#### PORSUK VOCATIONAL SCHOOL

The Vocational School of Information Technologies opened for the 2024-2025 academic year, and three programs within the school—Unmanned Aerial Vehicle Technology and Operation, Computer Programming, and Mechatronics—were transferred to the Vocational School of Information Technologies. The Hydrogen and Energy Storage Technician program was established for the 2024-2025 academic year, and students are also planned to enroll in the 2025-2026 academic year. Education services are provided in a total of seven programs: Printing and Publishing Technologies, Electrical Energy Production, Transmission, and Distribution, Hydrogen and Energy Storage Technician (New), Graphic Design, Mechanical Drawing and Construction, Radio and Television Technology, and Building Inspection.

Director : Assoc. Prof.Dr. Muammer TÜN
Deputy Director : Lecturer Özlem Emine DOĞAN

Deputy Director : Lecturer Doctor Hasan Candan ÖTEYAKA

Secretary to the school : Demet BAYRAKTAR

#### **STAFF**

#### Professors:

Hüseyin KOCA, Özlem ONAY, Ensar TAÇYILDIZ, Gülgün YILMAZ

#### **Associate Professors:**

Burak IŞIKDAĞ, Başak KALKAN, Burçin YERSEL

#### **Faculty Members:**

Şükrü ARDALI, Dilek ÇUKUL, Kadir GÜNGÖR, Asuman KAYA, Hüseyin Selçuk KIRAY, Emre Aytuğ ÖZSOY, Atakan UĞRAŞ

#### **Lecturers:**

Aytekin ATASOYU, Alper BAYRAKDAR, Arzu ÇELEN ÖZER, Sezen ÇINAL, Fatma Nur DEMİR ALADA, Özlem Emine DOĞAN, Semih GÖLCÜK, Sinan GÜVEN, Firdevs Diğdem GÜVEN, Roza KOÇKAR, Hasan Candan ÖTEYAKA, Nurcihan ÖZKAN, Zeynep Nazlı ÖZTOPCU KİRAZ, Hülya SÖKER, Ercan SÜNGER

# DEPARTMENT OF ELECTRICITY AND ENERGY

# PROGRAM IN GENERATION. TRANSMISSION AND DISTRIBUTION OF ELECTRICITY

Due to the limited energy resources in our developing and rapidly growing country, the energy problem is constantly on the agenda. Especially in industry, electrical energy is of great importance as it is easy to use, portable and has entered many areas of human life. In order to meet the need for well-trained intermediate staff to serve in the fields of electricity generation, distribution, measurement and maintenance and repair of electrical machines used in our country, theoretical and practical training is provided in the Program.

	I.Semester				II.Semester		
EEÜ204	Energy Analysis and	2+0	3.0	EEÜ106	Traditional Sources of	2+1	2.0
	Savings				Energy		
ELE103	Electrical and Electronical	3+1	5.0	EEÜ108	Renewable Sources of	2+1	3.0
	Measurements				Energy		
ELE105	Direct Current Circuit	3+1	5.0	ELE104	Alternative Current Circuit	3+1	5.0
	Analysis				Analysis		
iNG187 (Eng)	English I	3+0	3.0	ELO104	Analog Electronics	3+1	4.0
MAT1001	Mathematics I	3+0	4.0	iNG188 (Eng)	English II	3+0	3.0

TAR165	Atatürk's Principles and	2+0	2.0	iSG401	Occupational Health and	2+0	2.0
	History of Turkish				Safety I		
TEK107	Revolution I Scientific Principles of	3+1	4.0	MAT1002	Mathematics II	3+0	4.0
IEKIU/	Technology	3+1	4.0	MA11002	Mathematics II	3+0	4.0
TÜR125	Turkish Language I	2+0	2.0	TAR166	Atatürk's Principles and	2+0	2.0
					History of Turkish		
	a		2.0	m/hp.s.s.s	Revolution II	2 0	2.0
	Seçmeli Dersler		2.0	TÜR126	Turkish Language II	2+0	2.0
					Seçmeli Dersler		3.0
			30.0				30.0
	III.Semester				IV.Semester		
EEÜ104	High Voltage Technics	1 + 1	2.0	EEÜ210	Contract, Exploration and	2+1	4.0
EL EGIA		2.1	4.0		Planning		2.0
ELE212	Electricity Installation Plans	3+1	4.0	EEÜ252	Workshop Applications	1+2	3.0
ELO103	Digital Electronics	3+1	4.0	EEÜ299	Internship	0+2	5.0
ELO205	Power Electronics	3+1	5.0	ELE209	Electric Generation,	3+1	4.0
					Transmission and		
					Distribution		
	Mesleki Se <b>ç</b> meli Dersler		15.0	ELE227	Electrical Machines	3+1	4.0
					Mesleki Seçmeli Dersler		10.0
			30.0				30.0
<b>Elective Cour</b>	eses						
BEÖ155	Physical Education					2+0	2.0
ESTÜ1003	Yoga and Meditation					1+1	2.0
ESTÜ101	Introduction to Universi	-				0+1	2.0
ESTÜ103	Ceramic Design Process Academic and Life Skil					2+1	3.0
ESTÜ104 ESTÜ106	Proje Yönetimi	IS				2+1 2+1	3.0 3.0
ESTÜ111	Volunteering Works					1+2	4.0
ESTÜ112	Cyber Security for Ever	vone				2+0	2.0
ESTÜ113	Design Thinking	,				3+0	3.0
ESTÜ114	Visual Thinking					3+0	3.0
ESTÜ115	Photographic Viewpoin	t				2+1	3.0
ESTÜ116	Computer Aided Design					3+0	3.0
ESTÜ117	Computer Aided Design	ı II				3+0	3.0
ESTÜ118	Visual Thinking with C	oncepts				3+0	3.0
ESTÜ119	Flute					3+1	3.0
ESTÜ120	Solfege					3+1	3.0
ESTÜ121	Piano					3+1	3.0
ESTÜ127	Diction					1+2	3.0
ESTÜ129	Turkish as a Foreign La	nguage l	[			2+0	2.0
ESTÜ130	Turkish as a Foreign La					2+0	2.0
ESTÜ2001	AI Literacy	88				2+0	2.0
ESTÜ203	Introduction to Sociolog	ΣV				3+0	3.0
ESTÜ210	Culture of Museum	<i>53</i>				2+0	2.0
ESTÜZIG ESTÜ301	Science Communication	1				2+0	3.0
ESTÜ307	Children Rights and Far		cation			2+0	2.0
ESTÜ402	Coaching and Leadershi					3+0	3.0
ESTÜ403	Basic Computer Utilizat	_				3+0	4.0
ESTÜ405	Computer Programming					3+0	5.0
PMYO198	Optional Internship	>				0+2	5.0
SAN155	Hall Dances					0+2	2.0
SNT155	History of Art					2+0	2.0
THU203	Community Services					0+2	3.0
•	<b>3</b>						

urses		
Electricity and Energy Project	2+2	4.0
Energy and Environment	2+0	2.0
Hydrojen Energy and Usage	3+1	3.0
Solar Energy Systems	3+1	3.0
Thermal Power Plant	3+1	3.0
Energy Plant Management	3+1	4.0
Technical English	3+1	3.0
Fuels and Combustion Technology	3+1	3.0
Green Energy and Industrial Sustainability	3+1	4.0
Arduino Supported Electrical Energy Applications	2+2	3.0
Vocational Mathematics with MATLAB	3+1	3.0
Digital Signal Processing Fundamentals and MATLAB Applications	3+1	3.0
Electric Systems (Networks) and Foundations	1+1	3.0
Electrical Maintenance and Troubleshooting	1+1	3.0
Electromechanical Control Systems	3+1	4.0
Related Electrical Service and Systems	1+1	3.0
Microprocessors / Microcontrollers	3+1	5.0
Microcontroller Based Control	3+1	4.0
Turkish Sign Language	3+0	3.0
Introduction to Professional Life	1+1	2.0
Professional Ethics	2+0	3.0
Vocational Training in Workplace I	5+10	15.0
Vocational Training in Workplace II	5+10	15.0
Computer Aided Design I	3+1	4.0
Energy Management	3+1	4.0
	Electricity and Energy Project Energy and Environment Hydrojen Energy and Usage Solar Energy Systems Thermal Power Plant Energy Plant Management Technical English Fuels and Combustion Technology Green Energy and Industrial Sustainability Arduino Supported Electrical Energy Applications Vocational Mathematics with MATLAB Digital Signal Processing Fundamentals and MATLAB Applications Electric Systems (Networks) and Foundations Electrical Maintenance and Troubleshooting Electromechanical Control Systems Related Electrical Service and Systems Microprocessors / Microcontrollers Microcontroller Based Control Turkish Sign Language Introduction to Professional Life Professional Ethics Vocational Training in Workplace I Vocational Training in Workplace II Computer Aided Design I	Electricity and Energy Project Energy and Environment 2+0 Hydrojen Energy and Usage 3+1 Solar Energy Systems 3+1 Thermal Power Plant 3+1 Energy Plant Management 3+1 Technical English 3+1 Fuels and Combustion Technology 3+1 Green Energy and Industrial Sustainability Arduino Supported Electrical Energy Applications 2+2 Vocational Mathematics with MATLAB Digital Signal Processing Fundamentals and MATLAB Applications 3+1 Electric Systems (Networks) and Foundations 1+1 Electrical Maintenance and Troubleshooting 1+1 Electromechanical Control Systems Microprocessors / Microcontrollers 1+1 Turkish Sign Language 3+0 Introduction to Professional Life 1+1 Professional Ethics 2+0 Vocational Training in Workplace I Vocational Training in Workplace II Solution 15+10 Computer Aided Design I

# HYDROGEN AND ENERGY STORAGE TECHNICIAN PROGRAM

	I.Semester				II.Semester		
FiZ1051	General Physics	2+1	4.0	HED1006	Electrochemistry and Its Applications	3+1	5.0
HED1001	Hydrogen Production Methods	3+1	5.0	İNG188	English II	3+0	3.0
HED1003	Hydrogen Technologies	2+1	4.0	TAR166	Atatürk's Principles and History of Turkish Revolution II	2+0	2.0
iNG187	English I	3+0	3.0	TÜR126	Turkish Language II	2+0	2.0
KiM1053	General Chemistry	2+1	4.0		Seçmeli Dersler		3.0
MAT1001	Mathematics I	3+0	4.0				
TAR165	Atatürk's Principles and History of Turkish Revolution I	2+0	2.0				
TÜR125	Turkish Language I	2+0	2.0				
	Seçmeli Dersler		2.0				
			30.0				15.0
	III.Semester				IV.Semester		
HED2001	Energy Storage and Transportation Processes	2+1	4.0	HED2002	Fuel Cells	3+1	5.0
HED2005	Measurement and Control in Processes	2+1	4.0	HED2008	Industrial Equipment	2+1	4.0
	Mesleki Seçmeli Dersler		15.0	)	Mesleki Seçmeli Dersler		10.0

23.0 19.0 **Elective Courses** BEÖ155 Physical Education 2+02.0 Story Analysis On World Literature ESTÜ1001 3+03.0 ESTÜ1003 Yoga and Meditation 1+12.0 Introduction to University Life ESTÜ101 0+12.0 ESTÜ103 Ceramic Design Processes 2+13.0 ESTÜ104 Academic and Life Skills 2+13.0 ESTÜ106 Proje Yönetimi 2+13.0 Volunteering Works 1+24.0 ESTÜ111 Cyber Security for Everyone ESTÜ112 2+02.0 ESTÜ113 Design Thinking 3+03.0 Visual Thinking ESTÜ114 3+03.0 ESTÜ115 Photographic Viewpoint 2+13.0 ESTÜ116 Computer Aided Design I 3+03.0 ESTÜ117 Computer Aided Design II 3+03.0 ESTÜ118 Visual Thinking with Concepts 3+03.0 Flute 3+13.0 ESTÜ119 ESTÜ120 Solfege 3+13.0 ESTÜ121 Piano 3+13.0 ESTÜ122 Guitar 3+13.0 ESTÜ123 Gender Equality in Work Life 2+03.0 ESTÜ125 Philosophy of Science 3+03.0 1+2ESTÜ127 Diction 3.0 2+0ESTÜ129 Turkish as a Foreign Language I 2.0 ESTÜ130 Turkish as a Foreign Language II 2+02.0 ESTÜ131 Argentine Tango Dance 0+2 2.0 2+0 2.0 ESTÜ2001 AI Literacy Introduction to Sociology 3+0 3.0 ESTÜ203 Culture of Museum 2+02.0 ESTÜ210 2+0Science Communication 3.0 ESTÜ301 Children Rights and Family Education 2+02.0 ESTÜ307 Coaching and Leadership 3+0ESTÜ402 3.0 ESTÜ403 **Basic Computer Utilization** 3+04.0 ESTÜ405 **Computer Programming** 3+05.0 **PMYO198** Optional Internship 0+25.0 SAN155 Hall Dances 0+22.0 2+0SNT155 2.0 History of Art **THU203** Community Services 0+23.0 **Area Elective Courses iME201** Vocational Training in Workplace I 5+1015.0

## DEPARTMENT OF ELECTRONICS AND AUTOMATION

5+10

15.0

Vocational Training in Workplace II

**iME202** 

## PROGRAM IN RADIO AND TELEVISION TECHNOLOGY

The maintenance and application of all the electronic equipments of audio and video production and editing in radio and television studios and broadcast centres, are thought. The workshops are provided by the Open Educational Faculty Radio and TV Production Center Studios located in campus. The latest technology is applied in studios for educational purposes. Our students have an opportunity to practise their theoric knowledge and to be integrated to business life by getting training in important enterprises about Radio and Television industry (TRT and Private Televisions). Students have to get training total 30 working days. The graduates get Radio & TV Technician title.

ELO111		I.Semester				II.Semester		
FOTIO7   Photography	ELO111		2+1	3.0			3+0	3.0
INCIRT (Teng)	FOT107	Photography	2+1	3.0			2+0	2.0
MAT1001   Mathematics   3+0   4.0   RTV105   Radyo Programming   2+2   4.0   RTV121   Radyo Programming   2+2   4.0   RTV122   Camera and Lighting   2+2   4.0   RTV129   Technics   Technics   2+2   4.0   RTV131   Radio Television Broadcast   2+2   3.0   RTV133   Radio Television Broadcast   2+2   3.0   RTV135   Revolution I   Turkish Language I   2+0   2.0   TAR166   Autifix's Principles and   15   15   15   15   15   15   15   1	iNG187 (Eng)	English I	3+0	3.0	RTV114	•	3+0	3.0
RTV121   Measurement and Maintenance at RTV   RTV129   Image Technique   S		-						
TAR165	RTV121		2+1	3.0	RTV122	Camera and Lighting	2+2	4.0
TAR165	RTV129	Image Technique	3+1	4.0	RTV131		2+2	4.0
History of Turkish Revolution I TÜR125   Turkish Language I   2-0   2.0   TÜR126   Turkish Language II   2-0   2.	RTV133	Audio Technique	3+1	4.0	RTV135		2+2	3.0
Name	TAR165	History of Turkish	2+0	2.0	TAR166	History of Turkish	2+0	2.0
Name	TÜR125				TÜR126			
RTV247								
RTV247								
RTV249	RTV247	Digital Recording and	2+2	3.0	RTV273		2+2	5.0
RTV259	RTV249		2+2	4.0	RTV274		2+2	5.0
RTV261	RTV259		2+2	4.0	RTV280	TV Program Production	2+3	5.0
Mesleki Seçmeli Dersler	RTV261		2+2	4.0	RTV299		0+2	5.0
Selective Courses				15.0				10.0
BEÖ155         Physical Education         2+0         2.0           ESTÜ1001         Story Analysis On World Literature         3+0         3.0           ESTÜ1003         Yoga and Meditation         1+1         2.0           ESTÜ101         Introduction to University Life         0+1         2.0           ESTÜ103         Ceramic Design Processes         2+1         3.0           ESTÜ104         Academic and Life Skills         2+1         3.0           ESTÜ106         Proje Yönetimi         2+1         3.0           ESTÜ111         Volunteering Works         1+2         4.0           ESTÜ112         Cyber Security for Everyone         2+0         2.0           ESTÜ113         Design Thinking         3+0         3.0           ESTÜ114         Visual Thinking         3+0         3.0           ESTÜ115         Photographic Viewpoint         2+1         3.0           ESTÜ116         Computer Aided Design I         3+0         3.0           ESTÜ117         Computer Aided Design II         3+0         3.0           ESTÜ118         Visual Thinking with Concepts         3+0         3.0           ESTÜ120         Solfege         3+1         3.0           ESTÜ121								
BEÖ155         Physical Education         2+0         2.0           ESTÜ1001         Story Analysis On World Literature         3+0         3.0           ESTÜ1003         Yoga and Meditation         1+1         2.0           ESTÜ101         Introduction to University Life         0+1         2.0           ESTÜ103         Ceramic Design Processes         2+1         3.0           ESTÜ104         Academic and Life Skills         2+1         3.0           ESTÜ106         Proje Yönetimi         2+1         3.0           ESTÜ111         Volunteering Works         1+2         4.0           ESTÜ112         Cyber Security for Everyone         2+0         2.0           ESTÜ113         Design Thinking         3+0         3.0           ESTÜ114         Visual Thinking         3+0         3.0           ESTÜ115         Photographic Viewpoint         2+1         3.0           ESTÜ116         Computer Aided Design I         3+0         3.0           ESTÜ117         Computer Aided Design II         3+0         3.0           ESTÜ118         Visual Thinking with Concepts         3+0         3.0           ESTÜ120         Solfege         3+1         3.0           ESTÜ121	Elective Cours	ses						
ESTÜ1001         Story Analysis On World Literature         3+0         3.0           ESTÜ1003         Yoga and Meditation         1+1         2.0           ESTÜ101         Introduction to University Life         0+1         2.0           ESTÜ103         Ceramic Design Processes         2+1         3.0           ESTÜ104         Academic and Life Skills         2+1         3.0           ESTÜ106         Proje Yönetimi         2+1         3.0           ESTÜ111         Volunteering Works         1+2         4.0           ESTÜ112         Cyber Security for Everyone         2+0         2.0           ESTÜ113         Design Thinking         3-0         3.0           ESTÜ114         Visual Thinking         3-0         3.0           ESTÜ115         Photographic Viewpoint         2+1         3.0           ESTÜ116         Computer Aided Design I         3+0         3.0           ESTÜ117         Computer Aided Design II         3+0         3.0           ESTÜ118         Visual Thinking with Concepts         3+1         3.0           ESTÜ119         Flute         3+1         3.0           ESTÜ120         Solfege         3+1         3.0           ESTÜ121         P							2+0	2.0
ESTÜ1003         Yoga and Meditation         1+1         2.0           ESTÜ101         Introduction to University Life         0+1         2.0           ESTÜ103         Ceramic Design Processes         2+1         3.0           ESTÜ104         Academic and Life Skills         2+1         3.0           ESTÜ106         Proje Yönetimi         2+1         3.0           ESTÜ111         Volunteering Works         1+2         4.0           ESTÜ112         Cyber Security for Everyone         2+0         2.0           ESTÜ113         Design Thinking         3-0         3.0           ESTÜ114         Visual Thinking         3-0         3.0           ESTÜ115         Photographic Viewpoint         2+1         3.0           ESTÜ116         Computer Aided Design I         3-0         3.0           ESTÜ117         Computer Aided Design II         3-0         3.0           ESTÜ118         Visual Thinking with Concepts         3-1         3.0           ESTÜ118         Visual Thinking with Concepts         3-1         3.0           ESTÜ120         Solfege         3-1         3.0           ESTÜ121         Piano         3-1         3.0           ESTÜ122         Guitar<	ESTÜ1001		d Litera	iture			3+0	3.0
ESTÜ101         Introduction to University Life         0+1         2.0           ESTÜ103         Ceramic Design Processes         2+1         3.0           ESTÜ104         Academic and Life Skills         2+1         3.0           ESTÜ106         Proje Yönetimi         2+1         3.0           ESTÜ111         Volunteering Works         1+2         4.0           ESTÜ112         Cyber Security for Everyone         2+0         2.0           ESTÜ113         Design Thinking         3+0         3.0           ESTÜ114         Visual Thinking         3+0         3.0           ESTÜ115         Photographic Viewpoint         2+1         3.0           ESTÜ116         Computer Aided Design I         3+0         3.0           ESTÜ117         Computer Aided Design II         3+0         3.0           ESTÜ118         Visual Thinking with Concepts         3+0         3.0           ESTÜ119         Flute         3+1         3.0           ESTÜ120         Solfege         3+1         3.0           ESTÜ121         Piano         3+1         3.0           ESTÜ122         Guitar         3+1         3.0           ESTÜ123         Gender Equality in Work Life <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>1+1</td><td></td></td<>							1+1	
ESTÜ103       Ceramic Design Processes       2+1 3.0         ESTÜ104       Academic and Life Skills       2+1 3.0         ESTÜ106       Proje Yönetimi       2+1 3.0         ESTÜ111       Volunteering Works       1+2 4.0         ESTÜ112       Cyber Security for Everyone       2+0 2.0         ESTÜ113       Design Thinking       3+0 3.0         ESTÜ114       Visual Thinking       3+0 3.0         ESTÜ115       Photographic Viewpoint       2+1 3.0         ESTÜ116       Computer Aided Design I       3+0 3.0         ESTÜ117       Computer Aided Design II       3+0 3.0         ESTÜ118       Visual Thinking with Concepts       3+0 3.0         ESTÜ119       Flute       3+1 3.0         ESTÜ120       Solfege       3+1 3.0         ESTÜ121       Piano       3+1 3.0         ESTÜ122       Guitar       3+1 3.0         ESTÜ123       Gender Equality in Work Life       2+0 3.0         ESTÜ125       Philosophy of Science       3+0 3.0         ESTÜ127       Diction       1+2 3.0         ESTÜ129       Turkish as a Foreign Language I       2+0 2.0         ESTÜ130       Turkish as a Foreign Language II       2+0 2.0         ESTÜ131			ty Life				0+1	2.0
ESTÜ104       Academic and Life Skills       2+1 3.0         ESTÜ106       Proje Yönetimi       2+1 3.0         ESTÜ111       Volunteering Works       1+2 4.0         ESTÜ112       Cyber Security for Everyone       2+0 2.0         ESTÜ113       Design Thinking       3+0 3.0         ESTÜ114       Visual Thinking       3+0 3.0         ESTÜ115       Photographic Viewpoint       2+1 3.0         ESTÜ116       Computer Aided Design I       3+0 3.0         ESTÜ117       Computer Aided Design II       3+0 3.0         ESTÜ118       Visual Thinking with Concepts       3+0 3.0         ESTÜ119       Flute       3+1 3.0         ESTÜ120       Solfege       3+1 3.0         ESTÜ121       Piano       3+1 3.0         ESTÜ122       Guitar       3+1 3.0         ESTÜ123       Gender Equality in Work Life       2+0 3.0         ESTÜ125       Philosophy of Science       3+0 3.0         ESTÜ127       Diction       1+2 3.0         ESTÜ129       Turkish as a Foreign Language I       2+0 2.0         ESTÜ130       Turkish as a Foreign Language II       2+0 2.0         ESTÜ131       Argentine Tango Dance       0+2 2.0	ESTÜ103		-				2+1	3.0
ESTÜ106       Proje Yönetimi       2+1 3.0         ESTÜ111       Volunteering Works       1+2 4.0         ESTÜ112       Cyber Security for Everyone       2+0 2.0         ESTÜ113       Design Thinking       3+0 3.0         ESTÜ114       Visual Thinking       3+0 3.0         ESTÜ115       Photographic Viewpoint       2+1 3.0         ESTÜ116       Computer Aided Design I       3+0 3.0         ESTÜ117       Computer Aided Design II       3+0 3.0         ESTÜ118       Visual Thinking with Concepts       3+0 3.0         ESTÜ119       Flute       3+1 3.0         ESTÜ120       Solfege       3+1 3.0         ESTÜ121       Piano       3+1 3.0         ESTÜ122       Guitar       3+1 3.0         ESTÜ123       Gender Equality in Work Life       2+0 3.0         ESTÜ125       Philosophy of Science       3+0 3.0         ESTÜ127       Diction       1+2 3.0         ESTÜ129       Turkish as a Foreign Language I       2+0 2.0         ESTÜ130       Turkish as a Foreign Language II       2+0 2.0         ESTÜ131       Argentine Tango Dance       0+2 2.0								
ESTÜ111       Volunteering Works       1+2 4.0         ESTÜ112       Cyber Security for Everyone       2+0 2.0         ESTÜ113       Design Thinking       3+0 3.0         ESTÜ114       Visual Thinking       3+0 3.0         ESTÜ115       Photographic Viewpoint       2+1 3.0         ESTÜ116       Computer Aided Design I       3+0 3.0         ESTÜ117       Computer Aided Design II       3+0 3.0         ESTÜ118       Visual Thinking with Concepts       3+0 3.0         ESTÜ119       Flute       3+1 3.0         ESTÜ120       Solfege       3+1 3.0         ESTÜ121       Piano       3+1 3.0         ESTÜ122       Guitar       3+1 3.0         ESTÜ123       Gender Equality in Work Life       2+0 3.0         ESTÜ125       Philosophy of Science       3+0 3.0         ESTÜ127       Diction       1+2 3.0         ESTÜ129       Turkish as a Foreign Language I       2+0 2.0         ESTÜ130       Turkish as a Foreign Language II       2+0 2.0         ESTÜ131       Argentine Tango Dance       0+2 2.0		Proje Yönetimi					2+1	3.0
ESTÜ112       Cyber Security for Everyone       2+0       2.0         ESTÜ113       Design Thinking       3+0       3.0         ESTÜ114       Visual Thinking       3+0       3.0         ESTÜ115       Photographic Viewpoint       2+1       3.0         ESTÜ116       Computer Aided Design I       3+0       3.0         ESTÜ117       Computer Aided Design II       3+0       3.0         ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0							1+2	
ESTÜ113       Design Thinking       3+0       3.0         ESTÜ114       Visual Thinking       3+0       3.0         ESTÜ115       Photographic Viewpoint       2+1       3.0         ESTÜ116       Computer Aided Design I       3+0       3.0         ESTÜ117       Computer Aided Design II       3+0       3.0         ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0			vone					
ESTÜ114       Visual Thinking       3+0       3.0         ESTÜ115       Photographic Viewpoint       2+1       3.0         ESTÜ116       Computer Aided Design I       3+0       3.0         ESTÜ117       Computer Aided Design II       3+0       3.0         ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0								
ESTÜ115       Photographic Viewpoint       2+1       3.0         ESTÜ116       Computer Aided Design I       3+0       3.0         ESTÜ117       Computer Aided Design II       3+0       3.0         ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0							3+0	
ESTÜ116       Computer Aided Design II       3+0       3.0         ESTÜ117       Computer Aided Design II       3+0       3.0         ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0		-	t					
ESTÜ117       Computer Aided Design II       3+0       3.0         ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0								
ESTÜ118       Visual Thinking with Concepts       3+0       3.0         ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0								
ESTÜ119       Flute       3+1       3.0         ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0								
ESTÜ120       Solfege       3+1       3.0         ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0			жерь					
ESTÜ121       Piano       3+1       3.0         ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0								
ESTÜ122       Guitar       3+1       3.0         ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0		_						
ESTÜ123       Gender Equality in Work Life       2+0       3.0         ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0								
ESTÜ125       Philosophy of Science       3+0       3.0         ESTÜ127       Diction       1+2       3.0         ESTÜ129       Turkish as a Foreign Language I       2+0       2.0         ESTÜ130       Turkish as a Foreign Language II       2+0       2.0         ESTÜ131       Argentine Tango Dance       0+2       2.0			k Life					
ESTÜ127 Diction 1+2 3.0 ESTÜ129 Turkish as a Foreign Language I 2+0 2.0 ESTÜ130 Turkish as a Foreign Language II 2+0 2.0 ESTÜ131 Argentine Tango Dance 0+2 2.0			1110					
ESTÜ129 Turkish as a Foreign Language I ESTÜ130 Turkish as a Foreign Language II ESTÜ131 Argentine Tango Dance 2+0 2.0 ESTÜ131 Argentine Tango Dance 0+2 2.0								
ESTÜ130 Turkish as a Foreign Language II 2+0 2.0 ESTÜ131 Argentine Tango Dance 0+2 2.0			กดบอดค่ำ	ī				
ESTÜ131 Argentine Tango Dance 0+2 2.0								
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ESTÜ203 ESTÜ210 ESTÜ301 ESTÜ307 ESTÜ402 ESTÜ403 ESTÜ405	Introduction to Sociology Culture of Museum Science Communication Children Rights and Family Education Coaching and Leadership Basic Computer Utilization Computer Programming	3+0 2+0 2+0 2+0 3+0 3+0	3.0 2.0 3.0 2.0 3.0 4.0 5.0
PMYO198 SAN155	Optional Internship Hall Dances	0+2 0+2	5.0 2.0
SNT155	History of Art	2+0	2.0
THU203	Community Services	0+2	3.0
Area Elective	Courses		
ANi216	Graphic Animation at TV	2+1	3.0
BYT218	Visual Narration	2+1	4.0
BYT221	Types of Newspaper Articles	2+2	4.0
ELO103	Digital Electronics	3+1	4.0
ESTÜ201	Turkish Sign Language	3+0	3.0
ESTÜ401	Introduction to Professional Life	1+1	2.0
ETK211	Professional Ethics	2+0	3.0
iME201	Vocational Training in Workplace I	5+10	15.0
iME202	Vocational Training in Workplace II	5+10	15.0
işL421	Entrepreneurship	2+0	3.0
RTV234	Working Life in Media	2+1	3.0
RTV242	Video Editing Applications	1+2	3.0
RTV243	Kamera-Lighting Applications	2+2	3.0
RTV248	Television Advertising	2+1	3.0
RTV263	Short Film	2+2	4.0
RTV265	Media Literacy	2+1	3.0
RTV267	Digital Communication Technologies	2+2	4.0
RTV269	Digital Broadcasting	2+2	4.0
RTV270	Sound Application	2+2	4.0
RTV271	Social Media Content Production and Managament	2+2	4.0
RTV275	Web TV Broadcasting	2+2	4.0
RTV277	Digital Corporate Communication	2+1	3.0
RTV279	Digital Culture and New Media	2+1	3.0
RTV281	Digital Literacy	2+2	4.0
RTV282	News Gathering and Writing Techniques	2+2	4.0
RTV283	Radio Program Preparation and Application	2+2	4.0
RTV284	Creative Writing	2+2	4.0
RTV285	Audio Description Practices	2+2	4.0
RTV286	Announcer and Iterviev Techniques	2+1	3.0
RTV287	News Analysis	2+2	4.0
RTV289	Digital Advertising	3+1	4.0

