

COSMETIC CHEMISTRY – Engineer's degree

1st semester		
	module	ECTS
1.	Physical education	0
2.	Statistical compilation of measurement data	2
3.	Cosmetic law	3
4.	Health and Safety regulations and ergonomics	1
5.	Applied mathematics	5
6.	General and inorganic chemistry	5
7.	General microbiology	3
8.	Biochemistry and molecular biology	4
9.	Skin structure and physiology	4
10.	Bases of cosmetics science	3
11.	Introduction to the production and technology of cosmetics	

2nd semester		
	module	ECTS
1.	Physical education	0
2.	Economics (<i>in cosmetic industry</i>)	1
3.	Applied mathematics	5
4.	General and inorganic chemistry	5
5.	Organic chemistry	5
6.	Physics	5
7.	Immunology and allergology	2
8.	Dermatological cosmetics	2
9.	Student internship	5

3rd semester		
	module	ECTS
1.	English for academic and job-related purposes	1
2.	Intellectual property on the cosmetology services market	2
3.	Analytical chemistry	5
4.	Organic chemistry	5
5.	Microbiology of cosmetics	3
6.	Equipment and technology in cosmetic industry	3
7.	Raw materials	4
8.	Polymers in cosmetics	2
9.	Introduction to biopharmacy of cosmetics	5
10.	Industrial production of cosmetics	

4th semester		
	module	ECTS
1.	English for academic and job-related purposes	1
2.	Information Technology	2
3.	Physical chemistry	5
4.	Chemistry and cosmetic formula	5
5.	Toxicology of cosmetics	3
6.	Toxicological aspects in the production process of cosmetics	
7.	Biotech-derived materials in cosmetology	4
8.	Pharmacognosy and technology of plant raw materials	
9.	Student internship	5
10.	Analysis of cosmetic raw materials and cosmetics	5
11.	Chemical analysis of cosmetics. Cosmetics assessment methods	

5th semester		
	module	ECTS
1.	English for academic and job-related purposes	1
2.	Applied chemistry and management of chemicals	2
3.	Chemical technology	4
4.	Modelling and designing of technological processes	5
5.	Chemical commodity science	3
6.	Physical chemistry of cosmetic forms	4
7.	Dosimetry	1
8.	Cosmetic product design and engineering	5
9.	Cosmetics packaging requirements and criteria	
10.	Crystallography	5
11.	Rheology of cosmetic forms	

6th semester		
	module	ECTS
1.	Technology of cosmetic formulations	5
2.	Commodity science in cosmetic industry	3
3.	Quality management systems	2
4.	Quality and safety of a cosmetic product	
5.	Organic synthesis of cosmetic components	6
6.	Optimisation of cosmetic formulas	
7.	Natural certified cosmetics	5
8.	Eco certifications in cosmetology	
9.	Specialist seminar: research methodology; engineer's project	4
10.	Student internship	5

7th semester		
	module	ECTS
1.	Management in cosmetic industry	2
2.	Marketing and management in the cosmetic products trade	
3.	Environmental impact assessment	4
4.	UV radiation and protective filters used in cosmetics	
5.	Aroma products and introduction to perfumery	5
6.	Sensory perception and aromas	
7.	Colour cosmetics	5
8.	Cosmetics for care and beautifying purposes	
9.	Nanotechnology in cosmetology	4
10.	In-vitro testing in modern cosmetology	
11.	Specialist seminar: engineer's project	10

