

FACULTY OF ENGINEERING, DEPARTMENT OF COMPUTER ENGINEERING, 100% English, I. EDUCATION and II. EDUCATION, 2018 ACADEMIC CURRICULUM

CODE OF PROGRAMME: 0213, (100% English, FIRST EDUCATION) ----- CODE OF PROGRAMME: 0217, (100% English - SECOND EDUCATION)

0.YEAR

Code	Course Name	LT	LB	CR	ECTS
CPE000	Prep Class	0	0	0	0

I. YEAR

1st. Semester Courses						2nd. Semester Courses					
Code	Course Name	LT	LB	CR	ECTS	Code	Course Name	LT	LB	CR	ECTS
PHY195	General Physics I	3	2	4	5	PHY196	General Physics II	3	2	4	5
CHE189	General Chemistry	3	2	4	4	CAL194	Lineer Algebra	3	0	3	4
CAL181	Mathematics I	4	0	4	5	CAL182	Mathematics II	4	0	4	5
CPE101	Programming Languages I	2	2	3	6	CPE102	Programming Languages II	2	2	3	7
CPE103	Introduction to Computer Engineering	2	0	2	6	CEC106	Probability and Statistics	3	0	3	5
FOL183	Foreign Language I	2	0	2	2	FOL184	Foreign Language II	2	0	2	2
TRK181	Turkish Language I	2	0	2	2	TRK182	Turkish Language II	2	0	2	2
Total						Total					
18 6 21 30						19 4 21 30					

II. YEAR

3rd. Semester Courses						4th. Semester Courses					
Code	Course Name	LT	LB	CR	ECTS	Code	Course Name	LT	LB	CR	ECTS
FOL281	Technical Foreign Language I	2	0	2	2	FOL282	Technical Foreign Language II	2	0	2	2
CPE203	Logic Circuits	3	1	3	5	CPE204	Discrete Mathematics	3	0	3	5
CPE205	Circuit Analysis	3	1	3	5	CPE206	Algorithms	3	1	3	6
CPE207	Object Oriented Programming	2	2	3	6	CPE208	Electronic Circuits	3	1	3	5
CPE209	Data Structures	3	1	3	6	CPE210	Database Systems	3	1	3	5
CAL289	Differential Equations	4	0	4	4	CPE212	Internet Based Programming	2	1	2	5
HST181	Atatürk's Principles and History of Revolutions I	2	0	2	2	HST182	Atatürk's Principles and History of Revolutions II	2	0	2	2
Total						Total					
19 5 20 30						18 4 18 30					

III. YEAR

5th. Semester Courses						6th. Semester Courses					
Code	Course Name	LT	LB	CR	ECTS	Code	Course Name	LT	LB	CR	ECTS
CPE301	Industrial Practice I	0	0	0	4	CPE302	Automata Theory	3	1	3	5
CPE303	Microprocessors	3	1	3	4	CPE304	Computer Architecture	3	1	3	5
CEC301	Numerical Analysis	2	1	2	4	CPE306	Computer Network	3	1	3	5
CPE307	Operating Systems	3	1	3	5	CPE308	Signals and Systems	2	1	2	4
CPE309	Data Communications	3	1	3	5	CEC306	Occupational Health and Safety II	2	0	2	2
CEC305	Occupational Health and Safety I	2	0	2	2	CEC308	Engineering Economy	2	0	2	3
	Technical Elective Course (A)	3	1	3	4		Technical Elective Course (A)	3	1	3	4
	Social Elective Course (B)	2	0	2	2		Social Elective Course (B)	2	0	2	2
Total						Total					
18 5 18 30						20 5 20 30					

Technical Elective Courses (A)

CPE311	Computer Graphics	3	1	3	4
CPE313	Robot Technologies	3	1	3	4
CPE315	System Programming	3	1	3	4
CPE317	Visual Programming	3	1	3	4

Social Elective Courses (B)

ESC305	Entrepreneurship	2	0	2	2
CPE321	Project Management	2	0	2	2
DEG305	Values Education	2	0	2	2

Technical Elective Courses (A)