# DEPARTMENT OF AUDIO-VISUAL TECHNIQUES AND MEDIA PRODUCTION

# PROGRAM IN PRINTING AND PUBLISHING TECHNOLOGIES

The printing industry, which started as one of the oldest professions in the world, continues to be up-to-date and valid in parallel with the development of information technologies. Today, rapid developments in printing technologies have increased the need for trained technical personnel. Our training program has been prepared to meet the qualified workforce needed by the sector. Our students graduate with the ability to bring together the necessary equipment for the design, printing and publication of all kinds of materials and turn them into products, as well as marketing and advertising. In order to train individuals who can work as managers and intermediate staff in printing-publishing businesses, the Department offers courses with experienced academic staff and up-to-date content.

## **PROGRAM**

I.Semester II.Semester

BYT107	Printing and Publishing	2+1	3.0	BYT104	Reproduction and Color Theory	3+0	4.0
BYT109	Visual Culture	2+2	5.0	BYT106	Computerized Page Design I	2+1	4.0
BYT111	Printing Equipment	2+1	3.0	BYT108	Printing Management and Entrepreneurship	2+0	3.0
BYT113	Fonts and Typography	2+1	3.0	GTS112	Illustration	2+1	3.0
EST101	Aesthetics and Design	2+1	3.0	iNG188	English II	3+0	3.0
iNG187 (Eng)	English I	3+0	3.0	(Eng) iSG401	Occupational Health and Safety I	2+0	2.0
MAT1001	Mathematics I	3+0	4.0	TAR166	Atatürk's Principles and History of Turkish	2+0	2.0
TAR165	Atatürk's Principles and History of Turkish	2+0	2.0	TKY102	Revolution II  Quality Management  Systems in Production	2+1	4.0
T/\D105	Revolution I	2.0	2.0	mün 104	77 1:1 I	2 . 0	2.0
TÜR125	Turkish Language I	2+0	2.0	TÜR126	Turkish Language II	2+0	2.0
	Seçmeli Dersler		2.0		Seçmeli Dersler		3.0
			30.0				30.0
	III.Semester				IV.Semester		
BYT205	Binding and Cardboard Packing Production	2+2	4.0	BYT202	Digital Printing Technology	2+2	4.0
BYT207	Offset Printing Technology	2+2	4.0	BYT209	Cost Calculation	2+2	4.0
BYT211	Computerized Page Design	2+2		BYT210	Other Printing Techniques	3+1	4.0
GTS212	Desktop Publishing	2+2	3.0	BYT299	Internship	0+2	5.0
010212			15.0		Web Design	1+1	3.0
	Mesleki Seçmeli Dersler		15.0	OKAZII	web Design	111	
	Mesleki Seçmeli Dersler		13.0	OKAZII	Mesleki Seçmeli Dersler		10.0
	Mesleki Seçmeli Dersler		30.0	GKA211	_		
lective Cours BEÖ155				GKA211	_		10.0
	ses		30.0	GKAZII	_		10.0  30.0
BEÖ155	ses Physical Education Written and Verbal Com	munica	 30.0 tion	GKAZII	_	2+0	10.0  30.0
BEÖ155 BYT152 ESTÜ1001	ses Physical Education Written and Verbal Com Story Analysis On Work	munica	 30.0 tion	GKAZII	_	2+0 2+1	10.0  30.0 2.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003	ses Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation	munica 1 Litera	 30.0 tion	GKAZII	_	2+0 2+1 3+0 1+1	10.0  30.0 2.0 3.0 3.0 2.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101	ses  Physical Education  Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit	munica 1 Litera y Life	 30.0 tion	GKAZII	_	2+0 2+1 3+0 1+1 0+1	10.0  30.0 2.0 3.0 3.0 2.0 2.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103	Ses  Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processo	munica 1 Litera y Life es	 30.0 tion	GKAZII	_	2+0 2+1 3+0 1+1 0+1 2+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills	munica 1 Litera y Life es	 30.0 tion	GKAZII	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi	munica 1 Litera y Life es	 30.0 tion	GKAZII	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi Volunteering Works	munica 1 Litera y Life es s	 30.0 tion	GKAZII	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0 4.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every	munica 1 Litera y Life es s	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0 4.0 2.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking	munica 1 Litera y Life es s	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ112	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking	munica d Litera y Life es s	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ112 ESTÜ113	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint	munica d Litera y Life es s vone	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 2+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0 3.0 3.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skille Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design	munica I Litera y Life es s vone	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 2+1 3+0	10.0  30.0 3.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ115	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skille Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design	munica I Litera y Life es s vone I II	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 2+1 3+0 3+0	10.0  30.0 2.0 3.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ115 ESTÜ116	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skille Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co	munica I Litera y Life es s vone I II	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+0 3+0 3+0	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ114 ESTÜ115 ESTÜ116 ESTÜ117 ESTÜ117	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Processe Academic and Life Skille Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co Flute	munica I Litera y Life es s vone I II	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+0 3+0 3+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 4.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ101 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ116 ESTÜ116 ESTÜ117 ESTÜ117 ESTÜ118 ESTÜ119	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co Flute Solfege	munica I Litera y Life es s vone I II	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+0 3+0 3+1 3+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ1001 ESTÜ103 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ116 ESTÜ116 ESTÜ117 ESTÜ117 ESTÜ118 ESTÜ119 ESTÜ120 ESTÜ121	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co Flute Solfege Piano	munica I Litera y Life es s vone I II	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+0 3+1 3+1 3+1	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
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BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ1001 ESTÜ1001 ESTÜ1001 ESTÜ1004 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ116 ESTÜ116 ESTÜ117 ESTÜ117 ESTÜ119 ESTÜ120 ESTÜ121 ESTÜ121	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co Flute Solfege Piano Guitar Gender Equality in World	munica d Litera y Life es s one I II ncepts	 30.0 tion	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+1 3+1 3+1 3+1 2+0	10.0  30.0 2.0 3.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
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BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ1001 ESTÜ1003 ESTÜ1001 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ116 ESTÜ117 ESTÜ118 ESTÜ119 ESTÜ120 ESTÜ121 ESTÜ122 ESTÜ123 ESTÜ125 ESTÜ127 ESTÜ129 ESTÜ129	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skill: Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co Flute Solfege Piano Guitar Gender Equality in Worl Philosophy of Science Diction	munica d Litera y Life es s  one  I II oncepts	30.0 tion ture	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+1 3+1 3+1 3+1 3+1 2+0 3+0 1+2	10.0 30.0  2.0 3.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3
BEÖ155 BYT152 ESTÜ1001 ESTÜ1003 ESTÜ1001 ESTÜ1001 ESTÜ1001 ESTÜ1004 ESTÜ104 ESTÜ106 ESTÜ111 ESTÜ112 ESTÜ113 ESTÜ114 ESTÜ115 ESTÜ116 ESTÜ117 ESTÜ118 ESTÜ119 ESTÜ120 ESTÜ121 ESTÜ122 ESTÜ123 ESTÜ125 ESTÜ127 ESTÜ129	Physical Education Written and Verbal Com Story Analysis On World Yoga and Meditation Introduction to Universit Ceramic Design Process Academic and Life Skills Proje Yönetimi Volunteering Works Cyber Security for Every Design Thinking Visual Thinking Photographic Viewpoint Computer Aided Design Computer Aided Design Visual Thinking with Co Flute Solfege Piano Guitar Gender Equality in Worl Philosophy of Science Diction Turkish as a Foreign Lar	munica d Litera y Life es s  one  I II oncepts	30.0 tion ture	GKA211	_	2+0 2+1 3+0 1+1 0+1 2+1 2+1 1+2 2+0 3+0 3+0 3+1 3+1 3+1 3+1 3+1 2+0 3+0 1+2 2+0	10.0  30.0 2.0 3.0 2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3

ESTÜ203	Introduction to Sociology	3+0	3.0
ESTÜ210	Culture of Museum	2+0	2.0
ESTÜ301	Science Communication	2+0	3.0
ESTÜ307	Children Rights and Family Education	2+0	2.0
ESTÜ402	Coaching and Leadership	3+0	3.0
ESTÜ403	Basic Computer Utilization	3+0	4.0
ESTÜ405	Computer Programming	3+0	5.0
PMYO198	Optional Internship	0+2	5.0
SAN155	Hall Dances	0+2	2.0
SNT155	History of Art	2+0	2.0
THU203	Community Services	0+2	3.0
Area Elective Co	urses		
BYT201 (Eng)	Technical English	3+0	3.0
BYT213	Total Quality Management in Printing Industry	2+2	4.0
BYT214	Information Technology in Printing Industry	2+2	4.0
BYT215	Product Planning and Management in Printing Industry	2+2	4.0
BYT216	Grabhic Design on TV	2+1	4.0
BYT218	Visual Narration	2+1	4.0
BYT219	Main Concepts in Media	2+1	4.0
BYT220	Artificial Intelligence and Social Media Management	2+1	4.0
BYT221	Types of Newspaper Articles	2+2	4.0
ESTÜ201	Turkish Sign Language	3+0	3.0
ESTÜ401	Introduction to Professional Life	1 + 1	2.0
ETK211	Professional Ethics	2+0	3.0
FOT107	Photography	2+1	3.0
iME201	Vocational Training in Workplace I	5+10	15.0
iME202	Vocational Training in Workplace II	5+10	15.0
RTV245	Radio Broadcasting Systems and Applications	2+1	4.0
RTV265	Media Literacy	2+1	3.0
RTV269	Digital Broadcasting	2+2	4.0

# DEPARTMENT OF CONSTRUCTION DIVISION

# PROGRAM IN BUILDING INSPECTION

The aim of the program is to ensure that the qualified intermediate manpower needed by the construction industry in both production and after-sales service levels is trained in accordance with the quality and service philosophy that will meet the expectations of the age. Graduates will have the qualifications to meet the need for qualified personnel between the manager/engineer and the worker in the production and after-sales service sector or to open and run a business on their own behalf. The education of the building inspection technician will enable him to know the contemporary trends in advanced technology and information technologies.

	<b>I.Semester</b>				II.Semester		
iNG187 (Eng)	English I	3+0	3.0	BiL129	Information and	2+1	3.0
					Communication		
					Technologies		
MAT1001	Mathematics I	3+0	4.0	iNG188 (Eng)	English II	3+0	3.0
MEK104	Statics Strength of	3+0	4.5	iNŞ235	Methods of Concrete	2+2	3.0
	Materials				Technology		
TAR165	Atatürk's Principles and	2+0	2.0	iSG401	Occupational Health and	2+0	2.0
	History of Turkish				Safety I		
	Revolution I						
TOP102	Surveying	2+2	4.5	MAT1002	Mathematics II	3+0	4.0
TÜR125	Turkish Language I	2+0	2.0	TAR166	Atatürk's Principles and	2+0	2.0
					History of Turkish		
					Revolution II		
YPD101	<b>Building Inspection</b>	2+1	3.0	TÜR126	Turkish Language II	2+0	2.0

YPD103	Structural Design I	3+1	4.0	YPD102	Guidelines for Earthquake	2+0	2.0
					Resistant Construction		
YPD105	Construction and Material	3+0	3.0	YPD104	Structural Design II	2+0	3.0
				YPD222	Fundamental Disaster	3+0	4.0
					Knowledge in Building		
					Inspection Seçmeli Dersler		2.0
					Seçmen Dersier		
			30.0				30.0
	III.Semester				IV.Semester		
iN\$229	Reinforced Concrete	2+2	4.0	iN\$230	Soil Improvement Methods	3+0	4.0
	Design						
MEK211	Soil Mechanics	3+0	4.0	YPD204	Building Site Organization	2+0	3.0
YPD205	Application of Building	2+2	4.0	YPD208	Building Inspection and	2+1	3.0
	Inspection				Legal Aspects of Reconstruction		
YPD207	Introduction to Computer	2+1	3.0	YPD299	Internship	0+2	5.0
	Aided Design				1		
	Mesleki Seçmeli Dersler		12.0		Mesleki Seçmeli Dersler		15.0
	Seçmeli Dersler		3.0				
	•						
			30.0				30.0
			30.0				30.0
Elective Cour						2 0	2.0
BEÖ155	Physical Education					2+0	2.0
ESTÜ1003	Yoga and Meditation	tr. I ifa				1+1 0+1	2.0
ESTÜ101 ESTÜ103	Introduction to Universi	-				2+1	3.0
ESTÜ103 ESTÜ104	Ceramic Design Process Academic and Life Skil					2+1	3.0
ESTÜ104 ESTÜ106	Proje Yönetimi	13				2+1	3.0
ESTÜ111	Volunteering Works					1+2	4.0
ESTÜ112	Cyber Security for Ever	vone				2+0	2.0
ESTÜ113	Design Thinking	jone				3+0	3.0
ESTÜ114	Visual Thinking					3+0	3.0
ESTÜ115	Photographic Viewpoin	t				2+1	3.0
ESTÜ116	Computer Aided Design					3+0	3.0
ESTÜ117	Computer Aided Design					3+0	3.0
ESTÜ118	Visual Thinking with Co	oncepts				3+0	3.0
ESTÜ119	Flute					3+1	3.0
ESTÜ120	Solfege					3+1	3.0
ESTÜ121	Piano					3+1	3.0
ESTÜ127	Diction					1+2	3.0
ESTÜ129	Turkish as a Foreign La	nguage	I			2+0	2.0
ESTÜ130	Turkish as a Foreign La		II			2+0	2.0
ESTÜ203	Introduction to Sociolog	y				3+0	3.0
ESTÜ210	Culture of Museum					2+0	2.0
ESTÜ301	Science Communication	1				2+0	3.0
ESTÜ307	Children Rights and Far	nily Ed	ucation			2+0	2.0
ESTÜ402	Coaching and Leadershi	p				3+0	3.0
ESTÜ405	Computer Programming					3+0	5.0
PMYO198	Optional Internship					0+2	5.0
SAN155	Hall Dances					0+2	2.0
THU203	Community Services					0+2	3.0
Area Elective						2.6	2.0
ESTÜ201	Turkish Sign Language	1 7				3+0	3.0
ESTÜ401	Introduction to Profession	nai Lif	e			1+1	2.0
iN\$232	Analyses of Concrete	tor 1	10			3+0	4.0
KGS104 MiM216	Quality Assurance and S Architectural Project An		IS			2+0 2+1	2.0 3.0
MiM216	Architectural Project An	arysis				∠+1	3.0

ŞPL201	City Admiration and Environment	3+0	3.0
ŞPL202	Plans of Map and Expropriation	2+0	3.0
TEK107	Scientific Principles of Technology	3+1	4.0
TRA220	Road Knowledge	2+1	4.0
TRA223	Geotechnics for Roads	2+2	4.0
YPD108	Building Electrical Installation Knowledge	2+0	3.0
YPD201	Repairs and Strengthening of Structures	2+0	2.0
YPD202	Damage in Buildings	3+0	3.0
YPD206	Structures and Earthquake	2+0	4.0
YPD209	Traditional Building Materials	3+0	4.0
YPD213	Laboratory Experiments in Building Inspection I	3+1	4.0
YPD214	Laboratory Experiments in Building Inspection I	3+1	4.0
YPD215	Converting Buildings to Sustainable Green Buildings	3+0	4.0
YPD216	Alternative Building Materials	3+0	4.0
YPD217	Land Ownership and Real Estate Valuation in Building Inspection	3+0	4.0
YPD218	Urban Transformation and Urban Planning in Building Inspection	3+0	4.0
YPD220	Logic, Science and Ethics in Building Inspection	3+0	4.0
YPD2501	Economics In Building Inspection	3+0	4.0
YPD2502	Cost, Quantity and Exploration In Building Inspection	3+0	4.0
YPD2503	Solar Energy and Applications In Building Inspection	3+0	4.0
YPD2505	Foundation Drilling and Grouting Applications In Building Inspection	3+0	4.0

## DEPARTMENT OF MACHINES AND METAL TECHNOLOGIES

# PROGRAM IN MECHANICAL DRAWING AND CONSTRUCTION

The Machinery Drawing and Construction program is one of the associate degree programs that will form the backbone of the industry in the future as it is today. The aim of the program is to give theoretical and practical information about machine training, to introduce new technologies suitable for the changing conditions of the day, to teach computer aided design and production methods, and to gain the ability to prepare a program for numerically controlled benches; to educate about work discipline, management and organization principles, production and planning techniques, to teach measurement, control techniques and destructive and non-destructive testing methods, to provide theoretical and practical information on machining and chipless manufacturing methods and machine tools, hydraulic-pneumatic control systems.

