

UNDERGRADUATE CURRICULUM 2025		
Course	Credits	AKTS
<b>FIRST TERM</b>		
MATH 141 Basic Calculus I	(3-2) 4	5
<b>PHYS 101 General Physics I</b>	<b>(4-0) 4</b>	<b>5</b>
<b>PHYS 111 General Physics Lab I</b>	<b>(0-2)1</b>	<b>2</b>
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
<b>CHE 101 Introduction to Chemical Engineering</b>	<b>(2-0) 2</b>	<b>6</b>
<b>TOTAL</b>	<b>17</b>	<b>28</b>
<b>Second Term</b>		
	Credits	AKTS
MATH 142 Basic Calculus II	(3-2) 4	6
<b>PHYS 102 General Physics II</b>	<b>(4-0) 4</b>	<b>5</b>
<b>PHYS 112 General Physics Lab II</b>	<b>(0-2)1</b>	<b>2</b>
CHEM 122 General Chemistry II	(3-0) 3	5
CHEM 142 General Chemistry Lab. II	(0-2)1	2
<b>CHE 102 Computer Tools in Engineering</b>	<b>(3-2) 4</b>	<b>7</b>
ENG 102 Development of Reading and Writing Skills II	(3-0)3	3
GCC 101 Career Planning And Development	(2-0) NC	2
<b>TOTAL</b>	<b>19</b>	<b>32</b>
<b>Third Term</b>		
	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
<b>TOTAL</b>	<b>20</b>	<b>33</b>
<b>Fourth Term</b>		
	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
<b>TOTAL</b>	<b>17</b>	<b>28</b>
<b>Fifth Term</b>		
	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
<b>TOTAL</b>	<b>19</b>	<b>33</b>

<b>Sixth Term</b>		
	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
<b>TOTAL</b>	<b>19</b>	<b>28</b>
<b>Seventh Term</b>		
	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
<b>TOTAL</b>	<b>15</b>	<b>34</b>
<b>Eight Term</b>		
	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
<b>TOTAL</b>	<b>15</b>	<b>30</b>
<b>GENERAL TOTAL</b>	<b>141</b>	<b>246</b>



