

Curriculum Table	Doc Num	TIU.FA.FR.
Unit: Computer Engineering Department	Rev/ Issue Date	2-19/1/2019

## First Grade

	Fall Term/First Semester				
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>
CMPE 104	Computing Algorithms Fundamentals	2	2	3	5
CMPE 103	Introduction to Computers	1	2	2	3
CMPE 161	Calculus I	4	0	4	6
CMPE 171	General Physics I	2	2	3	4
DBT 101	Academic Debate and Critical Thinking	2	0	2	3
ELT 103	Advanced English	3	0	3	4
KUR 105	Kurdology I	2	0	2	2
	Non-Technical Elective I	2	0	2	3
	Total			21	30

Spring Term/Second Semester							
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>		
CMPE 154	Discrete Structures	3	0	3	4		
CMPE 105	Programming Fundamentals	1	4	3	5		
CMPE 162	Calculus II	4	0	4	5		
CMPE 178	General Physics II	2	2	3	4		
GEN 122	Interpersonal Dynamics and Character Building	2	0	2	3		
ELT 104	Technical English	3	0	3	4		
KUR 106	Kurdology II	2	0	2	2		
	Non-Technical Elective II	2	0	2	3		
	Total			22	30		

# Second Grade

	Fall Term/Third Semester				
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>
CMPE 200	Advanced Programming	3	2	4	7
CMPE 253	Electrical Circuits	3	2	4	6
CMPE 211	Probability and Statistics	3	0	3	5
CMPE 241	Linear Algebra	3	0	3	5
CMPE 213	Engineering Mathematics	2	0	2	4
	Non-Technical Elective III	2	0	2	3
	Total			<u>18</u>	<u>30</u>

	Spring Term/Fourth Semester						
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>		
CMPE 214	Programming Language Concepts	3	0	3	4		
CMPE 202	Database System Concepts	3	2	4	5		
CMPE 203	Data Structures and Algorithms	3	2	4	7		
CMPE 248	Electronics	3	2	4	6		
CMPE 204	Numerical Analysis	3	2	4	5		
	Non-Technical Elective IV	2	0	2	3		
	Total			<u>21</u>	<u>30</u>		

## Third Grade

	Fall Term/Fifth Semester					
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>	
CMPE 301	Operating Systems	3	0	3	5	
CMPE 303	Object-Oriented Programming	3	2	4	7	
CMPE 331	Digital Logic Design	3	2	4	6	
CMPE 353	Computer Networks I	2	2	3	6	
	Technical Elective I	3	0	3	6	
	Total		-	<u>17</u>	<u>30</u>	

Spring Term/Sixth Semester						
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>	
CMPE 302	Automata Theory and Formal Languages	3	0	3	4	
CMPE 332	Microprocessors and Microcontrollers	3	2	4	6	
CMPE 352	Computer Architecture and Organization	3	0	3	5	
CMPE 354	Computer Networks II	3	2	4	5	
CMPE 304	Internship	1	2	2	4	
	Technical Elective II	3	0	3	6	
	Total			<u>19</u>	30	

### Fourth Grade

	Fall Term/Seventh Semester				
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>
CMPE 401	Software Engineering	3	0	3	6
CMPE 405	Research Methodology	1	4	3	6
	Technical Elective III	3	0	3	6
	Technical Elective IV	3	0	3	6
	Technical Elective V	3	0	3	6
	Total			15	30

	Spring Term/Eighth Semester						
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>		
CMPE 406	Graduation Project	3	0	3	6		
	Technical Elective VI	3	0	3	6		
	Technical Elective VII	3	0	3	6		
	Technical Elective VIII	3	0	3	6		
	Technical Elective IX	3	0	3	6		
	Total			<u>15</u>	<u>30</u>		

# Electives

	Technical Electives						
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>		
CMPE 411	Artificial Intelligence	3	0	3	6		
CMPE 425	Advanced Database Concepts	2	2	3	6		
CMPE 435	Computer Security	2	2	3	6		
CMPE 400	Robotics	2	2	3	6		
CMPE 413	Human-Computer Interaction	3	0	3	6		
CMPE 424	Advanced Wireless Networks	3	0	3	6		
CMPE 453	Introduction to Cryptography	3	0	3	6		
CMPE 452	Introduction to Management Information Systems	3	0	3	6		
CMPE 454	Digital Image Processing	2	2	3	6		
CMPE 456	Digital Signal processing	2	2	3	6		
CMPE 445	Computer Systems and Programming	2	2	3	6		
CMPE 443	Mobile Applications Development	2	2	3	6		
CMPE 442	Advanced Mobile Applications Development	2	2	3	6		
CMPE 455	Introduction to Computer Graphics	3	0	3	6		
CMPE 448	Control System	2	2	3	6		
CMPE 451	Introduction to Data Mining	2	2	3	6		
CMPE 341	Web Programming I	1	4	3	6		
CMPE 342	Web Programming II	1	4	3	6		
CMPE 407	Internet of Things (IoT)	2	2	3	6		
CMPE 408	Embedded Systems	2	2	3	6		
CMPE 409	Project Management	2	2	3	6		
CMPE 410	Advanced Web Programming	2	2	3	6		
CMPE 414	Cloud Computing	2	2	3	6		
CMPE 415	Algorithms and Complexity	2	2	3	6		

	Non-Technical Electives							
Code	Course Name	Theory	Practice	Credit	<b>ECTS</b>			
TUR 121	Turkish I	2	0	2	3			
TUR 122	Turkish II	2	0	2	3			
TUR 223	Turkish III	2	0	2	3			
GEN 201	Ecology	2	0	2	3			
GEN 202	Musics	2	0	2	3			
GEN 203	Art	2	0	2	3			
GEN 204	Football	2	0	2	3			
GEN 205	History of Art	2	0	2	3			
GEN 206	Basketball	2	0	2	3			
GEN 208	Volleyball	2	0	2	3			
CMPE 218	Engineering Economy	2	0	2	3			
CMPE 205	Computer Aided Design (CAD)	1	2	2	3			