	I.Semester				II.Semester		
iNG187 (Eng)	English I	3+0	3.0	iNG188 (Eng)	English II	3+0	3.0
MAK105	Production and	3+1	4.0	iSG401	Occupational Health and	2+0	2.0
	Manufacturing Technology				Safety I		
	I						
MAT1001	Mathematics I	3+0	4.0	MAK106	Production and	3+1	3.0
					Manufacturing Technology		
					II		
MLZ112	Materials Knowledge	3+0	3.0	MAK115	Mechanical Drawing I	3+1	4.0
MRK109	Basic Principles in	2+0	2.0	MAT1002	Mathematics II	3+0	4.0
	Machine Construction						
TAR165	Atatürk's Principles and	2+0	2.0	MEK209	Mechanics of Materials	3+0	3.0
	History of Turkish				(Dynamics)		
	Revolution I						
TEK107	Scientific Principles of	3+1	4.0	MRK110	Computer Aided Drawing	3+1	4.0
	Technology						
TRS104	Technical Drawing	2+2	4.0	TAR166	Atatürk's Principles and	2+0	2.0
					History of Turkish		
					Revolution II		
TÜR125	Turkish Language I	2+0	2.0	TÜR126	Turkish Language II	2+0	2.0
	Seçmeli Dersler		2.0		Seçmeli Dersler		3.0
	•				•		
			30.0				30.0

	III.Semester				IV.Semester		
MAK221	Computer Aided Design I	3+1	4.0	KLP220	Mold Design	2+1	4.0
MAK229	Mechanical Science and	3+1	4.0	MAK240	Hydraulic and Pneumati		4.0
111111111	Elements	0.1		1,11,11,11	Systems		
MAK259	Machine Drawing II	3+1	4.0	MAK272	Computer Aided Design	n II 2+1	3.0
MRK223	Industrial Measurement	1 + 1	3.0	MRK226	Unconventional Product	tion 3+0	4.0
	Techniques				Methods		
	Mesleki Seçmeli Dersler		15.0	MRK299	Internship	0+2	5.0
					Mesleki Seçmeli Dersler	r	10.0
					•		
			30.0				30.0
<b>Elective Cours</b>	ses						
BEÖ155	Physical Education					2+0	2.0
ESTÜ1001	Story Analysis On World	d Litera	iture			3+0	3.0
ESTÜ1003	Yoga and Meditation					1+1	2.0
ESTÜ101	Introduction to Universit	y Life				0+1	2.0
ESTÜ103	Ceramic Design Process	es				2+1	3.0
ESTÜ104	Academic and Life Skill	S				2+1	3.0
ESTÜ106	Proje Yönetimi					2+1	3.0
ESTÜ111	Volunteering Works					1+2	
ESTÜ112	Cyber Security for Every	one				2+0	
ESTÜ113	Design Thinking					3+0	
ESTÜ114	Visual Thinking					3+0	
ESTÜ115	Photographic Viewpoint					2+1	3.0
ESTÜ116	Computer Aided Design					3+0	
ESTÜ117	Computer Aided Design					3+0	
ESTÜ118	Visual Thinking with Co	ncepts				3+0	
ESTÜ119	Flute					3+1	
ESTÜ120	Solfege					3+1	3.0
ESTÜ121	Piano Guitar					3+1 3+1	3.0
ESTÜ122 ESTÜ123	Gender Equality in Worl	z Lifo				2+0	3.0 3.0
ESTÜ125 ESTÜ125	Philosophy of Science	Life				2+0 3+0	
ESTÜ127	Diction					1+2	
ESTÜ127 ESTÜ129	Turkish as a Foreign Lar	างแลงค	T			2+0	
ESTÜ130	Turkish as a Foreign Lar					2+0	
ESTÜ131	Argentine Tango Dance	-88-				0+2	
ESTÜ2001	AI Literacy					2+0	
ESTÜ203	Introduction to Sociolog	y				3+0	
ESTÜ301	Science Communication	-				2+0	
ESTÜ307	Children Rights and Fan	nily Edu	ucation			2+0	2.0
ESTÜ402	Coaching and Leadershi					3+0	3.0
ESTÜ403	Basic Computer Utilizat					3+0	4.0
ESTÜ405	Computer Programming					3+0	
PMYO198	Optional Internship					0+2	
SAN155	Hall Dances					0+2	
SNT155	History of Art					2+0	
THU203	Community Services					0+2	3.0
	G.						
Area Elective		ion				2.2	4.0
BTP202 ELE102	System Analysis and Des Basics of Electricity	ıgıı				2+2 2+2	4.0 3.0
ESTÜ106	Proje Yönetimi					2+2 2+1	3.0
ESTÜ201	Turkish Sign Language					3+0	3.0
ESTÜ401	Introduction to Profession	nal Life	<b>;</b>			1+1	2.0
ETK211	Professional Ethics	1110				2+0	3.0
iLT105	General and Technical Co	ommun	ication			2+0	2.0
iME201	Vocational Training in W					5+10	15.0
iME202	Vocational Training in W					5+10	15.0
iŞL421	Entrepreneurship	•				2+0	3.0

KGS104	Quality Assurance and Standards	2+0	2.0
KLP222	Molding Practices	2+2	4.0
MAK242	Administrating Management and Manufacturing Control	1+1	3.0
MAK251	Energy Management	3+1	4.0
MAK257	Non-Destructive Testings	2+2	4.0
MAK261	Application of Engineering Science	2+2	4.0
MAK263	Material and Mechanical Testing	3+1	4.0
MAK265	Machine Drawing Applications	2+2	4.0
MAK278	Heat Treatment Technology	2+2	4.0
MRK213	Technical English	3+0	3.0
MRK221	Construction Applications	2+2	4.0
MRK222	Construction	2+1	3.0
MRK224	Basic Maintenance Management	2+0	2.0
MRK225	Computer Aided Manufacturing	3+1	4.0
MRK227	Industrial Products Design	2+2	4.0
MRK229	Reverse Engineering and Additive Manufacturing Technology	3+1	4.0
MRK231	Office Programs and Digital Data Management	3+1	4.0
MRK233	Polymer Technology and Mold Processing	2+2	4.0

# **DEPARTMENT OF DESING**

# **GRAPHIC DESING PROGRAM**

Graphic Design, reflecting the mutual interaction of consumer culture and folk culture; As a result of the development of the market economy, it is used as the most important tool in creating a body of messages that eliminates the communication gap between the producer companies and the consumers. It is determined by the effective promotion and admiration of the products we interact with in newspapers, television, and the Internet in all kinds of mass media, in other words, reaching its goal. This requires knowing and using many design criteria and graphic principles, from the selection of the appropriate target audience to the customer requests, from the slogan to the images chosen, from the color used to the composition created. With the Graphic Design program, it is aimed to meet the need for qualified workforce in the field.

	I.Semester				II.Semester		
BiL129	Information and Communication	2+1	1 3.0	EST106	Aesthetics	2+1	2.0
	Technologies						
FOT107	Photography	2+1	1 3.0	GTS110	Introduction Graphic Design	2+1	3.0
GTS111	Pattern	2+1	1 3.5	GTS112	Illustration	2+1	3.0
iNG187 (Eng)	English I	3+0	3.0	iNG188	English II	3+0	3.0
				(Eng)			
MAT1001	Mathematics I	3+0	) 4.0	iSG401	Occupational Health and Safety I	2+0	2.0
SAN111	Fundamental Art Education l	[ 3+(	3.0	SAN112	Fundamental Art Education II	3+0	3.0
SNT111	History of Arts I	2+0	2.0	SNT114	History of Art II	2+0	3.0
TAR165	Atatürk's Principles and	2+0	2.0	TAR166	Atatürk's Principles and	2+0	2.0
	History of Turkish				History of Turkish		
	Revolution I				Revolution II		
TiP113	Typography	2+1	1 2.5	TRS104	Technical Drawing	2+2	4.0
TÜR125	Turkish Language I	2+0	2.0	TÜR126	Turkish Language II	2+0	2.0
	Seçmeli Dersler		2.0		Seçmeli Dersler		3.0
				-			
			30.0	0			30.0
	III.Semester				IV.Semester		
ANi225	Animation	2+1	3.0	GTS212	Desktop Publishing	2+2	3.0

GRA211	Web Design	1 + 1	3.0	GTS218		ided Graphic	2+1	3.0
GTS217	Computer Aided Graphic	2+1	3.0	GTS220	Design II Original Pri	ntmaking II	2+2	3.0
	Design I				0.1.8.1.1.1.			
GTS219	Original Printmaking I	2+1	3.0	GTS222	Packing Des		2+1	3.0
GTS221	Packing Design I	2+1	3.0	GTS226	Visual Com Advertising	munication and	2+1	3.0
	Mesleki Seçmeli Dersler		15.0	GTS299	Internship		0+2	5.0
					Mesleki Seçi	meli Dersler		10.0
					,			
			30.0					30.0
			30.0					30.0
<b>T</b>								
Elective Cours BEÖ155	es Physical Education						2+0	2.0
ESTÜ1001	Story Analysis On World	d Liter:	ature				3+0	3.0
ESTÜ1001	Yoga and Meditation	a Litter	atare				1+1	2.0
ESTÜ101	Introduction to Universit	v Life					0+1	2.0
ESTÜ104	Academic and Life Skill	-					2+1	3.0
ESTÜ106	Proje Yönetimi						2+1	3.0
ESTÜ111	Volunteering Works						1+2	4.0
ESTÜ112	Cyber Security for Every	one					2+0	2.0
ESTÜ113	Design Thinking	•					3+0	3.0
ESTÜ114	Visual Thinking						3+0	3.0
ESTÜ115	Photographic Viewpoint						2+1	3.0
ESTÜ116	Computer Aided Design						3+0	3.0
ESTÜ117	Computer Aided Design						3+0	3.0
ESTÜ118	Visual Thinking with Co						3+0	3.0
ESTÜ119	Flute						3+1	3.0
ESTÜ120	Solfege						3+1	3.0
ESTÜ121	Piano						3+1	3.0
ESTÜ122	Guitar						3+1	3.0
ESTÜ123	Gender Equality in Worl	k Life					2+0	3.0
ESTÜ125	Philosophy of Science						3+0	3.0
ESTÜ127	Diction						1+2	3.0
ESTÜ129	Turkish as a Foreign Lar						2+0	2.0
ESTÜ130	Turkish as a Foreign Lar	iguage	II				2+0	2.0
ESTÜ131	Argentine Tango Dance						0+2	2.0
ESTÜ2001	AI Literacy						2+0	2.0
ESTÜ203	Introduction to Sociolog	У					3+0	3.0
ESTÜ210	Culture of Museum						2+0	2.0
ESTÜ301	Science Communication						2+0	3.0
ESTÜ307	Children Rights and Fan		ucation				2+0 3+0	2.0
ESTÜ402 ESTÜ403	Coaching and Leadershi Basic Computer Utilizat						3+0 3+0	3.0 4.0
ESTÜ405	Computer Programming						3+0 3+0	5.0
PMYO198	Optional Internship						0+2	5.0
SAN155	Hall Dances						0+2	2.0
SNT155	History of Art						2+0	2.0
THU203	Community Services						0+2	3.0
Area Elective								
ESTÜ103	Ceramic Design Processe	es					2+1	3.0
ESTÜ201	Turkish Sign Language						3+0	3.0
ESTÜ401	Introduction to Profession	nal Lif	e				1+1	2.0
ETK211	Professional Ethics						2+0	3.0
GTS201	Visual Communication I	esign					2+2	5.0
GTS205 GTS208	Printing Techniques Technical English						3+0 3+0	4.0 3.0
GTS208 GTS211	Graphic Applications						2+1	3.0
GTS211	Portfolio Design						3+0	4.0
GTS223	Plastic Arts						2+1	4.0
GTS225	Critical Thinking and Cro	eavity					3+0	4.0

GTS232	Illustrator Graphic Applications	3+1 3.0	
GTS236	3D Design	2+2 4.0	
GTS238	Design Culture	3+0 4.0	
GTS240	Advanced Illustrator Graphic Applications	2+1 4.0	
TiP204	Typography Applications	1+1 3.0	1

#### COURSE CONTENTS

# ANi216 Graphic Animation at TV

2+1 3.0

Graphic Design: Definition, Uses, Functions; Principles of Graphic Design: Line, Color, Texture, Form, Scale, Direction; Basic Design: Motion graphic design; Language and Technologies of Graphic Narratives; Electronic Graphic Animation: Systems and Functions; Graphic Production: Pixel based, Vector based; 2D and 3D Graphic Animation; Production.

ANİ225 Animation 2+1 3.0

Moving Image Design: Definition, Content, Properties, Areas of use; Basic Concepts: Resolution, Pixel, Anti-aliasing, Bitmap, etc.; Image Formats; Application Programs; Flash, 3D Max, and Other animation programs; Points to Consider in Practice: Exercises.

#### **BEÖ155** Physical Education

2+0 2.0

Definition of Physical Education and Sports; Aims, Disadvantages of Inactive Life; Various Activities for Physical Education; Recreation; Human Physiology; First Aid; Sports Branches: Definition, Rules and Application; Keep Fit Programs. Definition of Physical Education and Sports; Aims, Disadvantages of Inactive Life; Various Activities for Physical Education; Recreation; Human Physiology; First Aid; Sports Branches: Definition, Rules and Application; Keep Fit Programs.

#### **BiL129** Information and Communication Technologies

2+1 3.0

Basic Concepts of Information Technologies: Hardware, Software, Storage, Computer network; Information Technologies and the Society; Word Processing Programs; Image Processing Programs; Presentation Software; Use of Information Networks (the Internet, e-mail); Internet and Communication.

#### BTP202 System Analysis and Design

2+2 4.0

System Function and Components; Definition of the Problem and Solution Principles; System Creation Life Cycle; Analysis Tools and Techniques; Data Flow Charts or Modelling of New Information System; Data definition and Information Requirement at Data Dictionary; System Design and Application; Computer Inputs, Outputs, Controlls; Design of Files; Information System Development Steps and System Analysis; Administration Function; Data and Information Concepts; System Analysis Tools; Classification of Information Tools; Computer Aided Software Engineering Tools.

### BYT104 Reproduction and Color Theory

3+0 4.0

Definition of Reproduction; Introduction of Machines, Tools and Equipment Used in Reproduction Technology; Originals and Classification of Originals; Method of Reproduction: Line reproduction, Halftone reproduction; Tram Points: Sections of tram points, Types of tram points; Sensitometer; Colour Separation: Colour separation filters, Relations of exposing system of plates and colour separation; Colour: Definition, Specifications, Colour vision effect, Psychological effects of colour; Light and Paint Colours; Colour in Reproduction.

# BYT106 Computerized Page Design I

2+1 4.0

Design and Typesetting: Definition and Scope; Application Programs: Adobe Illustrator, InDesign, Photoshop, Macromedia Freehand, Corel-Draw; Digital Media Pictures Formats: EPS, TIFF, JPEG; Computer Color Formats: RGB, CMYK, Determining the appropriate color format; Exercises: Press release, Packaging, Posters, Magazine design.

#### BYT107 Printing and Publishing

2+1 3.0

Printing Industry: Definition, Historical development, Importance; Printing Industry in the World and in our Country: Past, Present and Future; Occupations Related to Printing Industry; Work Flow Process in Printing Industry: Pre- printing, Printing and Post-Printing Processes; Publishing: Definition, Scope, Historical development; Types of Publishing: Newspaper publishing, Magazine publishing, Book publishing; Legal Dimensions of Publishing; Electronic Publishing: Definition, Scope, Advantages; Types: Electronic newspaper, Magazine and book; Comparison of Traditional Publishing and Electronic Publishing; Relationship Between Publishing Industry and Publishing; Publishing Practices in Turkey and in the World.

#### BYT108 Printing Management and Entrepreneurship

2+0 3.0

Business and Entrepreneurship: Basic concepts, Business goals, Types and legal forms; Business Establishment Studies; Functions of Businesses; Production Systems: Properties, Classification, Evaluation of printing establishments according to production systems; Production Organization and Layout in Printing Establishments; Concepts Related to Entrepreneurship;

Types of Entrepreneurship: Internal and External Entrepreneurship; Entrepreneurship and Motivation; Characteristics in Entrepreneurs; Entrepreneurship Stories; Case Studies in Entrepreneurship.

#### BYT109 Visual Culture

Visual Culture and Visual Culture Studies; Image and Society: The Relationship Between image and Society; Audience and Meaning: Analysis of the Audience's Different Readings on the image; Concept of Visual Perception: Psychological Dynamics of Visual Perception, Cultural Foundations of Visual Perception; Basic Techniques of Visual Communication; Communication by Line; Communication in Writing; Icons and Symbols; Use of Visual Language; Shaping Visual Expression and Design: Visual Shaping, Material Shaping, Social Shaping; Project.

## **BYT111** Printing Equipment

2+1 3.0

Paper Making from Past to Present; Paper Production Process: Paper raw materials and properties, Paper production; Properties of Paper, Cardboard, Cardboard: Dimensional properties, Optical properties, Surface properties, Strength properties; Raw Materials of Printing Inks: Colorants, Binders, Solvents, Additives; Ink Production; Properties of Inks: Printability, Rheological; Excipients; Drying Patterns of Inks; Purposes of Use of Varnishes; Varnish Types and Selection: Oil-based, Water-based, UV varnishes; Adhesion Theories; Adhesive Principles; Parameters; Adhesive Types: Cold adhesives, Reactive melts and curing.

## **BYT113** Fonts and Typography

2+1 3.0

Development process of writing and alphabetic writing; Definition of typography and historical development process of typography; Development and classification of print texts; Conducting studies on letter anatomy, structural features of letters, and font designers; Readability and the importance of readability and typographic criteria; Typography in page design: Page design principles, visual hierarchy and continuity, balance, intensity, emphasis, attractiveness, contrast, pattern and effect concepts; Understanding the importance of proportional relationships, perception and communication in visual elements; Typographic studies and maturing the logic of typography.

#### BYT152 Written and Verbal Communication

2+1 3.0

Communication: Written and Verbal communication, Communication and expression; Forms of Expression: Explanatory narration, Narrative, Descriptive, Discussive; Ways of Improving Thought in Expression; Process and Practices of Written Expression; Thought Writings: Article, Essay, Memoir, Biography; Creative Writings; Personal Correspondence: Letters, Thank-you notes and regrets; Official Correspondence: Petition, Report, Record, Curricula vitae; Practices Related to Official Correspondence; Verbal Communication: The principles of rhetoric, Body language; Principles and Techniques of Preparing a Presentation; Practices for Verbal Expression.

# BYT201 (Eng) Technical English

3+0 3.0

Printing Industry Terminology: Basic operations, Printing systems, Printing, Pre-and post-printing processes; Publishing Terminology; Translation of Selected Parts from the Literature on Printing and Publishing; Use of Related Instructional Computer Software and Films in the Classroom; Technical Report Writing.

#### BYT202 Digital Printing Technology

2+2 4.0

Digital Printing: Definition, Principles, Applications and Advantages; Methods of Digital Printing System; Interior & Exterior Printing: Uses, Points to consider in printing, Raw materials used, Inks and their properties, Post-printing procedures; Digital Printing Quality: Printing problems and their solutions; Relationship between Digital Printing and Offset Printing; Digital Printing System; Workflow and Business Models; Industrial Applications in Digital Printing System: Backing layer, Reel to reel, Short-run, Personalization, Variable data.

# BYT205 Binding and Cardboard Packing Production

2+2 4.0

Binding Technology: Definition and basic concepts, Tools, equipment and machines used in bindery; Processes of Binding: Wire seam, Sting seam, Mechanical seam, Mechanical binding, Glue binding; Cardboard and Cartonnage: Definition, Production, Uses; Types of Packaging Production: Preparations, Design, Construction design and manufacturing; Blades Used in Cardboard Box Making; Cardboard box-cutting machines; Cardboard Box Gluing Techniques; Cost Calculations.

# BYT207 Offset Printing Technology

2+2 4.0

Offset Printing System: Definition of offset, Printing rules, Areas of application; Workflow in Offset Printing System: Preprinting, printing and post-printing processes; Offset Printing Materials and Their Properties; Plates and their properties, Toray waterless printing plates and their properties, Water and damp system, PH, Paper of offset printing, Ink for offset printing, Other materials, Printing solutions; Machines of Offset Printing; Machine Settings: Plate, Blanket and other settings; Quality Criteria for Offset Printing: Slur-Doubling, Dot gain, Trapping, Densitometric measuring; Problems of Offset Printing and Solutions to Problems.

BYT209 Cost Calculation

Cost Calculations in Printing: Expenses, Items causing expense, Establishing cost centres, Selection of cost calculation system, Estimated costs and real costs; Cost Control: Identifying deviations and corrections; Establishing and Operating Standard Cost System in Printing; Establishment and Operation of the Standard Cost System in Printing Companies: Determination of standards; Building a Cost System According to the Type of Printing Companies: Definition, Types and Characteristics, Points to consider in the selection of an appropriate cost system; Calculating Total Cost and Cost Per Unit of Products Printed: Calculation rules for typesetting, paper, printing, ink, binding, plate and film costs; Calculation Exercises.

#### **BYT210** Other Printing Techniques

3+1 4.0

Production Techniques: Definition, Scope, Historical development, Artistic production systems and industrial production systems; Industrial Propagating Systems: Relationship between printing and printing systems; Basic Printing Systems: Definition and principles of letterpress, offset, screen printing and rotogravure printing, Printing materials, Plate preparation methods; Other Printing Techniques: Flexo, Tampon, Digital, Hologram, Barcode; Printing Systems: Definition and principles of letterpress, offset, screen printing and rotogravure printing, Printing materials, Plate preparation methods.

#### BYT211 Computerized Page Design II

2+2 4.0

Layout Software: Control toolbar and tasks, Tolls, Paragraph, Color palettes; Standard Page and Book Sizes: Structure and properties of the columns in layout, Arrangements to be made according to the characteristics of book binding; Standard Magazine Sizes and Arrangements Required by the Characteristics of Magazine Binding; Exercises: Exercises of book, magazine, newspaper layout.

#### BYT213 Total Quality Management in Printing Industry

2+2 4.0

Total Quality Management (TQM): Definition and Scope, Basic principles, Process tools and techniques; Elements of Total Quality Management; Data Collection and Data Analysis: Histograms, Group works, Development process, Brainstorming, Fishbone diagram, Comparison; Quality Assurance System: Quality system documentation; Total Quality Management in Printing Industry.

