

ENGINEERING FACULTY, ELECTRICAL-ELECTRONICS ENGINEERING DEPARTMENT

2014-2015 EDUCATION CURRICULUM, PROGRAMME CODE: 0220, (100% English), (I.ve II. EDUCATION)

PREPARATION CLASS

Prep Class 1st. Semester

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.001	EEE000	Prep Class	0	0	0	0

Prep Class 2st. Semester

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.002	EEE000	Prep Class	0	0	0	0

I. CLASS

1st. Semester Courses

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.010	CAL183	Mathematics I	4	0	4	4
219.011	PHY183	General Physics I	4	0	4	4
219.012	CHE183	General Chemistry	3	0	3	3
219.013	CME183	Information Technologies and Applications	2	2	3	4
219.014	EEE101	Int. to Electrical and Electronics Eng.	2	0	2	3
219.015	EEE121	Electrical - Electronics Measurement	3	1	3,5	4
219.016	EEE107	Laboratory Sessions I	0	2	1	2
Total			18	5	20,5	30

2nd. Semester Courses

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.019	CAL186	Mathematics II	4	0	4	4
219.021	PHY186	General Physics II	4	0	4	4
219.022	CAL192	Linear Algebra	3	0	3	3
219.023	CME182	Computer Programming	2	2	3	4
219.024	EEE110	Computer Aided Technical Drawing	2	2	3	4
219.025	EEE180	Electrical Materials	3	0	3	3
219.026	EEE108	Laboratory Sessions II	0	2	1	2
Total			18	6	21	30

219.016	HST181	Atatürk's Principles and History of Revolutions I	2	0	2	2
219.017	TRK181	Turkish Language I	2	0	2	2
219.018	FOL181	Foreign Language I	2	0	2	2

219.026	HST182	Atatürk's Principles and History of Revolutions II	2	0	2	2
219.027	TRK182	Turkish Language II	2	0	2	2
219.028	FOL182	Foreign Language II	2	0	2	2

II. CLASS

3rd. Semester Courses

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.030	FOL281	Technical Foreign Language I	2	0	2	2
219.031	CAL283	Differential Equations	3	0	3	4
219.032	EEE243	Electronics Devices	3	2	4	5
219.033	EEE221	Circuit Analysis I	3	2	4	5
219.034	EEE241	Logic Circuits	3	2	4	5
219.035	EEE211	Algorithms and Data Structures	3	2	4	5
219.036	PHY261	Modern Physics	3	1	3,5	4
Total			20	9	24,5	30

4th. Semester Courses

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.040	FOL282	Technical Foreign Language II	2	0	2	2
219.041	EEE222	Circuit Analysis II	3	2	4	5
219.042	ESC280	Sustainable Environment	3	0	3	3
219.043	ENG206	Mathematical Methods for Engineers	3	1	3,5	4
219.044	EEE220	Basic Semiconductor Devices	3	2	4	5
219.045	EEE230	Electromagnetic Theory	3	2	4	5
219.046	CAL286	Probability and Statistics	3	0	3	4
219.047		Social Elective Course (C)	2	0	2	2
Total			22	7	25,5	30

Social Elective Courses (C)

ESC200	Labour Law	2	0	2	2
ESC202	Research and Presentation Skills	2	0	2	2

III. CLASS

5th. Semester Courses

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.050	EEE301	Industrial Practice I	0	0	0	6
219.051	FOL381	Reading and Speaking at Foreign Language	2	0	2	2
219.052	EEE343	Electronics I	3	2	4	4
219.053	EEE335	Electromagnetic Waves	3	2	4	4
219.054	EEE363	Signals and Systems	3	0	3	3
219.055		Technical Elective Course (A1)	3	2	4	4
219.056		Technical Elective Course (B)	3	1	3,5	5
219.057		Social Elective Course (C)	2	0	2	2
Total			19	7	22,5	30

6th. Semester Courses

P. Code	Code	Course Name	LT	LB	CR	ECTS
219.060	FOL382	Foreign Language for Business Life	2	0	2	2
219.061	EEE342	Microprocessors	3	2	4	5
219.062	EEE360	Communication Systems I	3	2	4	6
219.063		Technical Elective Course (A2)	3	2	4	5
219.064		Technical Elective Course (B)	3	1	3,5	5
219.065		Technical Elective Course (B)	3	1	3,5	5
219.066		Social Elective Course (C)	2	0	2	2
Total			19	8	23,0	30

Technical Elective Courses (A1)

EEE373	Control Systems I	3	2	4	4
EEE311	Software Applications of Electronics	3	2	4	4

Technical Elective Courses (A2)

EEE390	Electromechanical Energy Conversion I	3	2	4	5
EEE320	Digital Filters and Systems	3	1	3,5	5

Technical Elective Courses (B)

EEE351	Power Systems Analysis I	3	1	3,5	5
EEE353	Power Electronics	3	1	3,5	5
EEE391	Electrical Energy Production	3	1	3,5	5

Technical Elective Courses (B)

EEE362	Analog Communication	3	1	3,5	5
EEE372	Control Systems II	3	1	3,5	5
EEE380	LED Technology	3	1	3,5	5

Social Elective Courses (C)

ESC303	Patent and Industrial Design	2	0	2	2
ESC305	Entrepreneurship	2	0	2	2
ESC307	Communication Skills	2	0	2	2
ESC309	International Communication	2	0	2	2
ESC311	Critical Analytic Thinking Techniques	2	0	2	2

Social Elective Courses (C)

ESC304	Human Resources Management	2	0	2	2
ESC306	Management Systems	2	0	2	2
ESC308	Occupational Health and Safety	2	0	2	2
ESC310	Corporate Behavior	2	0	2	2
ESC312	Standardization	2	0	2	2

