

UNDERGRADUATE CURRICULUM 2022		
Course	Credits	AKTS
FIRST TERM		
MATH 141 Basic Calculus I	(3-2) 4	5
PHYS 121 General Physics I	(3-2) 4	7
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	8
TOTAL	17	30
SECOND TERM		
	Credits	AKTS
MATH 142 Basic Calculus II	(3-2) 4	6
PHYS 122 General Physics II	(3-2) 4	8
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	6
ENG 102 Development of Reading and Writing Skills II	(3-0)3	3
GCC 101 Career Planning and Development	(2-0) NC	2
TOTAL	19	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 121 Biology I	(3-0) 3	5
ELT 1 Technical Restricted Elective Course	(3-0) 3	3
HISTG20X Principles of ATATÜRK I	(2-0) NC	2
TURKG20X Turkish Language I	(2-0) NC	2
TOTAL	20	32
FOURTH TERM		
	Credits	AKTS
CHE 210 Numerical Methods in Engineering	(3-2)4	6
CHE 220 Thermodynamics I	(3-0)3	6
CHE 222 Fluid Mechanics (PREREQUISITES: MATH 255)	(4-0)4	6
BE 208 Biochemistry	(3-0)3	5
ELT 2 Technical Restricted Elective Course	(3-0)3	3
HISTB20X Principles of ATATÜRK II	(2-0) NC	2
TURKB20X Turkish Language II	(2-0) NC	2
TOTAL	17	30
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 and Communication for Chemical Engineers	(3-0) 3	3
ELS 1 Social Elective Course	(3-0) 3	3
CHE 300 Summer Practice I	NC	7
TOTAL	19	30

SIXTH TERM		
	Credits	AKTS
CHE 302 Chemical Kinetics and Reactor Design	(4-0) 4	7
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	7
ELS 2 Social Elective Course	(3-0) 3	3
ELT 3 Technical Elective Course	(3-0) 3	3
TOTAL	19	30
SEVENTH TERM		
	Credits	AKTS
CHE 402 Process Dynamics and Control	(3-0) 3	4
CHE 410 Chemical Engineering Lab. II	(0-4) 2	6
CHE 420 Engineering Economics and Design (PREREQUISITES: CHE 302 and CHE312)	(2-4) 4	8
ELT 4 Technical Elective Course	(3-0) 3	3
ELT 5 Technical Elective Course	(3-0) 3	3
CHE 400 Summer Practice II	NC	7
TOTAL	15	31
EIGHT TERM		
	Credits	AKTS
CHE 411 Chemical Engineering Lab. III (PREREQUISITES: CHE 312 and CHE 302)	(0-4) 2	7
CHE 421 Engineering Design (PREREQUISITES: CHE 420)	(2-4) 4	11
ELS 3 Social Elective Course	(3-0) 3	3
ELT 6 Technical Elective Course	(3-0) 3	3
ELT 7 Technical Elective Course	(3-0) 3	3
MAN 211 Corporate Communication and Management	(3-0)NC	3
TOTAL	15	30
GENERAL TOTAL	141	247