## BYT214 Information Technology in Printing Industry

2+2 4.0

Stages of Printing: Pre-printing, printing, post-printing processes; New Developments in Printing World: Desktop publishing, Design, Machines of film output and development, Printing machines, System of binding, System of packaging, Materials and accessories of printing; Information Technology in Printing Industry; Selection, Correct use, Efficiency; Change Management in Printing Industry: Definition and scope; Public Relations in Printing Industry; Exercises.

## BYT215 Product Planning and Management in Printing Industry

2+2 4.0

Product Management: Definition and scope, Production systems, Objectives, Functions; Selection of Technology: Aspects of technology, New production technologies; Layout and Material Transfer in Printing Companies: Effect of layout on production systems, Types of workflow, Material transfer factors; Capacity Planning and Business Analysis in Printing Industry: Capacitor measurement criteria, Method development and Work measurement; Production Planning and Quality Control in Printing Industry: Importance of planning, strategy and quality control; Exercises.

# BYT216 Grabhic Design on TV

2+1 4.0

Television Broadcasting in the Context of Media and Communication Systems; Television Program Types: News, Current Programs, Cultural Programs, Educational Programs, Entertainment Programs, Children's Programs, TV series, Commercial Communication and Promotion; Historical Development of Graphic Design on Television; Choosing Holistic Design and Graphic Systems; Intro Design; Classification of Credits: Generic font, Generic Background İmage; Montage; Sports Encounters Graphic Design; Competition Programs Graphic Design; Newsletters Graphic Design; Weather Graphic Design; Education Programs Graphic Design; Project.

### BYT218 Visual Narration

2+1 4.0

What is Narration? What is Visual Narrative? Types of Visual Narration; Basic Components of Visual Narration; Preparation of Visual Narration: Choice of topic, Selection of appropriate message, Creation of scenario, Selection of audio and visual materials, Creation of storyboard; Examples from the World and Turkey.

#### **BYT219** Main Concepts in Media

2+1 4.0

History of Media; History of Internet; History of Social Media; Tools of Social Media; Management of Social Media; Social Media and Data; What is Big Data?; Big Data and Social Media; What is AI?; AI Applications in Communication; AI and Social Media; AI and Big Data in Communication; Artificial Intelligence Technologies and Communication; Artificial Intelligence, Social Media and The Future of Communication.

# BYT220 Artificial Intelligence and Social Media Management

2+1 4.0

History of Media; History of Internet; History of Social Media; Tools of Social Media; Management of Social Media; Issues to be Considered in Management of Social Media: Language used, Neutral sharing, Actuality, Competitor analysis; Social

Media and Data; What is Big Data?; Big Data and Social Media; What is AI?; AI Applications in Communication; AI and Social Media; AI and Big Data in Communication; Artificial Intelligence Technologies and Communication; Artificial Intelligence, Social Media and The Future of Communication.

### BYT221 Types of Newspaper Articles

2+2 4.0

Types of Newspaper Articles: Column, News Article, Anecdote, Article, Essay, Story, Comment, Interview; Characteristics of Newspaper Writing Types; Examples of Newspaper Writing Types: Examination of newspaper writing types on newspaper samples; Editorial Writing, Column Writing: Differences between editorial writing and column; Expression in Writing Types: Stages of Thought Writing; Relations with the Reader; Reaching the Reader with Newspaper Writing Types; Newspaper Types Activity: Reaching information; Collecting information.

#### BYT299 Internship

0+2 5.0

#### EEÜ104 High Voltage Technics

1+1 2.0

Production of Impact; Measurement and Statistical Evaluation of Potential Impact; Partial Vacancies; Paschen's Law; Characteristics of Electrode Systems Based on Alternative Voltage; Characteristics of Electrode Systems; Corona Losses Measurement; Dimensioning of Transmission Lines and High-Voltage Direct Current; Direct Current Surge Arresters and Cutters; Insulation Coordination in Transmission Lines in Direct Voltage.

#### EEÜ106 Traditional Sources of Energy

2+1 2.0

Energy, Renewable Energy and the ImportanWorld and in Turkey, and Potential; The Formation of Properties and Preparation of the Coals; Usage of Coal and Coal Technologies; Oil Production; Petroleum Refinery Processes; Natural Gas Production; Natural Gas Usage.

#### EEÜ108 Renewable Sources of Energy

2+1 3.0

Energy and Energy, Types Fossil Energy Sources, Terms and Units, Renewable Energy Sources, Turkey's Renewable Energy Capacity, Renewable Energy Sources In World, Power Generation from Renewable Energy Sources, Renewable Energy Sources In the World Incentives, Renewable Energy Incentives In Turkey, Hybrid Systems, Cogeneration Plants, Application Examples, Project Examples For Each Energy Source

# EEÜ202 Electricity and Energy Project

2+2 4.0

Selection of the Project; Needs Analysis; Project Design, Planning, Coding, Testing, Implementation; Debugging and Error Detection; Error Correction; Maintenance, Cost, Time and Labour Management; Problem Statement and Resolution.

### EEÜ204 Energy Analysis and Savings

2+0 3.0

Energy Terminology; Energy Management, Measurement and Control; Basic Concepts of Thermodynamics; Thermodynamics and Energy; Industrial Energy Applications; Energy Audits in Industry; Thermal Comfort; Environmental Factors for Thermal Comfort; Human Factors for Thermal Comfort; Energy Savings and Isolation; Heat Transfer Methods; Regulations Related to Isolation; Environmentally-Sensitive Energy-Efficient Building and Installation; Industrial Energy Saving and Environmental Impact; Energy Saving in Home Appliances and Lighting Systems; Energy Storage.

# EEÜ205 Energy and Environment

2+0 2.0

Environment Pollution Caused By Energy Production; Environment Pollution Caused By Energy Consumption; Effect of Isolation Environment; Scientific Reasons of Global Climate Change; Effects of Global Warming on the World; Ecology and Its Importance; Basic Concepts for the Environmental Impact Assessment (EIA); Environmental Impact Assessment (EIA) Act and Its Applications.

# EEÜ210 Contract, Exploration and Planning

2+1 4.0

Organizational Structure of an Electrical Contracting Company; Stages of Project Design; Structure and Components of a Valid Agreement; Factors Affecting Acceptance of the Agreement; Framework of Exploration Procedures; Contract Form; Exploration Summary; Specifications; Authentic and Simulated Electrical Distribution Equipment for Exploration; Framework of Planning Procedures; Determination of Critical Orbit for Electrical Wiring; Explaining the Effect of Delays in Secondary Trajectories on Critical Orbit.

### EEÜ232 Hydrojen Energy and Usage

3+1 3.0

Fossil Fuels and Adverse Effects; Seeking an Alternative to Fossil Fuels and Energy Variables; The Nature of Hydrogen and Features; Hydrogen Production, Storage and Transport Technologies; Hydrogen Conversion and Application Systems; Hydrogen in the Quest Of Energy Requirements and Energy Problems.

# EEÜ234 Solar Energy Systems

3+1 3.0

Solar Energy and Formation; Some Basic Calculations Associated with Solar Energy; Solar Energy Technologies; Heat Treatment Technologies; Brooms With Colector Box Solar Hot Water Systems; Planar Solar Collectors; Collector Energy Balance; Medium and High Temperature Energy Producing Technologies; Turkey is Engaged in a few Words it is in Energy Studies in some Institutions.

#### EEÜ240 Thermal Power Plant

3+1 3.0

Thermal Power Plants; Thermal Power Plants Produce Electricity Running Coal Thermal Power Plants; Working with Fuel Oil Thermal Power Plants; Working With Diesel Fuel Thermal Power Plants; Gas-Powered Thermal Power Plants; The Thermal Power Plants in our Country.

#### EEÜ244 Energy Plant Management

3+1 4.0

The Definition of Energy; Types of Energy; Classification of Energy Facilities; Fuel, oil-gas Production and Distribution Facilities; Hydro-electric Power Plants (HEPP); Gas-Cycle Power Plants, Wind Power Plants; Nuclear Power Plants and Thermal Power Plants; The Design of the Plants and the Equipment Used; EN-VER (Energy Efficiency Act) In Order to Ensure Efficiency In Power Plants Required Procedures Within the Scope of The Law; The Necessary Measures Within the Scope of the Job Security in Power Plants.

#### EEÜ246 (Eng) Technical English

3+1 3.0

Speaking: Introduction himself and others, Subjects interested with working place, Demands in formal place, Offering help, Excuse, Apology, Necessity, Obligation, Quantity, Ratio Percentages, Estimating, Instruction; Listening-Understanding: Understanding in professional subject; Writing: Taking note, Cirriculum vitae, Business letters, Passive structure usage; Reading-Understanding: Conjunctions indicate time, purpose, condition, Expressions in passive structure, Expressions indicate contrariness, Dictionary usage.

### EEÜ248 Fuels and Combustion Technology

3+1 3.0

Introduction; Basic Concepts Related to Fuels and Combustion Technologies, Classification of Natural Fuels; Secondary Fuels; Pulverized Coal, Smokeless Fuel, Coke and Metallurgical Coke Production Process Chemistry and Technology; Liquid and Gas Fuels; Properties, Combustion Processes Chemistry and Technology; Effects of Solid and Liquid Fuels and the Reduction of Negative Environmental Impacts and Improvements. Analysis of Solid, Liquid and Gas Fuels; Combustion Processes Related to Quality Control and Digital Applications.

#### EEÜ2501 Green Energy and Industrial Sustainability

3+1 4.0

Introduction to Sustainability; Global Energy Policies and Environmental Approaches; Global Energy Crisis and Climate Change; Carbon Management and International Regulations I; Carbon Management and International Regulations II; Ecological Impacts of Energy Systems; Ecological Impacts of Sustainable Energy Technologies; Alternative Green Energy Technologies; Alternative Green Energy Technologies; Energy Oriented Industry and Sustainability Practices; Sustainable Energy Policies and Regulations; Sustainable Energy Transformation with Local Industry Practices; Sustainable Energy Future; Homework Presentations and Feedback

# EEÜ2503 Arduino Supported Electrical Energy Applications

2+2 3.0

Introduction and Installation of Arduino; Basic Electronic Components and Use with Arduino; Analogue and Digital Inputs/Outputs; Relays and Control of Electrical Loads; Current and Voltage Measurement; Power and Energy Calculations; Data Visualisation with LCD and OLED Displays; Serial Communication and Data Recording; Remote Energy Monitoring, Bluetooth Application; Automatic Lighting and Timer Systems; Renewable Energy Monitoring Applications; Outage Detection and Alarm Systems with Arduino; Smart System Applications

# EEÜ252 Workshop Applications

1+2 3.0

Electricity Protection; Calculation Of Wire Resistance in Accordance Length and Square Field; Electrical Energy Production From Wind Energy; Electrical Energy Production From Hydrogen Energy; Serial and Parallel Connected Solar Batteries; Storage of Electricity Energy Obtained From Solar Batteries; Remote Distance High Voltage Line Model; Resistances in Identifying And Setting Up A Circuit With Breadboard; Equivalent Resistance; Voltage and Current Measurement; Kirchhoff Laws Applications; Thevenin Theorem Applications; Direct Current RC Circuit; Oscilloscope Usage and DC/AC Voltage Measurement.

#### EEÜ254 Vocational Mathematics with MATLAB

3+1 3.0

Matrix Operations: Four operations on matrices, Determinant, Rank, Power, Complex numbers, Vector creation; Special Matrices: Zeros matrix, Ones matrix, Diagonal matrix, Unit matrix, Random matrix, Triangle matrix; MATLAB Commands; Operations in Polynomial Form; Graphic Drawings; Three Dimensional Graphic Drawings; Solving Sets of Linear Equations: Writing mesh cureent equations, Writing node voltage equations, Using Kramer's method; Solutions with Laplace Transform; Laplace Transforms of Some Functions; Symbolic Solutions of Equations; Solution with Laplace Transform in Electrical Circuits.

# EEÜ256 Digital Signal Processing Fundamentals and MATLAB Applications

Digital Signals; Systems: What is a system, System properties, Systems with memory, Memoriless systems, Linear systems, Time-invariant systems, Causal systems, Stable systems, Reversible systems; MATLAB Commands; Analysis of Signals with MATLAB: Discrete-time impulse signal, Discrete-time unit step signal, Discrete-time unit ramp signal; Sampling Theorem; Introduction to Discrete Fourier Transform.

# EEÜ299 Internship 0+2 5.0

Information about Internship: Purpose, Method, Process, Professional Awareness: Scope of the Profession, ResearchOriented Areas, Practical-Oriented Areas, Occupation and Employability; Occupation and Career Planning; Vocational Training and Specialization: Documentation of Expertise; On-site Practice: Field Trip Technical Trips and Application Studies; Project Design: Determination, Planning, Analysis, Method and Equipment Selection, Application and Conclusion, Reporting and Presentation.

#### **ELE102** Basics of Electricity

2+2 3.0

Formation and Properties of Electricity; Basic Electrical Laws; Direct Current and Alternative Current Sources; Electricity-Work and Electricity-Power Relations; Transformers and Electrical Installation Schemes; Operations and Connections of Electric Motors; Equipments Used in Electrical Installations; Stable Electrical Plants; Energy Sources.

#### **ELE103** Electrical and Electronical Measurements

3+1 5.0

Principles of Measurement and Instruments; Direct Current Measurements: Principles of ampermeter and voltmeter in direct current; Alternative Current Measurements: Principles of ampermeter and voltmeter in alternative current; Power and Work (energy) Measurements: Power measurement in three phases of alternative current circuits, Power measurement in direct current circuits, Power factor, Principles of wattmeter; Measurements of Circuit Components and Parameters; Measurements with Oscilloscope; Industrial Measurements and Transducer; Description and Classify of System; Uprightness, Sensitivity, Symbol.

#### **ELE104** Alternative Current Circuit Analysis

3+1 5.0

Alternative Current and Voltage: Maximum value, Average value, Instantaneous value, Effective value, Phase angle; Circuit Equipments AC Behaviour: Ohmic Resisteance, Condencer, Current, voltage, power over inductance, R-L-C circuits; Power and Energy on AC: Power and energy on ohmic resistance, Power and energy on condenser, Power types on R-L-C circuits; AC Systems with Three Phase.

#### **ELE105** Direct Current Circuit Analysis

3+1 5.0

Resistance; Ohm's Law; Work, Power and Efficiency; Kirchhoff's Laws; Electrical Supplies: Current and voltage supplies; Circuit Solution Methods: Mesh currents, Nodal analysis, Circuit theories; Thevenin, Norton, Superposition Theorems, Condensers; Electro Magnetism and Electro Magnetic Induction; Transient Analysis in Direct Current: Resistance-inductance, Resistance-capacitance time constant.

# **ELE106** Electric Systems (Networks) and Foundations

1+1 3.0

Basics Concepts About Electric System and Foundations: Phase, neutral, mean and conservation conductors, Insulation balks, Electric current and effects, Effects of electric current on human body, Avoid from electric current; Type and Safety of Low Voltages: TN network, TT network, IT network, Conservation insulation; Electric Installation Technology and Applications; Switchs and plugs, Light sources, Poor current units.

#### **ELE207** Electrical Maintenance and Troubleshooting

1+1 3.0

Maintenance: General maintenance, Proactive maintenance, Periodic maintenance; Fault Finding: To use avometer in fault finding; Repairing and Service: Checking of oil in power transformer: Fault finding cause of short circuit and over load on electric networks, To replace of electric machines parts, Checking of diodes, transistors, capacitance.

# ELE209 Electric Generation, Transmission and Distribution

3+1 4.0

Methods of Electric Generation: Electric power stations, Thermic plants, Vapour turbine plants, Gas turbine plants, Nuclear plants, Hydroelectric plants, Renewable energy sources, Cogeneration and ottoproductor; Electric Transmission and Distribution; Cross Section Calculation of Wire; Characteristics of Wire On Air Line.

#### **ELE212 Electricity Installation Plans**

3+1 4.0

Pre-study of Installation Plan: Definition of plan, Selective of materials and applications, Preparing of sketch, Legal procedure, Statutes related project; Preparing Installation Plan: Functional efficiency, Lighting, Energy and distribution of plan, Cost analysis of project, Preparing of project for approval, Finishing of installation plans and presentation; Presentation of Installation Plan.

#### **ELE215** Electromechanical Control Systems

3+1 4.0

Control Input Components: Switches, Buttons, Paco switches, Mechanic limiting switches, Micro switches, Sensors, Thermostats; Control Output Components: Solenoids valves, Contactors, Coils; Protection Coil of Electric Machines; Control of Electric Machines: Speed control and breaking in three phases asynchronous machines; Control of Lift; PLC in Control Systems.

#### **ELE222** Related Electrical Service and Systems

1+1 3.0

Water Systems in Buildings: Hot and cold water systems; Heating Systems in Buildings: Schematic diagrams and specifications for various heating systems; Air Conditioning; Lighting Systems: Typical lighting applications characteristics; Fire Alarms Systems: Smoke detectors, Temperature rise detectors, Flame detectors; Conductor Systems; Stand-by-Supply Systems.

#### **ELE227** Electrical Machines

3+1 4.0

Magnetic Materials and Magnetic Circuits; Electromechanical Energy Conversion Principles; Transformers; Asynchronous Machines Synchronous Machines; Direct Current Machines; Introduction to Power Electronics and Motor Drives.

#### **ELO103** Digital Electronics

3+1 4.0

Digital Concept; Number System; Logic Circuit: Definition of And-Or-Nand etc. logic gates; Simplification of the Logical Expressions; Integrated Circuits: Encoder, Decoder, Seven segment decoder; Flip-Flops: Truth tables of R-S,D, T and J-K type flip flops; Counters: Synchronous, Asynchronous, Up-down counter; Registers and Handlers; Memory Units: Definition of RAM, ROM, PROM, EPROM; Algorithmic State Machines; Invertors.

#### **ELO104** Analog Electronics

3+1 4.0

Semi-conductors and Basic Structures of PN Junction Circuit Equipments; Characteristics of Diodes, Filters, Cutters, Rectifiers, Inverter Circuits; Zener Diodes and Types of Other Diodes; BJT Transistors: Pre-voltage, Operation point, Figures of common connection and Darlington arrangement; JFET-MOSFET Transistors: Their features, Operations, Pre-voltages, Current controlling and types; Operational Amplifiers: Their characteristics, Basic circuits: Addition, Subtraction, Integration and Derivation receiving circuits; Multivibrators and Wave Formers: Their features, Operations and types.

#### **ELO111** Basic Electronic

2+1 3.0

Electrical Current: Definition and comparison of direct and alternating current; Alternans, Period and Frequency; Elements of Electronic Circuit: Characteristics, Types and Uses; Passive Circuit Element: Resistance, Capacitor, Inductor; Active Circuit Elements: Diodes, Transistors; Integrated Circuit: Conductor, Insulator and Semi-conductor; Power Sources.

#### **ELO205** Power Electronics

3+1 5.0

P?N Juncted Power Elements: Types of power diodes, transistors and thyristors; Electrical Characteristics of Thyristos: V?I characteristic of SCR, Gate characteristic of SCR; Triggering Elements: Usage, types and operation of triggering elements; Thyristor Applications: Rectifiers, Invertors, Static keys, Solid state relays; Protection of P?N Juncted Power Elements.

# ELO211 Microprocessors / Microcontrollers

3+1 5.0

General Structure of Micro Computer System: Central process unit, RAM and ROM memory characteristic, Input/Output interfaces and peripheral, Micro computer system tools; Comparison of Microprocessors and Microcontroller; Installation of Microprocessors and Microcontroller System; Introduction to Programming: Assembly language structure, Instructions, Flow diagrams; Programming: Data transfer, Loop consumption, Sub programme concepts.

#### **ENO210** Microcontroller Based Control

3+1 4.0

Basic Terms related to Input-Output Processes: "Sink current", "Source current" concept, Parallel data transfer process; Programming to Input-Output Device; Interrupt: Definition of interrupt vector, Interrupt sub-programs; Counters-Timers: Counter-Timer units and principles of working, Step motor control with microcontroller, DC motor control with microcontroller; ADC-DAC Applications.

# EST101 Aesthetics and Design

2+1 3.0

Concept of Aesthetics: Beauty, Beauty in Nature and Art; the Concept of Aesthetics in Daily Use; Visual Aesthetics and Perception; Visual Expression Methods and Basic Design Principles; Design and Composition: Space-occupancy, Equilibrium, Contrast, Movement and measurement ratio in composition; Design and Color: Definition of color, Color systems, Use of color; Color-Form-Space Relations; Aesthetics and Design Relation: Analysis of design works.

#### EST106 Aesthetics

2+1 2.0

Aesthetics: What is Aesthetics? Description of Aesthetics; What is Aesthetic Subject and Object?; Aesthetic Value Analysis: Good and beautiful, Truth and beautiful, Useful and beautiful, Conceptual and substantive determination of beauty in Plato, Mimesis of Aristo; The 17th and 18th Century Thinkers and their Aesthetic Views; Contemporary Art and Aesthetic View.

#### ESTÜ1001 Story Analysis On World Literature

3+0 3.0

Introduction and Description of the Story: General features; Historical Development of the Story Genre: Classical story understanding and Maupassant style, Chekhov style; Basic Elements of Story Analysis: Person, Time, Place, Theme, Language and Style, Structural Analysis of the Story; Maupassant Style Story Analysis: Plot and classical narrative understanding; Chekhov Style Story Analysis: Mood, character-oriented narration and modern story understanding; Existential Story Studies: Existentialism and the individual's search for meaning; Story in Turkish Literature: Depiction of people, nature and daily life, Postmodern understanding of story, irony and narrator characteristics, Minimalist narration and distribution; General Discussion and Comparison of Stories.

#### ESTÜ1003 Yoga and Meditation

1+1 2.0

Definition Yoga and Meditation; Yoga and Meditation Benefits; Basic Purposes of Yoga: Breath, Body awareness, Balance; Basic Principles of Meditation; Basic Yoga and Meditation Exercises, Yoga Poses.

#### ESTÜ101 Introduction to University Life

0+1 2.0

Orientation: Concept of university and understanding of university, General information about Eskisehir, Education and student discipline regulations, Ethics at the university, National and international exchange programs, General services of university, Faculty/department orientations; Self-improvement seminars: Research projects, Entrepreneurship, Respect to diversity, Social gender, Leisure philosophy, Zero waste and sustainability, Career planning and mind mapping, Scientific thinking and observation, Barrier - free living, Carbon footprint, Start-up practices, Project based internship.

#### ESTÜ103 Ceramic Design Processes

2+1 3.0

Ceramic Design: Definition, Uses, Functions; Principles of Ceramic Design: Line, Color, Texture, Form, Scale, Direction; Analyzing of Design Methods Related to Ceramic; Prepare a Draft Study on the Subject; Prepare a Project With Designs; Determination and Preparation of Ceramic Sludge Types Used in Forming; Defined Production Methods and Knowledge Series Production Methods; Drying; Bisque Firing; Glazing and Glazed Firing.

