

UNDERGRADUATE CURRICULUM 2025		
Course	Credits	AKTS
FIRST TERM		
MATH 141 Basic Calculus I	(3-2) 4	5
PHYS 101 General Physics I	(4-0) 4	5
PHYS 111 General Physics Lab I	(0-2)1	2
CHEM 121 General Chemistry I	(3-0)3	5
CHEM 141 General Chemistry Lab. I	(0-2)1	2
ENG 101 Development of Reading and Writing Skills I	(3-0) 3	3
CHE 101 Introduction to Chemical Engineering	(2-0) 2	6
TOTAL	18	28
Second Term		
	Credits	AKTS
MATH 142 Basic Calculus II	(3-2) 4	6
PHYS 102 General Physics II	(4-0) 4	5
PHYS 112 General Physics Lab II	(0-2)1	2
CHEM 122 General Chemistry II	(3-0) 3	5
CHEM 142 General Chemistry Lab. II	(0-2)1	2
CHE 102 Computer Tools in Engineering	(3-2) 4	7
ENG 102 Development of Reading and Writing Skills II	(3-0)3	3
GCC 101 Career Planning And Development	(2-0) NC	2
TOTAL	20	32
Third Term		
	Credits	AKTS
MATH 255 Differential Equations	(4-0) 4	6
CHE 201 Material and Energy Balances in Engineering	(3-0) 3	5
CHEM 221 Organic Chemistry	(4-0) 4	5
ECON 205 Principles of Economics	(3-0) 3	4
MBG 101 Biology I	(3-0) 3	5
*Restricted Elective	(3-0) 3	4
HIST 201 Principles of ATATÜRK	(2-0)NC	2
TURK 201 Turkish Language	(2-0) NC	2
TOTAL	20	33
Fourth Term		
	Credits	AKTS
CHE 210 Numerical Methods in Engineering	(3-2)4	5
CHE 220 Thermodynamics I	(3-0)3	5
CHE 222 Fluid Mechanics (PREREQUISITES: MATH 255)	(4-0)4	5
BE 208 Biochemistry	(3-0)3	5
*Restricted Elective	(3-0)3	4
HIST 202 Principles of ATATÜRK II	(2-0) NC	2
TURK 202Turkish Language II	(2-0) NC	2
TOTAL	17	28
Fifth Term		
	Credits	AKTS
CHEM 321 Physical Chemistry	(3-0) 3	4
CHE 311 Heat and Mass Transfer (PREREQUISITES: CHE 201)	(3-2) 4	5
CHE 321 Thermodynamics II	(3-0) 3	5
MSE 211 Materials Science and Engineering	(3-0) 3	5
CHE 301 Technical Writing for Chemical Engineer	(3-0) 3	3
*Non-Technical Elective	(3-0) 3	3
Compulsory Elective (CHE 300 Summer Practice I)	NC	8
TOTAL	19	33

Sixth Term		
	Credits	AKTS
CHE 302 Chemical Kinetics and Reactor Design	(4-0) 4	6
CHE 310 Chemical Engineering Lab. I	(0-4) 2	5
CHE 312 Separation Processes (PREREQUISITES: CHE 311)	(3-2) 4	5
CHE 330 Mathematical Modelling in Engineering	(3-0) 3	5
*Non-Technical Elective	(3-0) 3	3
Technical Elective	(3-0) 3	4
TOTAL	19	28
Seventh Term		
	Credits	AKTS
CHE 402 Process Dynamics and Control	(3-0) 3	5
CHE 410 Chemical Engineering Lab. II	(0-4) 2	5
CHE 420 Engineering Economics and Design (PREREQUISITES: CHE 302 and CHE312)	(2-4) 4	8
*Technical Elective	(3-0) 3	4
*Technical Elective	(3-0) 3	4
Compulsory Elective (CHE 400 Summer Practice II)	NC	8
TOTAL	15	34
Eight Term		
	Credits	AKTS
Restricted Elective		
CHE 411 Chemical Engineering Lab. III (PREREQUISITES: CHE 312 and CHE 302)	(0-4) 2	8
CHE 421 Engineering Design (PREREQUISITES: CHE 420)	(2-4) 4	8
* Nontechnical Elective	(3-0) 3	3
*Technical Elective	(3-0) 3	4
* Technical Elective	(3-0) 3	4
MAN 211 Corporate Communication and Management Skills for Engineers	(3-0)NC	3
TOTAL	15	30
GENERAL TOTAL	143	246