ESC313	Project Management	2	0	2	2
SOS381	Values Education	2	0	2	2

IV. CLASS

7th. Semester Courses										8th. Semester Courses				
P. Code	Code	Course Name	LT	LB	CR	ECTS	P. Code	Code	Course Name	LT	LB	CR	ECTS	
219.070	EEE401	Industrial Practice II	0	0	0	6	219.080	EEE402	Graduation Thesis	0	2	1	5	
219.071	ESC481	Introduction to Economy	3	0	3	3	219.081	ESC482	Industrial Management	3	0	3	3	
219.072	EEE403	Engineering Design	3	1	3,5	6	219.082	ENG402	Engineering Ethics	2	0	2	2	
219.073		Technical Elective Course (B)	3	1	3,5	5	219.083		Technical Elective Course (B)	3	1	3,5	5	
219.074		Technical Elective Course (B)	3	1	3,5	5	219.084		Technical Elective Course (B)	3	1	3,5	5	
219.075		Technical Elective Course (B)	3	1	3,5	5	219.085		Technical Elective Course (B)	3	1	3,5	5	
Total			15	4	17,0	30	219.086		Technical Elective Course (B)	3	1	3,5	5	
							Total			17	6	20,0	30	

Technical Elective Courses (B)						Technical Elective Courses (B)					
EEE405	Occupational Safety in Electric	3	1	3,5	5	EEE414	Microprocessors Laboratory	3	1	3,5	5
EEE413	Artificial Neural Networks	3	1	3,5	5	EEE440	Medical Electronics	3	1	3,5	5
EEE415	Web Technology and Applications	3	1	3,5	5	EEE442	Microelectronics Technology	3	1	3,5	5
EEE417	Microcontrollers	3	1	3,5	5	EEE444	Electronics IV	3	1	3,5	5
EEE421	Integrated Circuits	3	1	3,5	5	EEE446	High Frequency Electronics	3	1	3,5	5
EEE431	Microwave Techniques	3	1	3,5	5	EEE452	Electrical Machines Laboratory	3	1	3,5	5
EEE441	Biomedical Systems	3	1	3,5	5	EEE454	Power Systems laboratory	3	1	3,5	5
EEE443	Electronics III	3	1	3,5	5	EEE456	Protection at Power Systems	3	1	3,5	5
EEE445	Electronics Laboratory	3	1	3,5	5	EEE458	Special Electrical Machines	3	1	3,5	5
EEE451	Power Systems Analysis II	3	1	3,5	5	EEE460	Digital Signal Processing	3	1	3,5	5
EEE453	Industrial Applications Of Power Electronics	3	1	3,5	5	EEE462	RF Electronics	3	1	3,5	5
EEE455	Electrical Power Distribution	3	1	3,5	5	EEE464	Fiberoptic Communication	3	1	3,5	5
EEE457	Power Transmission Systems	3	1	3,5	5	EEE466	Satellite Communication	3	1	3,5	5
EEE459	High Voltage Techniques	3	1	3,5	5	EEE468	Antennas And Propagation	3	1	3,5	5
EEE461	Digital Communication	3	1	3,5	5	EEE472	Digital Control Systems	3	1	3,5	5
EEE463	Radio and TV Systems	3	1	3,5	5	EEE474	Computer Controlled Systems	3	1	3,5	5
EEE465	Computer Communication	3	1	3,5	5	EEE476	Driver Systems	3	1	3,5	5
EEE471	Process Control	3	1	3,5	5	EEE482	Optoelectronics II	3	1	3,5	5
EEE473	Industrial Automation Systems	3	1	3,5	5	EEE484	Nanotechnology	3	1	3,5	5
EEE481	Optoelectronics I	3	1	3,5	5	EEE486	Illumination Technique	3	1	3,5	5
EEE483	Semiconductor Thermoelectric Elements	3	1	3,5	5	EEE492	Photovoltaic Energy Production	3	1	3,5	5
EEE485	Laser Theory	3	1	3,5	5	EEE494	Electrical Plants	3	1	3,5	5
EEE491	Electromechanical Energy Conversion II	3	1	3,5	5						
EEE493	Renewable Energy Systems	3	1	3,5	5						

* 1 course will be selected in 5-8th semester depending on Branch Elective from "A" group courses

* 1 course will be selected in 5th Semester, 2 courses will be selected in 6th Semester, 3 course will be selected in 7th Semester and 4 course will be selected in 8th Semester from "B" group c

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

Descriptions of Course Codes		
EEE	Electrical and Electronics Engineering	
1. number	Year	
2. number	Project Training and Design	0
	Computer Software and Hardware	1
	Circuit	2
	Electromagnetic Theory	3
	Electronics	4
	Power	5
	Communication	6
	Control Systems	7
	Engineering Materials	8
	Energy	9
3. number	Course number (odd numbers: fall semester)	
	Course number (even numbers: spring semester)	

DERS İSTATİSTİKLERİ					
1	Toplam Ulusal Kredi	174	7	Toplam Ulusal Kredi / 128 Kredi Sınırı	%135,94
2	Toplam AKTS Kredi	240	8	Toplam AKTS Kredi / Toplam Ulusal Kredi	%137,93
3	Seçmeli Derslerin Toplam Kredisi	65	9	Seçmeli Derslerin Toplam Kredisi / Toplam Ulusal Kredi	%37,36
4	İngilizce Derslerin Toplam Kredisi	174	10	İngilizce Derslerin Toplam Kredisi / Toplam Ulusal Kredi	%100,00
5	Teorik Derslerin Toplam Saati	148	11	Teorik Derslerin Toplam Saati / Toplam Ders Saati	%74,00
6	Uygulama Derslerin Toplam Saati	52	12	Uygulama Derslerin Toplam Saati / Toplam Ders Saati	%26,00

courses