#### ESTÜ104 Academic and Life Skills

2+1 3.0

Self-Awareness: Development of self, Early adulthood and self-concept; Values and Goals: Goal setting, Concreate goals and priorities. Considering resources; Effective time Management: Management and planning Definition of Stress; Psychological and Physiological Aspects of Stress; Emotions, Cognitive processes; Coping with Stress. Definition of Stress; Psychological and Physiological Aspects of Stress; Emotions, Cognitive processes; Coping with Stress.

# ESTÜ106 Proje Yönetimi

2+1 3.0

Project Management Fundamentals: Definition of project; Human Resources and Communication Management; Quality Management in Projects; Procurement Planning in Projects; Stakeholders Management; Gantt Chart; Causality Relationship Between Activities; SWOT Analysis; Planning of Risk Management in Projects; Project Compression Analysis and Cost Management; Project Resources and Resource Scheduling; Project Monitoring with Earned Value Management; Control and Progress in Line with the Objective of the Projects; R&D Sample Projects; Project Practices.

#### ESTÜ111 Volunteering Works

1+2 4.0

Management and Organization Concepts; The Concept of Volunteering and Volunteer Management; Fundamental Volunteering Areas (Disaster and Emergency, Environment, Education and Culture, Sports, Health and Social Services etc.); Project Development Related to Volunteer Work and Participation in Volunteer Work in the Field; Ethics, Moral, Religious, Traditional Values and Principles in Volunteer Work; Participation in Voluntary Work in Public Institutions, Local Governments and Non Government Organizations (NGOs); Risk Groups in Society and Volunteering; Immigrants and Volunteering.

# ESTÜ112 Cyber Security for Everyone

2+0 2.0

Basic Concepts: Computer components and definitions; Software: System software, Application software; Computer Networks: Concept of Network and Internet; Malware and Network Attacks: Viruses, Attacks; Computer and Access Security: Password selection, File sharing, Backup; Internet security: SSL, Fake websites; Security on Social Platforms: Fake news and people; Security Analysis: System analysis, Network traffic analysis; System and Network Security: Network security, System security, Mobile device security; Information Security Management System: ISO 27001; Personal Data Protection Law: PDLP procedures; Information Technology Law: Information crimes and punishments.

#### ESTÜ113 Design Thinking

3+0 3.0

Design Thinking Concepts: Design thinking, Human-centered design, User research, Problem identification, Problem definition, Empathy, Idea development, Creativity, Idea elimination and selection, Low-precision prototyping, High-precision prototyping, User tests, Usage tests, Usability, Revision and iteration, Visual thinking, User-centered design, Design processes and innovation, applications, Presentation techniques.

3+0 3.0

Visual Thinking Concepts: Concepts of abstract and concrete, Point, Line, Surface, Volume, Composition, Repetition, Rhythm, Hierarchy, Harmony, Contrast, Measuring and scale; Presentation Techniques: Sketch, Color, Tone, Order; Visual Perception and Gestalt Theory: Figure-ground relationship, Proximity principle, Similarity principle, Completion principle, Continuity principle, Simplicity principle, Depth perception, Psychological effect; Visual Communication: Image reading, Image interpretation, Pictogram, Ideogram, Logotype.

# ESTÜ115 Photographic Viewpoint

2+1 3.0

Course Introduction: Project work; Research and Discussion of the Project Subject: Evaluation of research results, Successful examples from photography and graphic art, Examination of examples of selected works, Determination of application subjects, Discussion of application possibilities, Basic design elements and principles in photography and graphic design process, Trial shooting and evaluation; Light and Lighting: Color and functions of color; Photography Techniques: Visual editing, Reading photographs; Methods and Techniques in Applied Photography: Technical evaluation of photographs and development stages of the photographs; Basic Rules of Composition in Photography: Perspective, Balance, Proportion, Texture, Shape, Perspective, Lens selection and application; Shooting Process and Graphic Interventions on Photographs; Photographic View Methods: Evaluation of shooting results; Preparation of Portfolio: Portfolio evaluation, Presentation methods and techniques, Exhibition preparation methods.

#### ESTÜ116 Computer Aided Design I

3+0 3.0

Concepts of Computer Aided Design: Introducing to fusion360, Introducing interface, Surface modeling, Solid modeling; Basic Commands: Sketching, Editing, Constraints, Timeline, Parameter modification, Technical drawing; Construction Commands: Create, Inspect, Insert; Surface Modeling Tools: Creating and editing surfaces; Assembly: Adjusting, Arranging, Joint, Additional options; Freeform Modeling: T-Splines, Surface creation, Surface editing, Symmetry and tools; Visualization: Assigning material, Scene settings, Rendering methods; Various Applications.

### ESTÜ117 Computer Aided Design II

3+0 3.0

Concepts of Computer Aided Design: Surface and solid modeling, Differences between surface and solid modeling, Surface creation, Arrangement; Sheet Metal Processing: Sheet metal processing creation and editing; Advanced Modeling Tools: Product part modeling; Introduction to Simulation: FEA simulation, Analyzing and interpreting simulation results; Generative Design: Generative design concept, Generative design tools, Simulating and evaluating generative design results; Manufacturing Tools: 3D printing, Introduction to CAM, Introduction to electronics.

#### ESTÜ118 Visual Thinking with Concepts

3+0 3.0

Visual Thinking with Concepts: Perception as ability to know, Change of senses; Seeing and time, Seeing depth, Understanding shapes; Visual Perception: Abstraction; Static and dynamic concepts of abstraction, Context, Comparison of perception, Similarities; Image and thought: Mental images; Particular and spiritual images, Abstraction of the image, Perceived quantities, Geometry and meaning; Writing and speech: Words as images, Intuition and cognition, Perception of words, Verbal concepts and pictorial concepts; Vision in Education: Images and art, Looking and understanding, Visual education tools.

ESTÜ119 Flute 3+1 3.0

Breath Work: Breathing exercises the diaphragm and correctly use various activation studies; Technical Studies: Stance, Grip, Position, Fingering and embouchure work; Learning the Notes on the Flute: Learning the notes on the flute with octaves, The octave positions of the lip according to the study, A long blowing sound with learned notes; Technical Development; Proper Studies to be Determined by instructor According to Student's Performance on the Scales: With learned notes, Sharp, Flat, Major and Minor, According to the ranking exercises scales; Flute Repertoire in the Context of Period, Style and interpretation: Selected works according to student performance from periods in music history.

# ESTÜ120 Solfege 3+1 3.0

Octave of the Tone to be Specified According to The Groups; The Signs Used in Writing Music; Signs Spelling Rules; Staff and Additional Lines; Arrays and Intervals; Major and Minor Scales, İnterests, and Varieties: Natural, Harmonic, Melodic; Measure and Time; The Terms of the Transaction; Marks of Dynamics; The Expression of Terms; According to Student Level and Profile to be Created Reading Pieces by the Teacher; Reading with Piano Accompaniment; Rhythmic Perception and Rhythmic Reading, and Only Two Voice Dictation Skills; to be Able to Read on Different Keys, to be Able to Read Complex Rhythmic Pieces with Piano Accompaniment Two, Three, Four-Voices Dictation Skills; Ability to Read Ceremonial Solfege, Atonal Solfege.

ESTÜ121 Piano 3+1 3.0

Starting Position on the Piano: By taking into consideration to correct position of hands, Arms, Fingers, And feet; Technical Development Exercises: Etudes, Scales, Chords and arpeggios studies; Techniques of Touching Piano Keyboard, Staccato, Legato, Non Legato; Information About Dynamics; Working with Learning Notes and Octaves: One hand and double hand

into small pieces-small parts; Style and in the Context of Your Comment Piano Repertoire: Baroque, Classical, Romantic, And modern Turkish composers will be given according to the performance of student works.

ESTÜ122 Guitar 3+1 3.0

Theoretical studies: Writings symbols used in music; Basic information About Solfege; The Structural Characteristics of the Guitar; Guitar History; Introduction to Guitar: Learning the notes on guitar; Learning the Names of the Right Hand and The Left Hand; Technical Exercises on the Guitar; Scales; Arpeggios; Slurs; Barres; Repertoire: Proper studies to be determined by instructor according to student's performance on the scales; To Recognition of the Different Disciplines During The Phase of Prima Vista; To Make Conscious About Playing Together; Improving to Stage Performance.

ESTÜ123 Gender Equality in Work Life

2+0 3.0

#### ESTÜ125 Philosophy of Science

**3**+**0 3.0** 

The Emergence of Philosophy; Socrates and Post-Socratic Greek World; Epistemology: Types of knowledge, Knowledge criteria, The relationship between truth and reality; What is science?; Scientific method and process (1): Description, Explanation; Scientific method and process (2): Scientific law and theory; Scientific Objectivity and Historicity; Science and Logic: Deduction, Induction and Analogy; Validity Problems of Scientific Statements: Verifiability, Falsifiability, Possibility, Necessity; Science, Nature and Society: Faith, Ideology, Scientific attitude, Paradigm, Distinction of the scientific from the unscientific.

ESTÜ127 D	Diction		1+2	3.0
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# ESTÜ129 Turkish as a Foreign Language I 2+0 2.0

# ESTÜ130 Turkish as a Foreign Language II 2+0 2.0

# ESTÜ131 Argentine Tango Dance

0+2 2.0

Introduction to the Course; General Information About Argentine Tango: History of Argentine Tango, Argentine Tango styles, Argentine Tango music; Fundamentals of Tango Salone Dance; Walking Exercises: Training-Dance grip, Individual-couple walking, Steady-paced straight walking with music, Stopping, Changing steps; Walking Exercises: Forward, Backward, Right, Left, Face to face-cross, Straight-circular, Rock steps; Walking Exercises: Improvised walking with music in various rhythms and tempos; Basic Combinations; Forward Ocho; Back Ocho; Parada; Sandwich; Ocho Cortado; Media Luna; Tango Events: Milonga culture; Improvisational application of all learned figures.

#### ESTÜ2001 AI Literacy

2+0 2.0

The general aim of this course is to provide undergraduate students from various disciplines with AI literacy. It enables students to understand the fundamental concepts of AI, recognize its applications in daily life and various sectors, use common AI tools effectively and responsibly, and critically evaluate the ethical and societal implications of AI technologies. The course aims to empower students to become informed citizens and adaptable professionals in an increasingly AI-driven world.

ESTÜ201	Turkish Sign Language	3+0	3.0
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#### ESTÜ203 Introduction to Sociology 3+0 3.0

## ESTÜ210 Culture of Museum

2+0 2.0

Definition of Museum, its origin and Types of Museums, the story of Archaeological Excavations in Turkey, Ottoman Museology and Antiquities Laws; The Establishment of Museology in Turkey and the works of Osman Hamdi Bey; The importance of Archaeological Museums in Turkey; Ruins (Open-Air Museums) in Turkey; Turkish and Islamic Arts Museums in Turkey, Methods of preserving and exhibiting works in museums; Ethnography Museums, methods of preservation of artifacts; Painting and Sculpture Museums, methods of preserving and exhibiting works; Museums of Urban History; Modern Museums; General evaluation of the course

ESTÜ301 Science Communication

## ESTÜ307 Children Rights and Family Education

2+0 2.0

2+0 3.0

Children, Rights and Legal Arrangements Related to Children, Children's Rights and Laws for the Protection of Rights, Children's Rights Convention, Children in Need of Protection, Child Family Relationship I, Child Family Relationship II, Child Neglect and Abuse, Child and Crime Relationship, Family Education and Principles, Family Education and Family Communication, Family Problems and Services for Children, Turkish Family Structure and Family Services.

# ESTÜ401 Introduction to Professional Life

1+1 2.0

Information about PL, What is needed for PL?, Sector Meetings, 21. Century Competencies: Improving self-awareness, Basic communication skills, Problem solving, Decision making and leadership, Teamwork; Effective Interview Techniques and Interview Simulation; Career Planning; Resume Preparation Techniques, Networking: Social networks for professional life; Project Management; Job Search Strategies.

#### ESTÜ402 Coaching and Leadership

3+0 3.0

Definition of Coaching; The Difference of The Coaching Profession from Other Specializations Is the Basic Coaching Session; Characteristics Of Coach; Harmony In Coaching Relationship; Different Learning And Experience Styles, Coaching And Leadership-Based Communication; Listening Deeply, Asking Strong Questions, Giving Feedback. Coaching Levels; Goal, Motivation and Action Steps, Goal Setting Coaching Tool; Circle of Life, Values Assessment Coaching Tool; Determination of Core Values, Leadership; Vision and Mission Work, Holistic Leadership; Life Purpose Study, Leadership Styles; Teacher, Visionary, Warrior, Wise, Nourishing.

#### ESTÜ403 Basic Computer Utilization

3+0 4.0

#### ESTÜ405 Computer Programming

3+0 5.0

Modern Computers: Data storage, Binary system, Computer architecture, Arithmetic and logical unit; Algorithm Concept:, Algorithm design, Flow charts; Python Basics: Python versions, Integrated development environments, First program; Basic Data Types: Numerical and logical data types, Dictionaries, Sets, Lists; Variables and Operators: Variables, Operators; Control Statements: Sequential Statements, Decision Control Statements, Repetitive Statements; Functions: Creating and calling functions, Arguments, Recursive functions; Object-Oriented Approach: Classes, Objects, Methods; File Operations: Opening file, Reading file, File methods; Graphical User Interfaces.

#### ETK211 Professional Ethics

2+0 3.0

Concepts of Ethics and Morality: Definition, Characteristics, Distinction; Types of Ethics; Principles, Rules and Codes; Concept of Professional Values; Relationship Between Ethics and Professional Value; Need for Ethics; Principles and Rules of Professional Ethics; National and International Regulations of Ethics.

#### FiZ1051 General Physics

2+1 4.0

Unit Systems; Measurement Methods and Sources of Error; Vectors; Newton's Laws of Motion; Work, Power, and Energy (Kinetic, Potential, and Mechanical Energy Concepts); Conservation of Energy; Heat, Temperature, and Thermal Expansion; Laws of Thermodynamics; Fluid Physics; Electric Current, Resistance, and Ohm's Law; Electrical Energy and Power; Direct Current Circuits in Series and Parallel; Direct Current Sources, Batteries, and Accumulators; Combination of Capacitors and Energy Stored in Capacitors; Magnetic Fields; Alternating Current and Transformers.

#### FOT107 Photography

2+1 3.0

Components of Cameras; Techniques of Photography: Exposure, Equivalence laws, Exposure adjustments; Adjustments of Technical Equipment: White balance, Virtual adjustments; Compositions: Subject, Movement, Rhythm, Texture, Perspective, Light; Assistant Equipment; Tripod, Filters, Light; Ranges of Photography; Portrait, Nature, Architectural; Technological Developments: Digital photography.

### GRA211 Web Design

1+1 3.0

Basic Internet Terms: Server- client logic, TCP-IP Protocole, WEB based services; Introduction To Web Design: Softwares required for design and installation, FTP software; HTML: All HTML commands used in HTML; Script Using: The commands belong to script languages supporting design and flexibility while preparing web pages; Design and Planning: The design criteria needed to prepare visual and productive web pages.

GTS110 Introduction Graphic Design

2+1 3.0

Basic Concepts and Theories of Visual Communication; Basic Principles of Graphic Design; Development of Problem Solving Techniques: Problem statement, Research, Organization of information; Using Various Materials and Techniques in Graphic Image; Visual Analysis.

GTS111 Pattern 2+1 3.5

Pattern: Definition, Types, Tools and equipment used in patterns; Drawings of Figures and Objects, Line Values; Proportions, Balance, Movement, Composition; Introduction to Different Materials and Techniques; Exercises for the Use of the Language of Graphic Expression in Graphic Design.

GTS112 Illustration 2+1 3.0

Illustration: Definition, Content, History and Areas of use; Illustration Types and Techniques; Main Materials Used in Illustration; Identification and Analysis of Works Produced by Illustrators; Production and Evaluation of Illustration Works.

### GTS201 Visual Communication Design

2+2 5.0

Historical development of visual communication; Non-verbal communication; Perception and explanation in visual communication; Functions and necessity of visual communication; Marks and symbols in visual communication: analyses of symbols; Components of graphic design: Typography, Photo, Colour, Contrast relations; Visual analysis in advertisements: Creativity and correct and effective usage of visual elements.

# **GTS205** Printing Techniques

3+0 4.0

Basic Printing Techniques, offset printing, Press Letters, Gravure Printing, Printing Process: Prepress, Post press; Printing Considerations, Advertising and Publication Relations, Printing Technique Selection, Paper selection, Ink selection, Encountered In print Problems and Solutions.

#### GTS208 Technical English

3+0 3.0

Frequently used words and terms in the field of advertising; Recognition and Use, Turkish Provisions; Translation of Selected Texts from Advertising Field Literature; Technical Report Writing.

#### GTS211 Graphic Applications

2+1 3.0

Graphics Product Design Process: Operation steps, Relationship between graphics and printing; Graphic Production: Drawing-image processing and Page layout, Basic principles of graphic design; Graphic Production Techniques.

#### GTS212 Desktop Publishing

2+2 3.0

Desktop Publishing; Definition, Importance, Development, Drawing Image Processing and Page Layout programs, Data Transfer Methods and Image Formats Among Desktop Publishing Programs, Graphic Design Fundamentals and Principles; Page Design Studies; Brochure and Poster Design as Research Projects in Practice.

# GTS213 Portfolio Design

3+0 4.0

Personal Presentation: Preliminary preparation for presentation, Researching and Deciding on how to Present the Portfolio; Identifying the Target Group:Deciding on the private sector or personal aims; Presentation Techniques: Digital portfolio, Portfolio of printed works, Presentation plan.

# GTS217 Computer Aided Graphic Design I

2+1 3.0

Design and Typesetting: Definition, Scope: Application Programs: Adobe Illustrator, Design, Photoshop, Macromedia Freehand, Corel-Draw; Image Formats in Digital Environment: EPS, TIFF, JPEG; Color Models: RGB, CMYK; Selection of Appropriate Color Modes; Exercises: Press release, Packaging, Posters, Magazine.

# GTS218 Computer Aided Graphic Design II

2+1 3.0

Graphic Design Techniques; Design Elements; Vector-Based Drawing and Image Processing Computer Programs in Computer-Aided Design; Contemporary Graphic Designs; Studies in Visual Communication.

# GTS219 Original Printmaking I

2+1 3.0

Printmaking: Definition, Content, Techniques, History; Terminology of Original Printmaking; Types of Printmaking; Materials and Methods Used in Printmaking; Pit and High-Print Practices: Determining an original in view of the printing method, Preparation of the original, Mold preparation, Production and evaluation of works.

#### GTS220 Original Printmaking II

2+2 3.0

Original Printmaking: Content and Types; Linoleum and Wood Printing Techniques: Materials used, Mold preparation methods, Properties of materials, Properties of inks, Image transfer; Varieties Template Printing Technique in Printmaking: Materials used, Mold preparation methods, Properties of materials under printing, Properties of inks, Image transfer; Exercises.

#### GTS221 Packing Design I

2+1 3.0

Packaging Technology: Definition, Content, Properties, Areas of use; Packaging and Graphic Design; Points to Consider in Graphic Design by Type of Packaging; Producing Graphic Design of Product Packages Used for Different Purposes: Food, Clothing, Electronic goods, Retail consumer goods, etc.

# GTS222 Packing Design II

2+1 3.0

Relationship of Forms, Materials and Visual Communication in Packaging Design Process; Project Design in View of Brand Identity of a Product and Product Range Criteria: Analysis of successful examples on the market.

#### GTS223 Plastic Arts

2+1 4.0

Interdisciplinary Art: Art theories and interdisciplinary art studies; Interdisciplinary Art Studies: Concept, Methodological and technical relationships, Similarities and differences; Art Theory in Interdisciplinary Arts: Suggestions, Discussions; Exploration of Artistic Materials: Visual, Audial, Plastic art materials; Examination of Interdisciplinary Works of Art.

### GTS225 Critical Thinking and Creavity

3+0 4.0

Critical Thinking, Creation and Application: Problem analysis, Alternative thinking in problem analysis, Conceptual thinking and offering solutions, Conversion of an idea into object and installation; Experimental Production: Use of different techniques and materials, Investigation of appropriate techniques in visualizing the problem, Interdisciplinary applications.

#### GTS226 Visual Communication and Advertising

2+1 3.0

Use of Principles of Visual Aesthetics and Perception to Improve Advertising Strategies; Graphic Works in Advertising Campaigns; Advertising Campaigns: Definition, Surreptitious advertising, Newspaper, Radio and television, Difference of outdoor campaigns; Analysis of Advertising Campaigns.

#### GTS232 Illustrator Graphic Applications

3+1 3.0

What is Vectorial Graphics: Introduction to Adobe Illustrator and itsInterface; Using the Menu: Control panel, Tools panel; Using Panels: Using workspace; Working with Documents: Creating a new document, Working with template documents; Artboard Tool: Tool-1, Tool-2, Artboard panel, Navigation; Guides and Grids: Smart guides, Guides, Grids; Selection Tools: Direct selection tool, Group selection tool, Magic wand tool, Lasso tool.

#### GTS236 3D Design

2+2 4.0

Concept of 3d Design; Designing in the Context of Functionality and Aesthetics; Modelling Practice with Dimensional Circles, Squares and Triangular Shapes; Introduction of Plan, Section and View, and their Application to Geometric Forms; Formation of Cubes, Cylinders, Cones and Prisms, and Search for Layout in the Living Space; Sketching Drafts, Transfering Sketches into 3d Spatial Forms.

# GTS238 Design Culture

3+0 4.0

Art and Concepts related to art: Art, Artist, Spectator, Art Work; Art: Definition of art, Classification, Looking at art in historical process, Examining theory and concepts related to art; Artist: Artist's place in and relationship with society; Art Work: Necessary qualifications for a product to be an artwork, The items composing the artwork.

#### GTS240 Advanced Illustrator Graphic Applications

2+1 4.0

Layers; Transformational Operations: Align pane, Rotation tool, Scaling tool, Mirror tool; Object Usage Tools: Outline, Appearance, Masquerade; Basic Drawing Tools: Line, Arc, Spiral, Rectangular / Polar grid; Text Creation and Editing Tools: Character panels, Paragraph panels; Working with Colors: Gradian panel, Transparent panel; Project Work.

# GTS299 Internship

0+2 5.0

#### **HED1001** Hydrogen Production Methods

3+1 5.0

Energy; Hydrogen as an Energy Carrier; Properties, Advantages, and Disadvantages of Hydrogen; Hydrogen Production Resources; Renewable and Non-Renewable Resources; Hydrogen Production Methods; Reforming, Gasification, Pyrolysis, Electrolysis, Hydrolysis; Hydrogen Production Systems.

#### **HED1003** Hydrogen Technologies

2+1 4.0

The Importance of Hydrogen and Its Role in the World; Structural Properties of Hydrogen; Hydrogen Production Methods; Hydrogen Separation and Purification Methods; Hydrogen Storage Methods; Hydrogen Transportation Methods; The Use of Hydrogen in Fuel Cells; Hydrogen Standards and Sensors; Hydrogen Safety.

