Chemistry 3</b>	<b>5</b>	<b>72,5</b>
COLOUR ANALYSIS FC		12,5
SKIN BIOLOGY		10
CARE PRODUCTS		17
COSMETIC REGULATION		6
COSMETIC CONFERENCES 1		15
CREATION OF A COSMETIC		11

# 3<sup>rd</sup> YEAR: Advanced Specialisation

## FORMULATION CHEMISTRY

### Sem 1: Sept to Jan (S9)

Title	ECTS	Student Hours
UE_951 - Engineering Internship	8	1
ENGINEERING INTERNSHIP		1
UE_952 - Engineer in a company 8	3	46
HUMANITIES 3 : WORK ENVIRONMENT OF ENGINEERING		18
PROFESSIONAL ENGLISH		20
PREPARATION FOR A PROFESSIONAL CARREER - EMPLOYMENT		8
UE_953 - Engineer in a company 9	4	59
QUALITY		16
HR MANAGEMENT		30
SUSTAINABLE DEVELOPMENT, LIFE CYCLE ANALYSES, ECO-CONCEPTION		13
UE_954 - Research and Innovation 3	4	120
RESEARCH PROJECT		120
UE_971 - Formulation Chemistry 4	4	70
MANUFACTURING PROCEDURES		11
APPLICATION PROCEDURES		9
INDUSTRIAL PAINTS 2		34
SPECIFIC PAINTS		19
UE_972 - Formulation Chemistry 5	4	81
MAKE-UP PRODUCTS		31
OTHER ADHESIFS		23
INKS		11
OTHER FORMULATION PRODUCTS		16
UE_973 - Formulation Chemistry 6	3	44,5
HEALTH PRODUCTS		17
CONTAINER-CONTENT REGULATION (PACKAGING)		5.5
COSMETIC CONFERENCES 2		15
PAINTS AND ADHESIFS REGULATION		7

### Sem 2: Feb to Aug (S10)

### Final Year Engineering Project

Title	ECTS
UE_999 - Engineering Project	30
FINAL YEAR PROJECT	