

**Computer Engineering Curriculum**  
**First Year: Fall Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
1	25711	CMPE 107	Foundations of Computer Engineering	-	4	1	4	10	
2	25712	MATH 163	Discrete Mathematics	-	3	1	3	5	
3	25713	ENGL 191	Communication in English I	-	3	1	3	4	
4	25714	MATH 151	Calculus I	-	4	1	4	6	
5	25715	PHYS 101	Physics I	-	4	1	4	6	
S.Tot =5							Sem. Total	18	31
							Sub- Total	18	31

**First Year: Spring Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
-	25721	CMPE 100	Introduction to Computer Engineering	-	-	2	0	1	
1	25722	CMPE 112	Programming Fundamentals	CMPE 107	4	1	4	10	
2	25723	ENGL 192	Communication in English II	ENGL 191	3	1	3	4	
3	25724	MATH 152	Calculus II	MATH 151	4	1	4	6	
4	25725	PHYS 102	Physics II	-	4	1	4	6	
5	25726	TUSL 181 HIST 280	Turkish as a Second Language (other Students) History of Turkish Reforms (TC/TRNC)	-	2	-	2	2	
S.Tot =5							Sem. Total	17	29
							Sub- Total	35	60

**Second Year: Fall Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
1	25731	CMPE 223	Digital Logic Design	MATH 163	4	1	4	7	
2	25732	CMPE 231	Data Structures	CMPE 112	4	1	4	7	
3	25733	CMPE 211	Object-Oriented Programming	CMPE 112	4	1	4	7	
4	25734	ENGL 201	Communication Skills	ENGL 192	3	1	3	4	
5	25735	MATH 241	Linear Algebra and Ordinary Diff. Equations	MATH 151	4	1	4	6	
S.Tot =5							Sem. Total	19	31
							Sub- Total	54	90

**Second Year: Spring Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
1	25741	CMPE 224	Digital Logic Systems	CMPE 223	4	1	4	7	
2	25742	CMPE 226	Electronics for Computer Engineers	MATH 241	4	1	4	6	
3	25743	CMPE 242	Operating Systems	CMPE 112	4	1	4	7	
4	25744	MATH 373	Numerical Analysis for Engineers	MATH 241	3	1	3	5	
5	25745	UE - 01	Basic Science (CHEM 101, BIOL 105, SCIE 130, etc.)	-	3 4	-	3 4	4	
S.Tot =5							Sem. Total	18 19	29
							Sub- Total	72 73	120

**Third Year: Fall Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
1	25751	CMPE 325	Computer Architecture and Organization	CMPE 224	4	1	4	7	
2	25752	CMPE 353	Database Management Systems	CMPE 231	4	1	4	6	
3	25753	CMPE 371	Analysis of Algorithms	CMPE 231	4	1	4	6	
4	25754	CMPE 321	Signals and Systems for Computer Engineers	CMPE 226	4	1	4	6	
5	25755	MATH 322	Probability and Statistical Methods	MATH 151	3	1	3	5	
S.Tot =5							Sem. Total	19	30
							Sub- Total	91 92	150

**Third Year: Spring Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
1	25761	CMPE 318	Principles of Programming Languages	CMPE 211	4	1	4	6	
2	25762	CMPE 344	Computer Networks	CMPE 242 + MATH 322	4	1	4	6	
3	25763	CMPE 342	Client/Server Programming	CMPE 231	4	1	4	7	
4	25764	CMPE 312	Software Engineering	CMPE 211	4	1	4	7	
5	25765	UE- 02	Uni. Elective II- Arts & Humanities	-	3	-	3	4	
S.Tot =5							Sem. Total	19	30
							Sub- Total	110 111	180

**Fourth Year: Fall Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
-	25771	CMPE 400	Summer Practice	-	-	-	0	1	
1	25772	CMPE 455	Security of Computer Systems & Networks	CMPE 344	4	1	4	6	
2	25773	AE 01	Area Elective I	-	3 4	1	3 4	6	
3	25774	AE 02	Area Elective II	-	3 4	1	3 4	6	
4	25775	CMPE 471	Automata Theory	MATH 163	4	1	4	6	
-	25776	CMPE 405	Graduation Project I	-	1	-	1	2	
5	25777	IENG 355	Ethics in Engineering	-	3	-	3	4	
S.Tot =5							Sem. Total	17 20	31
							Sub- Total	127 131	211

**Fourth Year: Spring Semester**

# of crs.	R.code	Crs.Code	Course Name	Prerequisite	Lect.	Lab/Tur	Cr.	ECTS	
1	25781	CMPE 420	Embedded System Design	CMPE 224	4	1	4	7	
2	25782	AE 03	Area Elective III	-	3 4	1	3 4	6	
3	25783	UE-03	Uni. Elective III- Arts & Humanities	-	3	-	3	4	
4	25784	UE-04	Uni. Elective IV (Restricted: ECON/MGMT/FIN/BANK/ACCT Fields)	-	3	-	3	4	
5	25785	CMPE 406	Graduation Project II	CMPE 405	3	1	3	8	
S.Tot =5							Sem. Total	16 17	29
C.tot=40							Sub- Total	143 148	240