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### **HED1006** Electrochemistry and Its Applications

3+1 5.0

Electrochemical Terms and Concepts; Ionic Conductivity; Electrolytic Equilibria; Electrochemical Cells; Fuel Cells; Electrolysis; Corrosion; Corrosion Prevention Methods; Electrochemical Production Processes.

#### **HED2001** Energy Storage and Transportation Processes

2+1 4.0

Energy Storage; General Thermodynamics; Mechanical Energy Storage; Thermal Energy Storage; Thermomechanical Energy Storage; Electrochemical Energy Storage; Secondary Batteries; Hydrogen for Energy Storage; Supercapacitors for Energy Storage and Conversion.

HED2002 Fuel Cells 3+1 5.0

Introduction to Fuel Cells; Efficiency and Open-Circuit Voltage in Fuel Cells; Voltage Losses in Fuel Cells; Polymer Electrolyte Membrane Fuel Cells; Methanol Fuel Cells; Alkaline Fuel Cells; Phosphoric Acid Fuel Cells; Molten Carbonate Fuel Cells; Solid Oxide Fuel Cells.

#### **HED2005** Measurement and Control in Processes

2+1 4.0

Introduction to Process Control; Pressure Measurement; Level Measurement; Density Measurement; Flow Measurement; Temperature Measurement; Humidity Measurement; Viscosity Measurement; pH Measurement; Other Sensors; Actuators and Control; Process Control Methods.

#### **HED2008** Industrial Equipment

2+1 4.0

Classification of Processes and Process Flow Diagram; Pressure Control in Processes; Pressure Gauges; Temperature Control in Processes; Thermometers; Pressurized Tanks; Valves; Pumps; Turbines; Fans and Nozzles; Heat Exchangers; Reactors.

#### iLT105 General and Technical Communication

2+0 2.0

Definition and Type of Communication: Communication and it's basic concepts, Types of communication; Oral Communication: Techniques, Principles and necessity of oral communication, It's effects on daily life; Written Communication; examples of written language, The kinds of written text used for institutional communication at business Life; Applying Communication Techniques at Business Life; Graphics Communication; Purpose of using Graphic and Schemes Communication; Communication via Technological Devices; Convenience provided by Technologic Equipments.

## iME201 Vocational Training in Workplace I

5+10 15.0

Knowing the Workplaces: Organizational structure, Hierarchical position of the student, Work discipline and rules; Safety: Occupational health and safety, Working rules, Protective equipment; Production process: Observation and simple application of the production process, use of theoretical knowledge; Professional communication: The ability to communicate with personnel in horizontal and vertical positions in the workplace.

### iME202 Vocational Training in Workplace II

5+10 15.0

Workplaces Working Rules and Conditions: Occupational health and safety, Knowledge and use of protective equipment; Production System and Method: Monitoring the production process and being involved in the production process under the supervision of the management training officer; Use of Appropriate Equipment and Materials; Problem Solving; Professional communication: Written and verbal professional communication skills; Profession and Technology: Following, analyzing and evaluating technological developments in the field.

#### iNG187 English I

**3+0 3.0** 

Using Personal Pronouns and Possessive Adjectives; Using to be in Present Tense; Using Singular and Plural Nouns; Using Basic Language Related to Food and Drink; Using "There is-there are" in sentences; Using "have got"; Asking "yes-no" Questions and Giving Short Answers to Them; Talking about Daily and Weekly Routines; Talking about Likes and Dislikes; Talking about Sports and Hobbies; Talking about Abilities by Using "can", "can't"; Using Adjectives that Describe People; Talking about Appearance, Personality and Feelings of People; Talking about Clothes and Colours; Talking about Shopping and Prices; Using Present Continuous Tense.

#### iNG187 (Eng) English I

3+0 3.0

Using Personal Pronouns and Possessive Adjectives; Using to be in Present Tense; Using Singular and Plural Nouns; Using Basic Language Related to Food and Drink; Using "There is-there are" in sentences; Using "have got"; Asking "yes-no" Questions and Giving Short Answers to Them; Talking about Daily and Weekly Routines; Talking about Likes and Dislikes; Talking about Sports and Hobbies; Talking about Abilities by Using "can", "can't"; Using Adjectives that Describe People; Talking about Appearance, Personality and Feelings of People; Talking about Clothes and Colours; Talking about Shopping and Prices; Using Present Continuous Tense.

iNG188 English II 3+0 3.0

Using Simple Present Tense; Comparing Simple Present and Present Continuous Tenses; Using Prepositions of Time and Place; Giving Directions, Making Reservations; Using "to be" in Past Tense; Using Regular and Irregular Verbs in Simple Past Tense; Using Comparative and Superlative Form of Adjectives; Using Modals to Give Advice; Suggestions and Obligations; Using Future Tense: Making Sentences Using "going to" and "will"; Using If Clauses Type 0 and 1.

# iNG188 (Eng) English II

3+0 3.0

Using Simple Present Tense; Comparing Simple Present and Present Continuous Tenses; Using Prepositions of Time and Place; Giving Directions, Making Reservations; Using "to be" in Past Tense; Using Regular and Irregular Verbs in Simple Past Tense; Using Comparative and Superlative Form of Adjectives; Using Modals to Give Advice; Suggestions and Obligations; Using Future Tense: Making Sentences Using "going to" and "will"; Using If Clauses Type 0 and 1.

#### iN\$229 Reinforced Concrete Design

2+2 4.0

Preloading; Vertical Drains; Deep Compaction of Cohesion less Soils: Vibro floatation, Vibratory probes, Compaction piles, and Dynamic compaction, Blasting; Grouting: Permeating grouting, Compaction grouting; Chemical grouting; Soil Reinforcement: Soil nailing, Micro piles, Reinforced earth, Stone columns, Lime columns, Geotextiles, Freezing, Electro-osmosis.

#### **iNS230** Soil Improvement Methods

3+0 4.0

Preloading; Vertical Drains; Deep Compaction of Cohesion less Soils: Vibro floatation, Vibratory probes, Compaction piles, and Dynamic compaction, Blasting; Grouting: Permeating grouting, Compaction grouting; Chemical grouting; Soil Reinforcement: Soil nailing, Micro piles, Reinforced earth, Stone columns, Lime columns, Geotextiles, Freezing, Electro-osmosis.

## iN\$232 Analyses of Concrete

3+0 4.0

Introduction; Quality Control of Concrete Structures: Types of tests applied on concrete; Strength of concrete, Standard testing, Preparation of test samples; Semi-destructive tests; Pull-out tests, Pull-off tests; Non-destructive tests; Rebound hammer test; Ultrasonic pulse velocity test; Radar imaging of concrete, X-ray diffraction on concrete materials; Porosity by mercury intrusion porosimetry; Differential scanning calorimeter tests on concrete; Maturity of concrete; Estimation of concrete strength by combined methods; Project presentations.

#### iN\$235 Methods of Concrete Technology

2+2 3.0

Ordinary Concrete Technology: New developing concrete materials; Additive materials; Quality assurance and quality control; Special production technologies; Concrete pouring in extreme weather conditions (Hot and Cold Weather); Ready mixed concrete; Pump concrete; Shot create; Injection mortar; Vacuum concrete; Concrete under water; Heat treatment application in prefabrication; Massive concrete and Roller compacted concrete; Light weight concrete; Highway and airport concrete.

# iSG401 Occupational Health and Safety I

2+0 2.0

Overview of Occupational Health and Safety: Scope, Importance, Related concepts; Workplace Accidents and Occupational Diseases: Reasons, Precautions, Costs; Occupational Health and Safety: Responsible institutions, Problems in applications, Legal basis for occupational safety, Legislation, Regulations for employers; Legal Responsibility of Employers for Workplace Accidents and Occupational Diseases: Liability concept, Regulations for employer responsibility.

#### i\$L421 Entrepreneurship

2+0 3.0

Importance and Evolution of Entrepreneurship: Entrepreneurship within the framework of Manager, Concepts of Entrepreneur, Employer, Boss and Investor; Leadership in Entrepreneurship and Importance of Management Characteristics; Characteristics of Entrepreneurship; Changing Views of Entrepreneurship; General Evaluation of Entrepreneurship in Turkey: Change and Entrepreneurship; Entrepreneurship before and after the Republic; Female Entrepreneurs.

## **KGS104** Quality Assurance and Standards

2+0 2.0

Standardization: Definition, Aims and principles, TSE (Turkish Standards Institute) and its mission, Regional and internal standardization associations; Quality and Quality Concept: Quality definition and concept, Quality approach, Quality costs and risks, Concept of quality control; Quality Assurance: Quality management principles, TS-EN-ISO 9000, TS-EN-ISO 9001; TS-EN, ISO 9004, ISO 9004, ISO 19011 standards and explanations; Vocational Standards: Understanding vocational standards.

### KiM1053 General Chemistry

2+1 4.0

Matter and Measurement, Atoms, Molecules, and Ions, Chemical Reactions and Reaction Stoichiometry, Reactions in Aqueous Solutions, Electronic Structure of Atoms, Periodic Properties of the Elements, Chemical Bonding, Gases, Liquids, Intermolecular Forces, and Solids, Properties of Solutions, Chemical Kinetics, Chemical Equilibrium and Acid-Base Equilibria, Thermochemistry and Chemical Thermodynamics, and Electrochemistry.

#### KLP220 Mold Design

2+1 4.0

Importance, Features and Selection of Mold Presses in Machine Construction; Studying Basic Mold Components: Mold sets, Bushes, Guide columns, Columns and abrasives, Scraper plates, Docking, Stages, Pilots; Basic Operations: Filing, Marking, Drilling, Bailing, Pinging and tapping, Centering, Detachable attachments; Machine Tools Used in Mold Making; Construction of Simple Cutting Molds; Construction Principles in Volume Molds; Construction and Assembly of Volume Molds.

# **KLP222** Molding Practices

2+2 4.0

Mold Components: Materials used, Mechanical properties of the materials, Heat treatments, Mold components and standards; Cutting and Drilling Mold: Design, Modelling and manufacturing drawings; Bending and Drawing Molds: Design, Modelling and manufacturing drawing; Press Automation System: Design, Modelling and manufacturing drawing; Sheet-Metal Mold: Design, Manufacture and assembly; Other Molding Methods.

### MAK105 Production and Manufacturing Technology I

3+1 4.0

Principles, Scope and Importance of Production and Manufacturing Technologies; Measurement and Control Knowledge; Traditional Manufacturing Methods: Definition, Scope, Areas of Use, Comparison with computer aided production and manufacturing methods; Analysing the Manufacturing System; Manufacturing Methods: Definiton, Scope, Areas of Use, Comparison Other Manufacturing Methods.

# MAK106 Production and Manufacturing Technology II

3+1 3.0

Manufacturing Methods: Areas of use, Advantages and disadvantages, Casting-welding-machining-plastic forming, Powder metallurgy, Special manufacturing methods; Adjustable Measuring and Control Instruments, Operations on Outer and Inner Conical Surfaces; Sheet Metal Forming; Lathes; Chip Removal Principles: Lathes, Assembly and planing machines, Grinding machines, Broaches, Chip removal with finishing cut.

#### MAK115 Mechanical Drawing I

3+1 4.0

Geometrical Drawings: Angle, Spring, Curved, Straight line, Constructs the common tangents to two circles; Projection, Drawing View: 1st angle projection, 3rd angle projection including the use of hidden detail lines; Dimensions; Identifying The Standard Symbols for Machined Surfaces; Section Views; Perspective Drawing: Spring, Curved; Standard Machine Components: Bolt, Loaf, Pin, Peg, Rivet, Welding.

# MAK221 Computer Aided Design I

3+1 4.0

Basic CAD Applications: Commands of limits, Units, Grid, Snap, Ortho, Menu, Save, End, Quit, Screen; CAD Station Drawing Spring: Drawing sector, Drawing straight line; Coordinate Systems: Commands of zoom, Pan, Redraw, Regen Fillet, Chamfer, Break, Trim, Move, Copy, Array, Offset Mirrormirrtext, Rotate, Ellipse, Polygon, Rectangle, Trace, Fill, Solid, Donut, Polyline, Divide, Measure, Change Color, Linetype, Ltscale, Scale, Explode Extend, Stretch, Block, Wblock, Insert, Minsert, Layer, Hatch, Help, List, Area, Dblist, Dist, Id, Status.

# MAK229 Mechanical Science and Elements

3+1 4.0

Basic Terms: Diagram of force extension, Stress, Modulus of rigidity, Safety coefficients, Poisson's ratio; Stress: Gliding stress, Shear stress, Hardness, Bending stress, Flow tension, Extension, Elasticity, Beam, Grade, Moment of inertia, Torsional stress, Machine Components: Rivet, Welding, Solder, Bolt, Archer, Shafts, Bearing, Journal bearing, Roller bearing, Lubrication.

#### MAK240 Hydraulic and Pneumatic Systems

3+1 4.0

Basic Terms of Hydraulic: Bernoulli's equation, Continuation, Flow variety, Reynold's number; Elements in Hydraulic Pneumatic: Gear pumps, Sliding pumps, Piston pumps, Screw pumps, Directional control valves, Flow control valves, Pressure control valves, Cylinders; Basic Terms in Pneumatic: Absolute temperature, Absolute pressure, Isothermal, Adiabatic, Compression; Elements in Pneumatic: Air lubrication, Compressor, Directional control valves, Flow control valves.

# MAK242 Administrating Management and Manufacturing Control

1+1 3.0

Management and Manufacturing: Preplanning, Forecasting, Planning, Organisation, Job, Batch, Flow and automatic types of production, Industrial wage, Waste of energy, Material consumption, Statistical of quality control, Production, Planning; Control Rules of Management: Quality control, Stock control, Buck keeping; Marketing; Planning, Orient and Check; Education; Turkish Work Laws; Auditing: Strike, Lockout, Syndicate.

#### MAK251 Energy Management

3+1 4.0

Common Energy Situation of Turkey; Structure of Turkish Industry; Energy Direction: Importance of energy consumption; Energy Committee; Energy Manager and His Duties; Measurement Devices and Measurement Techniques; To increase

Energy Efficiency in Accidents; Electrical Systems: Energy Saving in Electrical Motors, Energy saving in lightning; Economical Analysis Methods; Alternative Energy Sources; Compound Heat-Power Production Systems.

#### MAK257 Non-Destructive Testings

2+2 4.0

Testing with Penetrating Sprayed Paint (Penetrant Paints); Testing with Magnetic Pieces (Magnaflux): Permanent magnets, Electromagnets, Contact current flow, Coil methods; Testing with Eddy Currents; Testing with Infrared Rays; Testing with Industrial Radiography (X and Gamma Rays); Testing with Ultrasonic Waves: Piezoelectric Calibration; Chemical Composition Analysis (Spectrograph).

#### MAK259 Machine Drawing II

3+1 4.0

Tolerances and Surface Qualities: Surface process marks, Chip marks; Construction Drawings: Gear wheels, Design of a double gear wheel according to given center distance and data; Assembly Images: Basic standard screw thread profiles, Single square screw, Multi square screw, Square screw, Saw screw, Trapezoidal screw, Screw thread, Bearings, Ball bearings, Cams; Office Practice: Production drawings in accordance with Turkish standards, Production drawings, Tolerances in accordance with Turkish standards.

#### MAK261 Application of Engineering Science

2+2 4.0

Engineering Systems: Definition, Fields of application; Design and Implementation of a Mechanical Part; Design and Implementation of Mechatronic Parts; Examination of Case Studies; Application Study: Investigation of the subject, Costing, Designing of the system, Application of the designed system.

#### MAK263 Material and Mechanical Testing

3+1 4.0

Material Testing: Introduction, Importance, Material testing methods; Destructive Examinations: Definition and Scope, Importance, Usage objectives, Properties of materials that can be detected with destructive examinations, Classification of destructive examinations and places of use; Experiments and Analysis Techniques: Tensile, compression, torsion, hardening, impact, wear, fatigue, creep, corrosion experiments, Techniques of metallographic analysis; Destructive Examinations of Industrial Pieces and Examination Standards.

#### MAK265 Machine Drawing Applications

2+2 4.0

Basic Geometric Drawings; Invisible Detail and Section Drawings; Dimensioning; Surface Treatment Marks; Production and Assembly Drawings: Drawing of basic material profiles, Drawing and dimensioning standard machine elements; National and International Standards; Drawing of Sample Material Parts: Drawing of the details and sections according to the standards, Dimensioning and evaluation.

#### MAK272 Computer Aided Design II

2+1 3.0

Dimensioning: Dimension line, Extension lines, Dimension arrows, Layout of writing, Text format, Perspective drawing, Printer and printing; 3D Drawing: Features, Colors; Linear Dimensioning: Horizontal dimensioning, Vertical dimensioning, Inbuilt dimensioning, Rotated dimensioning, Basic line, Continuous dimensioning, Angular dimensioning, Radial dimensioning, Diameter dimensioning, Radius dimensioning, Ordinate dimensioning; 3 Dimensional Drawing.

# MAK278 Heat Treatment Technology

2+2 4.0

Steel Structure: Crystal structure, Crystal structure errors, Solid solution, Annealing, Rapid cooling, Slow cooling; Steel Annealing: Normalization annealing, Softening annealing, Stress relieving annealing, Recrystallization temperature; Steel Hardening: Watering, Tempering, Cementation; Heat Treatment Methods Suitable for Steel; Building Steels, High-Speed Tool Steels, High-Speed Steels; Crystal Structure Errors, Jominy Experiment.

#### MAT1001 Mathematics I

3+0 4.0

Sets, Real Number Sets, Intervals, Exponentials and Radicals; Identities and Factorization, First and Second Degree Equations and Inequalities; Functions: Concept of a function, Operations with functions, Graph of a function; Linear Functions: Equation of a line, Analytical investigation of lines; 2nd Degree Polynomial Functions: Parabola; Rational, Algebraic and Trigonometric Functions; Inverse Function, Exponential and Logarithmic Functions.

#### MAT1002 Mathematics II

3+0 4.0

Limit and Continuity; Derivative: Definition of derivative, Tangent line, Properties of the derivative, Chain rule; Derivatives of Polynomial, Rational, Exponential and Logarithmic Functions; Applications of Derivative: Increasing and decreasing functions, Local extremum points, Concavity, Plotting Graphs; Integral: Definite integral, Areas of plane regions; Indefinite Integral; Properties of Integral, Integrals of Polynomial, Rational, Algebraic, Exponential and Logarithmic Functions: Change of variables, Integration by parts, Partial fractions; Surface Area and Volume; Matrices and Determinants; Solutions of Linear Systems of Equations.

MEK104 Statics Strength of Materials

3+0 4.5

Introduction to Mechanics; Static of Rigid Materials; Truss Systems; Distributed Forces; Center of Gravity; Analysis of Structures; Forces in Beams and Cables; Method of Virtual Work; Friction; Mechanical Properties of Materials; Linear Elasticity; Hooke's law; Moments of Inertia; Bending Moment.

# MEK209 Mechanics of Materials (Dynamics)

3+0 3.0

Inner and Outer Force: Static loads, Dynamic loads, Tension and stress, Strength, Factor of safety; Pulling and Pressing Strength: Hooke's law, Trimming strength, Pins and Designing; Moment of Inertia; Torsion Strength Composite Stress Strength; Tender Columns; Wearing: Repeating loads, Examining broken weary cross sections.

#### MEK211 Soil Mechanics

3+0 4.0

Physical and Index Properties of Soil: Gravity-volume relations, Viscosity limits; Classification of Soil; Water Currents on Soil: Permeability and leakage; Stress-Deformation Relation in Soil Block; Compaction; Squeezed Soil: Consolidation settling and sudden settling; Gliding Resistance of Soil; Ground Pressure; Soil Carrying Capacity for Superficial Foundation.

## MiM216 Architectural Project Analysis

2+1 3.0

Operating Principles of CAD-based Computer Programs Used in Construction Sector; Program Commands; Exercise on Commands, Drawing of the Plan, Section and External View of an Architectural Project with CAD-based Computer Program; Modeling a Two-dimensional Project as a Three-dimensional Project together with Environmental Layout.

#### MLZ112 Materials Knowledge

3+0 3.0

Importance of Materials Science and Engineering; Atomic Structure and Bond Forces: Formation of atomic structures, Crystal structures and their types, Crystal structure errors; Solidification and Melting Behavior: Equilibrium, Phase, Liquefaction curve, Evaluation of equilibrium diagrams by examining solidification curve; Industrial Materials; Examination of Ferrous and Non-ferrous Metals: Introductions and standards; Material Selection Criteria; Application Examples.

#### MRK109 Basic Principles in Machine Construction

2+0 2.0

Lightness, Determination, Simplicity, Safety, Compliance with Standards, and Prevention of Stress Stacking in Construction; New Design in Terms of Manufacturing, Transportation and Ease of Installation; Constructive Design According to Forcing Forms; Measures to Facilitate Surface Finishing; Rules to Consider during Production Drawing; Design of the Parts to be Heat-Treated; Points to Consider in Designing theMachine Parts to be Manufactured by Casting; Modification and Improvement of the Systems Used.

#### MRK110 Computer Aided Drawing

3+1 4.0

Computer Aided Drawing; Computer Aided Design; 3D Drawing; Properties, Colors; Dimensioning; Dimension Line, Elongation Lines, Dimesion Arrows, Text Positioning, Perspective Drawing, Plotter and Plotting; Dimensioning; Horizontal Dimensioning, Vertical Dimensioning, Aligned Dimensioning, Rotational Dimensioning, Basic Line, Continous Dimensioning, Angular dimensioning, Radial dimensioning, Diamter Dimensioning, Oordinate Dimensioning; 3D Solid Modelling: Extrusion, Revolving, Sweeping; Part Design.

# MRK213 Technical English

3+0 3.0

Speaking: Introduction himself and others, Subjects interested with working place, Demands in formal place, Offering help, Excuse, Apology, Necessity, Obligation, Quantity, Ratio Percentages, Estimating, Instruction; Listening-Understanding: Understanding in professional subject; Writing: Taking note, Curriculum vitae, Business letters, Passive structure usage; Reading-Understanding: Conjunctions indicate time, purpose, condition, Expressions in passive structure, Expressions indicate contrariness, Dictionary usage.

#### MRK221 Construction Applications

2+2 4.0

Points to Consider When Designing and Drawing Machine Parts; Steel Contruction Applications; Machine Construction Preparation and Application of Prefabricated Construction; Construction Drawing Applications: Drawing of parts to be produced by casting, Drawing of moving, presuring, pushing and removing plates, Detailed drawings of extrusion and precision press molds; Drawing Negative and Positive Plastic Volume Molds.

#### MRK222 Construction

2+1 3.0

Design and Construction: Definition, Objectives, Basic construction principles, Points to consider in the design of machine parts; Cross Section and Openings; Drawing Techniques of Standard Mold Components; Sketch Drawings; Construction Drawings: Model drawing, Modelling drawing, Molding drawing; Examples of Various Constructions: Mills, Pulleys, Conical gear wheels.

#### MRK223 Industrial Measurement Techniques

1+1 3.0

Basic Principles of Measurement and Control: Information about the terms, Classifications, Standards used in the world; Units Used in Measurement and Control: SI unit system; Definitions and Concepts of Length and Protractors Used in a

Basic Workshop; Basic Properties of Measurement: Errors of measurement, Calibration of the device; Teaches the Technique of Reading the Length and Protractors; The Rules of other measurements used in the industry: Pressure, temperature, flow, level and roughness, Working techniques of the devices used; Specialized Measurement and Control Devices; New Measurement and Control devices.