CPE310	Software Engineering	3	1	3	4
CPE312	File Organizations	3	1	3	4
CPE314	Remote Sensing Technologies	3	1	3	4
CPE316	Embedded Systems	3	1	3	4

Social Elective Courses (B)

ESC302	Research and Presentation Skills	2	0	2	2
ESC304	Human Resources Management	2	0	2	2
ESC306	Management Systems	2	0	2	2

1 course will be selected in each semester from A and B group courses

"Industrial Practice" will be done according to the training regulation

IV.YEAR											
7th. Semester Courses					8th. Semester Courses						
Code	Course Name	LT	LB	CR	ECTS	Code	Course Name	LT	LB	CR	ECTS
CPE401	Industrial Practice II	0	0	0	4	CPE402	Applied Engineering Education ⁽²⁾	0	22	11	20
CEC401	Ethics in Engineering	2	0	2	2	CPE424	Senior Project II ^{(1) (2)}	0	2	1	10
CPE423	Senior Project I	0	2	1	9		Technical Elective Course (A₁)⁽²⁾	3	0	3	5
	Technical Elective Course (A₁)	3	0	3	5		Technical Elective Course (A₂)⁽²⁾	3	0	3	5
	Technical Elective Course (A₂)	3	0	3	5		Technical Elective Course (A₃)⁽²⁾	3	0	3	5
	Technical Elective Course (A₃)	3	0	3	5		Technical Elective Course (A₄)⁽²⁾	3	0	3	5
Total		11	2	12	30	Total (The courses tagged with (1))		12	2	13	30
						Total (The courses tagged with (2))		0	24	12	30

Technical Elective Courses (A)

CPE407	Mobile Programming	3	0	3	5
CPE409	Image Processing	3	0	3	5
CPE411	Artificial Intelligence	3	0	3	5
CPE413	Wireless Network	3	0	3	5
CPE415	Compiler Design	3	0	3	5
CPE417	Data Mining	3	0	3	5
CPE419	Server Side Programming	3	0	3	5
CPE421	Cloud Computing	3	0	3	5

Technical Elective Courses (A)

CPE404	Parallel Programming	3	0	3	5
CPE406	Game Programming	3	0	3	5
CPE408	Digital Signal Processing	3	0	3	5
CPE410	Geographical Information Systems	3	0	3	5
CPE412	Pattern Recognition	3	0	3	5
CPE414	GPS Based Systems	3	0	3	5
CPE416	Bioinformatics	3	0	3	5
CPE418	Optimization Theory	3	0	3	5
CPE420	Computer and Network Security	3	0	3	5
CPE422	Computer Vision and Imaging Techniques	3	0	3	5

TOTAL CREDIT 143
TOTAL ECTS CREDIT 240

"Industrial Internships" will be done according to the Internship Directive.

* 8. yarıyılıda (1) son ekli derslerini alan öğrenciler, (2) son ekli "Endüstride Mühendislik Uygulamaları" dersini almayacaklardır.

Aynı şekilde, (2) son ekli "Endüstride Mühendislik Uygulamaları" dersini alan öğrenciler, (1) son ekli dersleri almayacaklardır.

Kısaltmalar: TE = Haftalık teorik ders saati; PR= Haftalık uygulama ders saati, KR = Dersin kredisi

DERS İSTATİSTİKLERİ			
1	Total National Credit	143	
2	Total AKTS Credit	240	
3	Total Credit of Elective Courses	31	
4	Total Time of Theoretical Courses	135	
5	Total Time of Practice Courses	38	
6	Total Credit of English Courses	43	
7	Total ECTS Credits of Elective Courses	47	
8	Total National Credit / 128 Credit Limit		%111.72
9	Total AKTS Credit / Total National Credit		%167.83
10	Total Credit of Elective Courses / Total National Credit		%21.68
11	Total Time of Theoretical Courses / Total Course Hours		%78.03
12	Total Time of Practice Courses / Total Course Hours		%21.97
13	Total Credit of English Courses / Total National Credit		%30.07
14	Total ECTS Credits of Elective Courses / Total ECTS		%19.58