

# FACULTY OF CHEMICAL TECHNOLOGY

- Please try to choose the courses from the same semester, in order to avoid timetable clashed.
- The majority of your subjects (around 3) should be from your main faculty with which your university has an agreement.
- Bachelor level students are only allowed to choose Master level subjects after receiving a permission from the professor of that subject.

#### **Bachelor courses**

#### **Autumn**

Course code	Course title	<b>ECTSCredits</b>	Semester
P360B105	Inorganic Chemistry	6	1
T480B107	Introduction to Biomedical Materials Industries	6	1
T480B108	Non-Renewable Natural Resources	6	3
P320B001	Molecular Biology	6	5
T390B102	Polymer Chemistry and Technology	9	5
T350B138	Introduction to Chemical Technology and Engineering	6	1
P360B501	Inorganic Chemistry 1	6	1
P300B503	Chemical Analysis	6	3
P390B301	Organic Chemistry 1	6	3
P400B001	Physical Chemistry 1	6	3
P300B603	Instrumental Analysis	6	5
T350B125	Process Engineering 1	6	5
T350B127	Process Modelling	6	5
PR00B013	Chemical Engineering Design	6	7
T490B111	Introduction to Biotechnologies	6	1
B230B104	Microbiology	6	3
T490B105	Molecular Biology	6	5
P004B001	Principles of Biochemistry	6	5
T000B238	Introduction to Food Science and Technologies	6	1
P390B104	Bioorganic chemistry	6	3
P300B101	Chemical and Instrumental Analysis	6	3
T430B145	Food Technology 1	12	5
B420B103	Nutrition and Metabolism	6	5
T430B149	Food Technology Design and Production Organization	6	7
T430B150	Sustainable Food Systems	6	7
B740B010	Toxicology and Human Safety	6	7
P390B103	Introduction to Applied Chemistry	6	1
P175B142	Software for Chemistry	6	3
P310B001	Biochemistry	6	5
P003B010	Chemistry of Functional Inorganic Materials	6	5
P003B101	Chemistry of Functional Organic Materials	6	5
T350B123	General Chemical Technology and Biotechnology	6	7
T500B101	Human Safety and Toxicology	3	7
T480B010	Quality Control of Chemical Products and their Manufacturing	3	7



## Spring

Course code	Course title	ECTS Credits	Semester
B200B001	Cell Biology	6	2
P390B107	Organic Chemistry	6	2
B230B104	Microbiology	6	4
P360B502	Inorganic Chemistry 2	6	2
T350B103	General Chemical Technology	6	4
P390B302	Organic Chemistry 2	6	4
P400B002	Physical Chemistry 2	6	4
T390B207	Polymer Technology	6	4
P400B010	Chemical Thermodynamics	3	6
T350B126	Process Engineering 2	6	6
B110B001	Bioinformatics	3	4
T500B101	Human Safety and Toxicology	6	4
P352B001	Surface and Colloid Chemistry	6	4
T490B011	Enzymonology	6	6
T490B112	Genetic Engineering	6	6
B200B010	Cell and Tissue Biology	6	2
P390B105	General Organic Chemistry	6	2
T430B144	Food Chemistry and Analysis	9	4
T430B143	Food Microbiology and Hygiene	6	4
T430B109	Food Sensory Evaluation	3	4
P004B001	Principles of Biochemistry	6	4
T430B147	Catering Technology	3	6
T430B146	Food Technologies 2	12	6
T430B148	Packaging Materials and Technologies	3	6
T430B140	Food Quality and Safety	6	8
P300B503	Chemical Analysis	6	4
P370B002	Polymer Chemistry	6	4
P352B001	Surface and Colloid Chemistry	6	4
T480B215	Chemistry and Technology of Cosmetics	6	6
P390B106	Drug Chemistry and Technology	6	6
P003B100	Sustainable Chemistry	6	8



### **Master courses**

#### <u>Autumn</u>

Course code	Course title	<b>ECTSCredits</b>	Semester
P400M101	Analytical and Preparative Chromatography	6	1
P390M117	Selected Chapters of Organic Chemistry	6	1
P390M327	Spectroscopy of Organic Compounds	6	1
T480M100	Extraction of Bioactive Natural Materials	6	3
P000M116	Research Project 2 (Medicinal Chemistry)	12	3
T350M115	Chemical Reaction Engineering	6	1
T350M110	Fluid Dynamics	6	1
T230M121	Design of Chemical Industry Enterprises	6	3
T000M253	Research Project and Practice	12	3
T000M252	Research Project 2 (Chemical Engineering)	18	3
P400M101	Analytical and Preparative Chromatography	6	1
B230M105	Applied Microbiology	6	1
T490M107	Product Quality Systems in Biotechnology Industry	6	1
T490M108	Technology of Industrial Bioprocesses	6	1
T125M101	Advanced Optimisation and Control Methods for	6	3
	Biotechnological Processes		
P390M112	Methods of Spectroscopic Analysis of Biomolecules	6	3
T000M264	Research Project 2 (Industrial Biotechnology)	12	3
T430M133	Applied Food Chemistry	6	1
T430M141	Dietetics	6	1
T430M102	Food Quality and Safety Management	6	1
T000M246	Modern Methods in Food Analysis and Quality Control	6	1
T430M134	Assessment of Functionality of Food Ingredients	6	3
T430M142	Personalised Nutrition	6	3
T000M197	Research Project 2 (Food Science and Nutrition)	12	3
P400M103	Chemical Kinetics and Catalysis	6	1
P003M100	Green Chemistry and Renewable Resources	6	1
P352M010	Liquid and Gas Chromatography	6	1
P390M327	Spectroscopy of Organic Compounds	6	1
P000M119	Research Project 2 (Applied Chemistry)	6	3
T270M138	Air Quality Engineering	6	1
T270M123	Chemicals in Environment	6	1
P305M010	Methods of Environmental Analysis	6	1
T270M135	Sustainability Management and Law	6	1
T000M239	Eco-Entrepreneurship Project	6	3
T270M121	Modelling of Environmental Processes and Technologies	6	3
T000M238	Research Project 2	12	3

## **Spring**

Course code	Course title	<b>ECTSCredits</b>	Semester
P000M112	Research Project 1 (Medicinal Chemistry)	6	2
P390M116	Selected Chapters of Medicinal Chemistry	6	2
T000M251	Research Project 1 (Chemical Engineering)	6	2
T490M109	Bioprocess Technology in Industry 2	9	2
P390M113	Production of Biologically Active Materials	6	2



#### Courses in English 2025-2026

T000M263	Research Project 1 (Industrial Biotechnology)	9	2
B230M100	Applied Microbiology and Biotechnology	6	2
T430M126	Functional Foods and Food Supplements	6	2
T000M258	Research Project 1 (Food Science and Nutrition)	12	2
P003M102	Collected Chapters of Chemistry	6	2
P000M101	Research Project 1 (Applied Chemistry)	6	2
P360M106	Thermal Analysis and X-Ray Powder Diffraction Methods	6	2
T270M122	Experimental Design and Data Analysis in Environmental	6	2
	Engineering		
T000M022	Research Project 1 (Environmental Engineering)	6	2
T270M137	Technologies for Waste Management and Resources	6	2
	Recovering		
T270M136	Water Resources Engineering	6	2