#### MRK224 Basic Maintenance Management

2+0 2.0

Basic Topics of Maintenance Management; Importance, Purpose and Classification of Maintenance; Importance and Applications of Maintenance Strategies; Application of Root Cause Analysis of Failures; 5S Importance and Applications; Maintenance Organization and Management; Predictive Maintenance Practices and Their Importance; Introduction of Total Productive Maintenance; Spare Parts Management; Applications Used in Maintenance; Key Performance Indicators Purpose and Types.

#### MRK225 Computer Aided Manufacturing

3+1 4.0

CNC machine tools: Parts of CNC machines, Types, Advantages and disadvantages, Installation and maintenance; Cutting tools; Tool holders; Work clamping systems; Work safety rules; Cutting parameters; Fanuc codes: G and M codes, Cycles, Manual program writing; CAM programs: Solid model preparation, Toolpath creation, Operation sequence determination, CAM applications, Making changes to the program

#### MRK226 Unconventional Production Methods

3+0 4.0

Modern-non-traditional manufacturing methods: Comparison of traditional and unconventional methods, Classifying methods according to energy type; Ultrasonic processing; Processing with water jet; Chemical machining: Electrochemical machining, Electrochemical boning; Electrochemical principal machining; Sinking erosion machining, Wire erosion machining; Laser processing; Processing with plasma; Electron Beam processing.

#### MRK227 Industrial Products Design

2+2 4.0

Concept of design; Ergonomics; Relationship between Ergonomics and Design; General and formal rules in industrial design; Process concept and preparation in industrial design; The design stages of an industrial product; working principles and ergonomics rules; selection of appropriate materials and production methods required for design and production; Design and cost relationship; Product design within the framework of economic rules; Material selection-working principle analysis-resistance calculation of an industrial product; Drawing of manufacturing and assembly drawings of an industrial product.

#### MRK229 Reverse Engineering and Additive Manufacturing Technology 3+1 4.0

Reverse Engineering; 3D Optical Scanning; Benchmarking and Competitor Analysis; Additive Manufacturing Method; History of Additive Manufacturing Method; Technics used in Additive Manufacturing Method; Materials used in Additive Manufacturing Method; Post processes for Additive Manufacturing Method; Advantages and Disadvantages of Additive Manufacturing Method; Design for Additive Manufacturing; Topology Optimisation and Advantages of Topology Optimisation.

# MRK231 Office Programs and Digital Data Management

3+1 4.0

Key Issues in Office Programs and Digital Data Management; Basic Computer Concepts; Information Collection and Management; General Introduction of Office Programs: Knowledge of which application is used for what purpose; Introduction and Application of Word Processing Software; Introduction and Application of Spreadsheet Software; Presentation and Application of Presentation Software; Digital Data Management: Purpose, introduction and design of data management software used in businesses, Importance and methods of digital archive; Purpose and Application of Flowchart Design Application: Demonstrating processes in enterprises by flowchart method.

# MRK233 Polymer Technology and Mold Processing

2+2 4.0

Structure of polymers, classification, application areas and forming methods; Physical-thermal-mechanical and rheological properties; Analysis and comparison of various processes in plastic product manufacturing; Process parameters and design principles; Effect of molding on mechanical properties; Problems encountered in injection; injection molding and its theories; effects on part quality; vacuum and other operations.

#### MRK299 Internship

0+2 5.0

Information about Internship: Purpose, Method, Process, Professional Awareness: Scope of the Profession, Research-Oriented Areas, Practical-Oriented Areas, Occupation and Employability; Occupation and Career Planning; Vocational Training and Specialization: Documentation of Expertise; On-site Practice: Field Trip Technical Trips and Application Studies; Project Design: Determination, Planning, Analysis, Method and Equipment Selection, Application and Conclusion, Reporting and Presentation.

PMYO198 Optional Internship

0+2 5.0

Meeting with the Business World; Obtaining Experiences that Support Theoretical, Practical and Personal Development: Practice by working in public or private institutions, Developing field-oriented skills with applications, Teamwork experience, Time and stress management skills; Verbal and Written Communication: Horizontal and vertical communication within the organization, Communication with the customer, Reporting and presentation of experiences; Occupation and employability, Creating a Vocational Career Plan.

#### **RTV114** General Communication

3+0 3.0

Definition and Concept of Communication; Elements of communication process; Culture and Communication: Definition and concept of culture, Elements of culture, Types of culture; Non-verbal Communication: Definition, Functions, Codes of non-verbal communication; Organizational Communication: Functions, Organizational culture, Formal communication channels; Communication Tools; Mass Communication: Definitions, Characteristics, Functions; Basic Communication Theories.

#### RTV116 Radyo Programming

2+2 4.0

Basics of Radio Programming: Concept of program, Characteristics of radio programs, Types of radio programs; Program Production Processes: Preparing proposal forms, Guests selection, Determination of music, Writing the text; Types of Broadcasting: Live and Recorded; Program Planning; Characteristics of Radio Studios.

#### RTV121 Measurement and Maintenance at RTV

2+1 3.0

Concept and Definition of Measurement; Basic Electricity Knowledge; Wiring Specifications in System Installation; Video Signal Measurement and Maintenance; Light Level Measurement and Maintenance; Audio Level Measurement and Maintenance; Camera Maintenance and Preparations Before Shot; Maintenance of Sound Recording Devices; Maintenance of Sound Recording Hardware.

#### **RTV122** Camera and Lighting Technics

2+2 4.0

Camera History; Camera Types and Structures; F-number; Depth of Field and Variables Affecting It; Lenses and Lens Types: Equipment of Electronic Cameras; Studio Control Rooms: Mobile recording tools, Camera supports, Power sources. Lighting Concept: Light Intensity and Color Temperature; Lighting Sources; Effects of Lightinf; Psychological Effects in Lighting; Lighting Aesthetics:; Color Case and Color Control: filters; Outside Lights and Interior Lights

#### RTV129 Image Technique

3+1 4.0

Basic Cinema Technology: Film cameras, Film formats; Basics of Television Technique: Forming image on television; TV Broadcast Standarts: Properties of PAL, SECAM and NTSC systems, Basics of PAL broadcast system; Physics of Color: Spectrum of electromagnetic waves, Color saturation, Tone of color, Type of color, Brightness, Luminance, Chrominance, Color temperature; Electronic Cameras: Working principles of cameras; Principles of Video Recording and Reading: Video recording, Video reading, Electronic editing.

#### RTV131 Radio-Television Broadcast Systems

2+2 4.0

Historical Development of Radio; Basic Information about Radio: Radio waves and frequencies, FM and AM transmitters; Technological Equipment Necessary for Radio Broadcasting; Historical Development of Television; Basic Information about Television; Television Broadcast Techniques; Radiolinks, Sattelites, Cable broadcasting; Technological Equipment Necessary for Television Broadcasting.

#### RTV133 Audio Technique

3+1 4.0

Formation and Definition of Sound: Sound and hearing; Physical and Perceptual Features of Sound: Frequency, Wavelength, Amplitude, Frequency and hearing, Frequency and pitch, Amplitude and intensity, Frequency and intensity, Timbre, Sound envelope; Structure of Audio Signal: Analog and digital audio signal, Mono and stereo audio signal; Audio Connection Components: Cables and connectors; Microphones: Structural and directional features of microphones, Microphone usage techniques, Microphone accessories; Audio Mixers: Audio mixers usage areas, Basic structures of audio mixers; Sound Recording Techniques on film and video cameras.

#### RTV135 Studio Equipment and Usage

2+2 3.0

Camera control unit: definition, characteristics, and functions of the camera control unit; camera control: camera used in a studio environment control units (CCU); the key features, the camera control unit of structure and functions; remote control panels (RCP): Properties, structure, functions, basic measurement devices; and Waveform/Vectorscope to make following Router matrix of the image distribution image distribution amplifier (VDA); Converters: purpose of use, structure, properties; Monitoring Monitors and reference Monitors

# RTV234 Working Life in Media

2+1 3.0

The Economical and Legal Conditions for Media Personnels; Basic Concepts and Foundations Towards Working Life in Media. Media Expertise as Professional Group, Radio Broadcasting, Journalism, Television Broadcasting, Advertising; The Characteristics and Working Conditions of Media Members, Legal Regulations in Media Towards Working Life, The aim

and content of Labor Laws of Press. The Radio Television Chief Committee and Their Aim, The Issues in Media Sector, The Ownership of Media and Relations with Staff, Employment; Media in Respect of Turkish Laws, Principles of Press, The Actual Situation in Turkey, The Principles of Local Television, Radio and Press.

### **RTV242** Video Editing Applications

1+2 3.0

Aim of Editing in Video and Audio; Editing Magnetic Tapes: A-B roll editing system, Necessary software and connections for desktop editing, Differences between A-B roll editing and desktop editing, Preparations before editing in desktop editing systems; Meaning of Time Code and Editing Script; Desktop Editing: Computer and its hardware and software for desktop editing; Video and Audio Signal Transfer to Computer; Concepts of Capture and Import; Editing Orograms: Basic characteristics, Main effect groups, Exporting the projects in editing programs.

#### RTV243 Kamera-Lighting Applications

2+2 3.0

Cameraman and Characteristics of A Cameraman; Basic Knowledge of Image And Light; Studio: Studio equipment, Lighting sources in studios and aids equipment, Studio lighting technics; Studio Equipments: Tripod, Stand, Pedestal, Jimmy jib, Crane; Studio Cameras: Structure, Body, Objectives, Visor, Connection Systems; Camera Movements; Shooting Scale; Exterior Shoots: Environments, Equipment, Lighting, Camera movements and scale; News Cameraman; Documentary Cameraman.

## RTV245 Radio Broadcasting Systems and Applications

2+1 4.0

Basic Elements of Radio Broadcasting: Voice, Words, Music; Radio and Radio Listener's Features; Production Preparation and Organization; Radio Broadcasting/Studio Equipment: Radio automation systems; Oratory and Diction; Radio Program Types: Music, Documentary, Culture, Art and News; Studio Practice: Voiceover and Editing.

#### RTV247 Digital Recording and Archiving

2+2 3.0

Types of Audio and Video Archives; Terminology of Audio and Video Recording; Mass Communication Tools and Record Production: Institutions Providing Resources for Mass Communication and Record Production; Management of Audio and Video Records: Selection and Evaluation, Establishment of Classification, Cataloguing and Access System, Storage, Conservation and Restoration, Immigration Records, Core Benefits and Legal Problems; Bibliographic Control of Digital Resources and Metadata; Thesaurus as a Tool of Information Identification and Retrieval; Digital Archives and Production System (Cinegy) and Examples of Application.

#### RTV248 Television Advertising

2+1 3.0

Writing; Story Board; Shooting Board; Types of Camera Shooting; Visual Displays; Camera Movement; Production Companies and Director; Casting; Photo Shootings; Montage; Production and Post-Production.

#### **RTV249** Video Editing Technics

2+2 4.0

Cable Systems Used in Image and Sound Transmission: Types of video and audio signals, Types of analog and digital cables and connection; Historical Development of Video Cameras; Basic Elements of Video Cameras; Types of Video Cameras; Principles of Video Cameras; Camera Objectives: Structure of objectives, Classification of objectives; Importance and Role of Lighting; Reasons of Using Lighting in Shooting: Technical reasons, Aesthetic reasons; Lighting Equipment; Lighting Methods.

# **RTV259** Television Program Production Techniques

2+2 4.0

Basic Concepts: TV program types, Broadcasting types and shooting types; Program Production Process; TV ProgramNarrative Structure and Production Elements: Audio visualnarrative elements; Treatment, Scenery technics, Budget; Production Process: Planning, Shooting technics and scales, Shooting rules; Eye lines, Action lines, Continuity; PostProduction: Transitions and effects.

### RTV261 Text and Scenario Writing

2+2 4.0

The concept of scenario: theme, plot, character creation, plot, conflict, climax Point, storytelling; Scenario Sections: the shot, scene, Distinction, Chapter; a draft of the screenplay; Scenario Development; Scenario Segmentation; preparation of Storyboard; shooting script; and the transition method to be used in Fiction Information; the concept of Narrative and narrator in the film; the installation of the narrative Formats; the basic components of the cinematic narrative; cinematography, sound design and audio components; affecting the rhythm of the short film; Filmic time and space in the narrative, use of dialogue and scenario the use of scenario analysis.

#### RTV263 Short Film

2+2 4.0

Narrative theory; forms of narrative installation; creating dramatic structure; conflict in dramatic structure; creating short Film story; developing short Film story; Art Of Cinema and storytelling; Sound Design in Cinematography; use of Music In Film; image editing and continuity; storyboard narration of short film; concept of narrator in short film; character creation in short film; film analysis

#### RTV265 Media Literacy

2+1 3.0

Media Literacy: Concept, Definition and Importance; Historical Development, Theories and Principles; Critical Approaches; Media Enterprises: Possession and control, Regulation and policy-making, Production and Distribution; Structure of Media Message; Configuration and Interpretation of Visuals: Power, Gender in public and media, Children and advertising, Censorship, Racism and Monopolization.

## RTV267 Digital Communication Technologies

2+2 4.0

Communication Technologies: Definitions, Developments and Features; Classsification of Communication Technologies; Analog and Digital Communication Technologies; IT: Computers, Information Technologies; Social Networking, Network Technologies, Hybrid Technologies, Mobility, Innovasion, Digital Transformation, Convergence and Globalisation. Cyber Technologies: Smart, Artificial Intelligence, Virtual Reality, Augmented Reality

## RTV269 Digital Broadcasting

2+2 4.0

History of Internet Technologies; Internet and Social Media; Digital Evolution of Media; Web 1.0 and Web 2.0 Technologies; Blog Technologies; Social Sharing Sites; Podcast Broadcating; Digital Video Broadcasting; Internet Journalism; Internet Radios; Internet Televisions (IPTV); Cable TV and Broadcasting Properties; Computer Communication Genres; Video Conference Systems and Usage Areas; GSM and Sattelite Phones.

#### **RTV270** Sound Application

2+2 4.0

Physical Properties of Sound: Frequency of sound, Sound amplitute, Sound tone; Microphones: Structural properties, Dynamic and condensator microphones, Direction properties, Single andmulti-directional microphones, Shotgun microphones; Sound Mixers: Broadcast sound mixers, Post-production mixers, In-line mixers; Sound Recording Equipment: Tape recorders, Digital recorders; Sound Signal Processors: Compressor and Limiter; Loudspeaker and Cabin Systems; Stereo Sound Recording: XY and MS methods.

#### RTV271 Social Media Content Production and Managament

2+2 4.0

Social Media Definition and Features; Social Media Platforms and Features: Digital Content Production: Principles of Digital Content Production. Corporate Content Production, Commercial Content Production. Visual Creation Criteria, Literary Criteria, Photo Qualities. Platform Target Audience Relationship. Platform Management and Sharing Qualities. Interaction, User Relationship Management.

#### RTV273 Media Management

2+2 5.0

Media Companies; Qualifications of Media Companies: Radio stations, TV stations, Film studios, Newspapers and Magazines, Publishing. Production and Broadcasting Organizations: Organizational structure, workflow, job descriptions; Digital Content Producers; Structure of the Media Industry; Content Production Styles and Features; Content Publishing Strategies, Publishing Planning, Audience Analysis.

#### **RTV274** Interactive Television Applications

2+2 5.0

Interactive Television: Definition of digital TV broadcasting; Standarts of Digital Communication: Transmission areas of digital broadcasts, Receiving digital television broadcasts; Interaction on Television: Interactive services on television and interaction levels; Analysing interactive TV applications, Interaction opportunities of DTV broadcasting: Semi-interaction, Full interaction; Designing Interface for Interaction: Designing interface for semi-interaction, Designing interface for full interaction.

# RTV275 Web TV Broadcasting

2+2 4.0

Network-based Broadcasting: Definition and Features.; Network broadcasting: Development and Types; Internet TV, IPTV, Web TV; What is Web TV?; Web TV System Features: Web TV Configuration: Technical features: TVE Configuration: Hybridization, Mobility; Content Features: Web TV Broadcast Planning, Content Preparation, VTR Preparation; Interactive Configuration; WEB Live Broadcast; Web API Connections. Video Streaming. Channel and Social Platform Publishing: Limitations, Features, Usage and Effects.

# RTV277 Digital Corporate Communication

2+1 3.0

Corporate Communication and Digital Transformation: Traditional corporate communication, Digital corporate communication; Strategic Communication Management and Theoretical Infrastructure of Digital Corporate Communication; Identity- Brand- Image and Reputation Management; Digital Corporate Advertising; Institution Digitalization in Internal Communication; Digital Activism and Civil Society Organizations; Management of The Digital Corporate Communication Campaign.

#### RTV279 Digital Culture and New Media

2+1 3.0

Global Digital Age: Self theories in the digital age, Digital culture, Media and transformation; Social Layers in Technology Usage; New Space in the Digital Age; Accessibility and Usability in the Digital Age; Definition of Content in New Media;

New Media Writing and Hypertext; New Trends in Content Production: User-friendly content production; Sharing Culture and Intellectual Property.

#### RTV280 TV Program Production Applications

2+3 5.0

TV program pre-production process: Program idea development, program proposal, Snopsis, Treatman writing, Storyboard, Budget preparation, shooting time calculation, Editing time, cost calculation, standard budget items; script writing: Technique, script writing layout, shooting numbering, showing sequences; planning: calendars, shooting planning, shooting permits; production process: shooting techniques; genres, scales, Chromakey, Basic Rules, shooting rules, realization of shooting; post-production: editing and evaluation.

#### RTV281 Digital Literacy

2+2 4.0

Internet Technology and Uses; Abbreviations on Internet Addresses; Accessing Information over the Internet; Effective Participation on the Web; Web Literacy Reading Skills and Competencies; Terms and Concepts in New Media; Social media: Social Media Literacy Components; Social Media Security Threats and Precautions: Malware on the Web, Access to Reliable, Accurate and Updated Information in the Web Environment; Misinformation and Disinfection Concepts; Information Usage and Sharing in the Web Environment; Web Ethics: Privacy and Privacy in Social Media Use.

#### RTV282 News Gathering and Writing Techniques

2+2 4.0

News Description and Elements; Event Notification Criteria; 5 N-1 K Rule; News Values; Actors of the News; News Types and Types; News Gathering Methods; Importance of Photography and Visual Elements in News Gathering Process; News Feeds; Language of News and Elements to Consider in News Writing; Word Selection in News Text Writing; News Entry Types and Techniques; Interview and Interview Types; News Auditing And Verification Process; Press Professional Ethics and Principles; Problems Encountered in Journalism and Rules of Good Conduct.

# RTV283 Radio Program Preparation and Application

2+2 4.0

Radio Language and Features; Basic Elements of Speaking on Radio; Writing and Expression Language in Radio Journalism; Considerations When Writing Radio News; Announcer and Server Features; Basic Materials Used in Radio Broadcasting; Radio Program Production Types; Program Preparation on Radio: Deciding on the Program Format and Format, Determining the Subject of the Radio Program, Research Phase, Preparation of Suggestion and Suggestion Form, Writing Radio Program Text; Formal Features of Radio Program Text; Program Identification Form; Announcer and Server Features; Preparing An Interview on Radio; Preparing an Interview on Radio.

#### **RTV284** Creative Writing

2+2 4.0

Introduction to Creative Writing: Basic Competencies and Features for Creative Writing, Things to Know Before Writing, Elements that Develop and Prevent Creativity; Features of Literary Text; Basic Features of Storytelling; Basic Elements of Storytelling: Theme Selection And Topic, Conflict Types and Conflicts in the Story, Creating People and Characters, Place and Space Usage: Time in Story, Space in the Story; Dialogue and Speech in the Story; Visual Narrative Structure.

# **RTV285** Audio Description Practices

2+2 4.0

Narrative Theory; Storytelling; Accessibility: Audiovisual Media Accessibility, Audiovisual Text, Experiencing and Storying; Audio Description Definition; Methods of Audio Description; Audio Description as a Storytelling Tool; Past to Present Audiovisual Translation in Turkey; Audio Description Competencies and Training; Production in Audio Description: Audio-visual Product / Environment, Audio Description Derivatives, Qualities and Language of the Text, Text Production Time, Text Production Method, Voice of the Text, Transmission Stage in Audio Description, Consumption Stage in Audio Description.

#### **RTV286** Announcer and Iterviev Techniques

2+1 3.0

Speaking and Listening, The Effective Use of Sound and Voice, Voiceless Communication, The Effective Use of Body Language, The Control of Breath, Voice Training and Articulation, The Usage of Period in Speaking, Sounding and Concepts, Studio Knowledge, The Usage of Microphone, Pursuing The Film and The Text From The Monitor, The Concept of Reggie, The Harmony of Casting and Voicing Artists, The Voicing of Production, Animation, Documentary and Advertising Films, The Presentership of Open Faculty, Radio and Television Programs, The Voicing of Documentary, Radio Theatre, Congress Presentation, Diction, Phonetic, Articulation, News Announcing, Sport Announcing.

#### RTV287 News Analysis

2+2 4.0

Media; Representation in The Media; Concept of News; News Values; Types of News: Economic news, Policy news, PoliceCourthouse News, Culture-Art news, Tabloid News, Sports News, 3. Page news, Health news, Technology news; Representation in The News; Analyses News with Different Scientific Research Methods: Content analysis method, Semiotic analysis method; Critical news analysis method.

RTV289 Digital Advertising

3+1 4.0

New Communication Technologies and Advertising Relations; Digital Advertising and Features; Digital Consumer and Active Participation: User generated content; Digital Advertising Models; Digital Advertising Strategies; Social Networks and Advertising; Mobile Advertising; Search Engine Advertising (SEA); Advertising via E-mail; Creative Process in Digital Advertising; Digital Advertising and Ethics; Digital Marketing Trends; Digital Advertising Examples; Digital Campaign Design

#### RTV299 Internship

0+2 5.0

Information about Internship: Purpose, Method, Process, Professional Awareness: Scope of the Profession, ResearchOriented Areas, Practical-Oriented Areas, Occupation and Employability; Occupation and Career Planning; Vocational Training and Specialization: Documentation of Expertise; On-site Practice: Field Trip Technical Trips and Application Studies; Project Design: Determination, Planning, Analysis, Method and Equipment Selection, Application and Conclusion, Reporting and Presentation.

#### SAN111 Fundamental Art Education I

3+0 3.0

Goals, Content and Main Concepts of Fundamental Art Education; Design and Creativeness; Basic Plastic Elements: Paint, Line, Colour, Dimension, Shape, Surface; Material Identification; Plastic Components: Action, Rhythm, Volume, Place, Balance, Tissue; Usage Methods of Values and Applications; Light-Dark Values; Composition Setting; Form Associations: 2-D form, Adding third dimension.

# SAN112 Fundamental Art Education II

3+0 3.0

Condition and Principles in Fundamental Art Education; Visual Record Elements; Universal Elements; Drawing Systems; Arrangement Factors; Analysing of Objects; Study Works; Derivation of Artistic Forms from Natural Forms: Getting object lineated synthesis, Migrating to new form; Material Identification; Analysing Artistic Work; Personal and Group Projects; Artistic Research Excursion.

#### SAN155 Hall Dances

0+2 2.0

Basic concepts. The ethics of dance, Dance Nights, Dance Costumes, National International Competitions and rules/grading, Basic Definitions, Classifications of Dances: Social Dances; Salsa, Cha Cha, Samba, Mambo, Jive, Rock'n Roll, Jazz, Merenge; Flamenko, Rumba, Passa -Doble, Argentina tango, Vals, Disco, Quickstep, Foxtrot, Bolero, European Tango: Ballroom Dances; Sportive Dances; Latin American Dances; Samba, Rumba, Jive, Passa-Doble, Cha Cha, Standart Dances; European Tango, Slow vals (English), Viyana vals, Slow foxtrot, Quickstep.

#### SNT111 History of Arts I

2+0 2.0

Definition, Content and Fundamental Concepts of History of Arts; Art Branches; Culture and Art Relation; Analysing Methods of Artistic Works: Material and technique, Theme, Figure, Shape, Specific content; Relations with Other Sciences: Philology, Palaeography, Epigraphy, Numismatic, Chronology, Archaeometry, Geography, Ethnography, Anthropology, History, Archaeology; Developed Theories About History of Arts; Reflection Theory; Pre-historical Art: Antiquity art, Middle age art, Renaissance, Baroque; Art Trends: Classism, Romantism, Realism, Impressionism, Symbolism.

#### SNT114 History of Art II

2+0 3.0

Art Movements and Graphic Design; Arts and Crafts Movement; Typographic Revolutions; Font Designers; Classification of Typefaces; Art Nouveau; Art Movements That Affect Design in the Early 20th Century Art; Cubism, Futurism, Dadaism, Surrealism; Use of Posters in World War I, Russian Suprematism and Constructivism, De Stijl Movement, Bauhaus.

#### SNT155 History of Art

2+0 2.0

History of Civilization and Evolution of Art: Prehistory to Present; Concepts and Terminology in Art with Samples; Interrelation among Art-Religion and Society; Effects of Religion on Artistic Development; Reflections and Interpretations of Judaism, Christianity and Islam on Art; Renaissance: Emergence, Effects, Artists, Works of Art; Architecture and Plastic Arts; Art in the 19th and 20th Centuries: Relevanceof the main historical events of the period.

# **\$PL201** City Admiration and Environment

3+0 3.0

Urban Management; Perception of City; Human and Environment; Globalization; Urban Culture and Identity; Environment and Participation; Industrialization and Urban Transformation; Effects of Urbanization to Environment and Ecological System; Urbanization and Environmental Problems; The Planning and Application Problems of Urban Technical and Social Services; Urban Planning and Administrative Organization; Importance of Public Participation in Urban Planning; Restructuring of Local Governments; Historical Development of Local Governments; Legal and Administrative Regulations.

# **\$PL202** Plans of Map and Expropriation

2+0 3.0

Existing Maps; Types and Hierarchy of Plans; Development Plans, Regional Plans, Metropolitan Area Plans, Environment Organization Plan, City Plans: Land use plans, Detail plans; Procedures of Elaborating and Implementing city plans;

Changing city plans, Expropriation: Process of Making an Expropriation Decision, Notifying the Owners; Organization of land and land subdivision control.

#### TAR165 Atatürk's Principles and History of Turkish Revolution I 2+0 2.

Reform efforts of Ottoman State, General glance to the stagnation period, Reform searching in Turkey, Tanzimat Ferman and its bringing, The Era of Constitutional Monarchy in Turkey, Policy making during the era of first Constitutional Monarchy, Europe and Turkey, 1838-1914, Europe from imperialism to World War I, Turkey from Mudros to Lausanne, Carrying out of Eastern Question, Turkish Grand National Assembly and Political construction 1920-1923, Economic developments from Ottomans to Republic, The Proclamation of New Turkish State, from Lausanne to Republic.

#### TAR166 Atatürk's Principles and History of Turkish Revolution II 2+0 2.0

The Restructuring Period; The Emergence of the fundamental policies in the Republic of Turkey (1923-1938 Period); Atatürk's Principles, and Studies on Language, History and Culture in the period of Atatürk; Turkish Foreign Policy and Application Principles in the period of Atatürk; Economic Developments from 1938 to 2002; 1938-2002 Period in Turkish Foreign Policy; Turkey after Atatürk's period; Social, Cultural and Artistic Changes and Developments from 1938 to Present.

#### TEK107 Scientific Principles of Technology

3+1 4.0

Material Properties: Chemical operations in burning and oxidation, Prevention from oxidation, Elasticity of material and Hook's Law; Static: Static balance state, Vctorial and scalar quantities, Moment, Center of gravity; Dynamics: Path, time, velocity and acceleration; Mechanic and Electromagnetic Wave Movement: Wave length, Frequency; Fluid Pressure: Pressure and its units, Absolute pressure, Relative Pressure; Electric and Magnetism: Simple circuits with serial and parallel connected resistants, Current, voltage difference and resistant problems.

#### **THU203** Community Services

0+2 3.0

Various Community Projects: Helping young students during their study periods or after school study sessions, Aiding the elderly in nursing homes, helping disabled individuals with various tasks, helping social services and aiding children with their education etc., take part in the projects which raise environmental awareness, Integrating with the community and enabling use of knowledge accumulated in the courses.

# TiP113 Typography

2+1 2.5

Defining Typography and its Importance in Graphic Design: Historical development of typography, Birth of writing and the first alphabets, Progress of Roman Alphabet until the Invention of Printing Press; Basic Terms of Typography; Typographical Editing Practice.

# TiP204 Typography Applications

1+1 3.0

Union of Typography and Image; Interaction Between Typography and Image; Using Typography and Image Together: Words within Images; Union of Typography and Image: Image as Letter, Letter as Image, Word as Image, Typographical Applications.

#### TKY102 Quality Management Systems in Production

2+1 4.0

Standardization: Definition, Objectives and Principles, TSI and its functions, Regional and international standardization organizations; Quality and Quality Management: Definition of quality and related concepts, Quality approach, Quality costs and risks, Quality control concept, Total quality management; Professional Standards: Comprehending professional standards, Quality problems encountered by enterprises, Quality circles in printing sector; Application of Quality Control Methods to Printing Establishments: Reflection of quality assurance system in printing sector, Quality control stages in preprinting, printing and post-printing processes.

#### TOP102 Surveying

2+2 4.5

Concepts Related to Topography; Simple Measurement Tools and Horizontal Measurement: Application of right angles, Application of right angles by the help of prisms, Application of lines; Length Measurement: Calculation of Surveying and levelment; Calculation of Area: Calculation of area according to measurement values, Calculation of area according to coordinate values, Calculation of area according to Cross Method; Theodolite and Angle Measurement: Measuring horizontal and vertical angles, Length measuring; Drawing Maps and Plans Using The Dimensions of a Field: Calculation of Coordinates; Calculation of Polygons.Concepts Related to Topography; Simple Measurement Tools and Horizontal Measurement: Application of right angles, Application of right angles by the help of prisms, Application of lines; Length Measurement: Calculation of Surveying and levelment; Calculation of Area: Calculation of area according to measurement values, Calculation of area according to Cross Method; Theodolite and Angle Measurement: Measuring horizontal and vertical angles, Length measuring; Drawing Maps and Plans Using The Dimensions of a Field: Calculation of Coordinates; Calculation of Polygons.

TRA220 Road Knowledge

History of Roads; Road Construction Methods and Inspection; Site Management in Road Construction; Classification of Roads: Highway, Railway, Seaway, Airway; Terms Used in Highway;Route and Survey: Preliminary project, Route definition, Soil, Stabilized, Asphalt and concrete road, Determination and confirmation of the final route; Profile; Road Materials: Bitumen, Bituminous materials, Asphalt, Asphalt cement, Liquid asphalt, Tar.

#### TRA223 Geotechnics for Roads

2+2 4.0

Geotechnical Investigation for Road Construction; Soil Borings; Soil Compaction and Stabilization for Pavements; Fundamental of Drainage and Consolidation; Slope Stability and Retaining Structure Practices; Geosynthetics Design for Road Construction; Ground Anchors Practices for Road Construction; Road Earth Structures; Rock Mechanics for Road Construction.

#### TRS104 Technical Drawing

2+2 4.0

Technical Drawing and Tools: Drawing tools, introduction, usage and care; Technical Drawing Papers: Papers used at drawing, Measurements of paper standarts; Scales: Applications; Standart Line: Usage areas, Line studies; Standart Writing: Inclined and Perpendicular writing, Writing studies; Geometrical Drawings: Angles, Setsquare, Ruler, Drawing angles by using compasses, Dividing to equal parts, combinations, Drawing regular polygons into a circle; Geometric Projection and Drawing Views; Scaling and Measuring; Cross Section Views; Perspective; Roughness of Surfaces and Surface Processing Signs; Tolerance and Exercises.

### TÜR125 Turkish Language I

2+0 2.0

Language: Characteristics of language, Relationship between language and thought and language and emotion, Theories about the origin of languages, Language types, The position of Turkish Language among world languages; Relationship Between Language and Culture; Historical Progress of the Turkish Language; Alphabets Used for Writing in Turkish; Turkish Language Studies; Turkish Language Reform; Phonetics; Morphology and Syntax; The Interaction of Turkish Language with Other Languages; Wealth of Turkish Language; Problems Facing Turkish Language; Derivation of Terms and Words; Disorders of Oral and Written Expression.

### TÜR126 Turkish Language II

2+0 2.0

Composition: Written composition, Paragraph and ways of expression in paragraphs; Punctuation; Spelling Rules; Types of Written Expression and Practices I: Expository writing; Types of Written Expression and Practices II: Narrative writing; Academic Writing and Types of Correspondence; Reading and Listening: Reading, Reading comprehension strategies, Critical reading; Listening; Relationship between Listening and Reading; Oral Expression: Basic principles of effective speech; Body Language and the Role of Body Language in Oral Expression; Speech Types; Principles and Techniques of Effective Presentation; Some Articulatory Features of Oral Expression.

### YPD101 Building Inspection

2+1 3.0

Legal procedures in building inspection; Application Process: Building Material Standards; Control of material and laboratory tests; Application of Building: Control of steel and mold; Preparation of concrete; Compliance control of materials in projects.

#### YPD102 Guidelines for Earthquake Resistant Construction

2+0 2.0

Causes and Characteristics of Earthquakes: Concept and definitions; Seismological assessment; Forms of ground motion; Design for earthquakes; Collecting the geological data's and evaluation; Slope stability analysis and landslides; Liquefactions; The basic design of foundation; Retaining structures; Construction on active faults; Strengthening of structures.

#### YPD103 Structural Design I

3+1 4.0

Evolution of Concrete and Concrete Buildings: Structural Behavior of concrete elements; Structure and building loads; Design criteria for concrete framed structures; Elements of Concrete Framed Structures: Foundation, Floors, Stairs; Wall design; Exterior Wall Design: Wall types and assemblies, Metal cladding, Stud-backed walls; Drawing a Wall Section: Points to consider, Drafting guidelines; Reinforced prefabricated buildings; application systems; Assembling techniques of panel facade elements and joint analysis.

### YPD104 Structural Design II

2+0 3.0

Steel in Architecture: Evolution of Steel Structures, Steel- Framed Structures: Developments and achievements; Example of Steel-Framed Buildings; Principles of Design and Construction: Fundamentals of planning, Load bearing systems, Columns, Bracing, Flooring systems, Integration of building structure with building insulation; Steel stairs; External Walls: Curtain walls, Facade claddings; Internal Walls: Glass walls, suspended ceilings, raised floors; Roofs: Glass roofs; Corrosion and protection, Fire Protection; Wood in Architecture: Wood construction components; Principles of Design and Construction: Fundamentals of planning, Load bearing systems, Bracing, Floor structures, Construction of floors, Integration of building structure with building insulation, Wooden Stairs; External Walls and facade claddings; Internal walls construction; Roofs.

#### YPD105 Construction and Material

3+0 3.0

Definition of Materials: History; Natural Stone as an Element of Construction Materials; Aggregate: Classification, Screen Analysis, Granulometry, Properties of Aggregates Used in Foundation Construction; Properties of Bitumen Aggregate; Experiments Applied to Aggregate; Plaster; Lime; Cement, Properties of Cement; Mortar and Properties; Concrete and Properties of Concrete; Mixture Ratios for Concrete Materials; Metals, Woods, Glass, Plastic Materials.

#### YPD108 Building Electrical Installation Knowledge

2+0 3.0

Electricity Technology and Applications in Buildings; General Information About Electricity and Installations: Tools and Equipment Used in Electricity Installations; Recessed and Surface Mounted Installation and Rules; Regulations, Implementation and inspection in electrical installations; Electrical Installation Projects and Readings; Electric Motors in Construction and its their Use; Electrical Installation Panels and Hydrophoresofors; Devices Used in Heating and Natural Gas Installations.

### YPD201 Repairs and Strengthening of Structures

2+0 2.0

Damage Assessment in Building: Study of building survey; Non-Destructive Inspection and Destructive Inspection; Strengthening of structures. Repair and strengthening methods; Strengthening techniques of materials; Financial issues in Strengthening.

# YPD202 Damage in Buildings

3+0 3.0

Type of damage and causes in reinforced concrete elements; To apply basic principles to determine the damage status; Basic principles of surveying; The methodology of damage in buildings and their causes; Improvement of damages in buildings; Damages in wood, steel, concrete and reinforced concrete structures.

#### YPD204 Building Site Organization

2+0 3.0

The creation of building site; Work programmed; Manufacturing preparation building site; Manufacturing teams and their applications; Excavations works and office works; Preparation of progress payment. applications; Excavations works and office works; Preparation of progress payment.

#### YPD205 Application of Building Inspection

2+2 4.0

Regulation of building inspection; Considerations when examining projects; Application of buildings; Preparation of Concrete: Concrete casting and processing; Sampling; To check compliance with standards; Methodology of permission to use the buildings.

# YPD206 Structures and Earthquake

2+0 4.0

Earthquake Movement: The behavior of structure element under the influence of earthquakes; Curating wall system design Structures under torsion; Design of masonry structures; Considerations in earthquake resistance structural system.

### YPD207 Introduction to Computer Aided Design

2+1 3.0

Definition and Aim of AutoCAD 2000: Coordinate System; Command Line; Trim; Erase; Save; Save As; Command Offset; Mirror; Chamfer; Fillet; Move; Rotate; Scale; Stretch; Lengthen; Extend; Dimension; Polygon; Circle; Rectangle; Ellipse; Point; Hatch; Explode; Inquiry; Option Properties: Make Block; Insert Block; External References; Image; Format; Jpeg; Bmp; Export; Plot; Plot Preview.

### YPD208 Building Inspection and Legal Aspects of Reconstruction

2+1 3.0

Administrative Structure of Turkey: Centralized administration; Decentralized administration; Limitations of Authority in City Planning and the Reconstruction Law: Basic principles of city planning; Allotment and unification; Principles of construction, Provisions of penalty; Regulations based on reconstruction law; Regulations on the elaboration of existing maps; Regulations on elaborating and changing city plans; Regulations on land subdivision; Typical reconstruction regulation of municipalities; Regulation on parking areas; Regulation on reconstruction amnesty.

#### **YPD209** Traditional Building Materials

3+0 4.0

Classification of Stone and Terracotta Products Used in Historical Periods; Raw Material Processing and Shaping Techniques; Examination of Traditional Construction Methods and Materials Used in Buildings; Development Processes; Durability Determination Methods; Reinforcement Techniques; Protection Methods. Creating Traditional Building Materials Determination of substances by XRD, XRF, DTA and SAM Analysis.

# YPD213 Laboratory Experiments in Building Inspection I

3+1 4.0

Requirements for Construction Supervision Law No. 4708 According to TS 1900 Soil Tests; Determination of Water Content; Consistency (Atterberg) Limits; Finding Particle Diameter Distribution; Obtaining Dry Unit Volume Weight-Water Content Relation on Ground with 2.5 Kg Rammer; Obtaining Dry Unit Volume Weight-Water Content Relation on

Ground with 4.5 Kg Rammer; Determination of Dry Unit Volume Weight in Ground; Determination of One-Way Consolidation Properties; Determination of Free (Uniaxial) Compressive Strength; Determination of Slip Resistance with a Cutting Box.

#### YPD214 Laboratory Experiments in Building Inspection I

3+1 4.0

Concrete Experiments According to TS 12350-TS 12390 and TS 12504 Required in the Laboratory As Per the Building Inspection Law No. 4708; Sampling in Fresh Concrete; Sample Slump Test in Fresh Concrete; Preparation and Curing of Test Samples to be Used in Strength Tests; Determination of Density of Fresh Concrete; Compressive Strength Determination of Experimental Samples in Hardened Concrete; Core Samples and Core Drilling; Non Destructive Experiments; Determination of Back Bounce Value; Determination of Density of Hardened Concrete.

#### YPD215 Converting Buildings to Sustainable Green Buildings

3+0 4.0

Sustainable Buildings; Climate Change; Global Warming and Increasing Energy Costs; Green Buildings; Benefits of Green Buildings; Green Building Cortification Systems; Green Building Cost; Green Building Applications; Development of Green Building Concepts in Turkey; International Green Building Performance Evaluation Systems; LEED and BREEAM Applications. Building Performance Evaluation System and the Issues Experienced in Turkey.

#### YPD216 Alternative Building Materials

3+0 4.0

Alternative Building Materials in Parallel to the Development of Technology; Carrier Construction Materials that can be Used as an Alternative to Reinforced Concrete and Non-Carrier Protective and Detail Materials; Production Methods of Materials; Types and Usage Areas; Comparing Advantages and Disadvantages; Determination of Substances Forming Alternative Building Materials by XRD, XRF, DTA and SAM Analysis.

#### YPD217 Land Ownership and Real Estate Valuation in Building Inspection 3+0 4.0

Land Definition in Building Inspection; Ownership; Property Types; Altitude Rights; Personal and Land Alliance Rights; Floor Altitude and Condominium Ownership; Commentary and Hostages; Land Registry and Its Applications; Real Estate Valuation; Valuation Expertise; Moral Principles; Principles that form the Basis of Real Estate Value; Elements of Real Estate Value; Issues to be Considered in Real Estate Valuation; Related Theories and Valuation Methods

#### YPD218 Urban Transformation and Urban Planning in Building Inspection 3+0 4.0

Urban Transformation and Urban Planning Legislation; The Place and Importance of Urban Transformation in Building Inspection; Urban Transformation Applications; Definition of Urbanization; Dynamics and Reasons; Urbanization Theories; Urbanization Models in the World; Present Urban Planning in Turkey in the past; Current Problems of Urbanization and Urban Transformation Process; Interdisciplinary Work in Urban Planning; Importance and Application Examples.

#### YPD220 Logic, Science and Ethics in Building Inspection

3+0 4.0

The Origin of the Word Intermediate (Technician-Technician); Sector Meaning and Types; Expert Opinion; Interim Training and Problems in Building Inspection Sector in Vocational Education; Engineer-Technician Relationship; Philosophy of Knowledge; Logic Conjunctions; Propositions; Inferences (Reasoning); Mind-Logic Matrix; Fuzzy Logic Principles; Development of Scientific Thought; Empiricism; Information and Types; Engineering Ethics and Principles.

# YPD222 Fundamental Disaster Knowledge in Building Inspection

3+0 4

Disaster and Disaster Types; Structures and Disaster; Earthquake; Characteristic Properties of Earthquakes; Fault Systems and Earthquake Activity; Disaster Risk Areas in Turkey; Buffer Zone Formation; Activities Required Before and After the Earthquake; Hydro-Meteorological Disasters; Global Climate Change and Climate Risk Management; Mass Movement; Structures and Earthquake; Technological Disasters; Disaster Management and Public Organizations in Turkey: AFAD.

#### YPD2501 Economics In Building Inspection

3+0 4.0

Economics and Basic Concepts: The birth of economics, its historical development, its relationship with other sciences and its importance in the construction inspection sector; Engineering Economics and Basic Principles; Time Value of Money; Supply and Demand Concepts; Economic Variables: Gross Domestic Product, Unemployment; Elements Affecting the Economy: Interest, Inflation, Devaluation, Exchange Rate, Financial Markets; Economic Policies: Monetary Policy, Fiscal Policies; The Effect of Economic Elements and Economic Policies on the Construction Sector; The Place and Effect of the Construction Inspection Sector in Türkiye and the World Economy.

#### YPD2502 Cost, Quantity and Exploration In Building Inspection

3+0 4.0

Cost, Quantity Take-off and Estimation Concepts: Traditional Cost Methods; Preliminary, Intermediate and Final Estimation Methods; Estimated Cost Calculation of Construction Based on Quantity Take-off: Quantity Take-off; Estimation: Unit price, Transportation analysis, Estimated cost; Excavation-Filling Quantity Take-off: Excavation and Filling in Building Foundations; Quantity Take-off for Excavation Works in Channels: Formwork Quantity Take-off; Formwork Scaffolding Quantity Take-off; Reinforcement Quantity Take-off; Concrete Quantity Take-off; Work

Scaffolding Quantity Take-off; Roof Quantity Take-off; Floor, Wall and Ceiling Coverings Quantity Take-off; Mechanical and Electrical Installation Quantity and Estimation.

#### YPD2503 Solar Energy and Applications In Building Inspection

3+0 4.0

Energy Science and Basic Historical Development, Concepts: Birth of energy science, Its relationship with other sciences and its importance in the building inspection sector; Energy Sources; Solar Radiation Coming to Earth; Components and Working Principles of Solar Energy Systems; Areas of Use and Purposes of Solar Energy Systems; Solar Energy Active Systems: Heating Systems, Photovoltaic (PV) Systems; Efficiency of Active Systems: Active System Design, Evaluation of Active Systems in Buildings; Providing Savings with Solar Energy in Buildings and Recovery to the Economy; Solar Energy Applications: Design, Method, Problems and Solution Suggestions.

# YPD2505 Foundation Drilling and Grouting Applications In Building Inspection 3+0 4.0

Historical Development of Drilling, Concepts: Drilling types, Diamond Drilling and Rotary Drilling, Introduction of machinery and equipment; Using DCDMA and CMS Drilling Standards: Ground (Foundation) Drilling, Injection Drilling; Construction Techniques and Injection Mixture Ratios, Injection Additives, Injection Pressures, Preparation of Mixtures and Applications; Drilling, Scanning, Logging, Isolation, Equipment, Washing-Graveling, Pump Experience in Drilling Wells; Field Tests Conducted in Drilling Wells: Calculation of Test Data and Evaluation of Results; Preparation of Drilling-Injection well logs, sections and reports suitable for the purpose.

#### YPD299 Internship

0+2 5.0

Information about Internship: Purpose, Method, Process, Professional Awareness: Scope of the Profession, Research-Oriented Areas, Practical-Oriented Areas, Occupation and Employability; Occupation and Career Planning; Vocational Training and Specialization: Documentation of Expertise; On-site Practice: Field Trip Technical Trips and Application Studies; Project Design: Determination, Planning, Analysis, Method and Equipment Selection, Application and Conclusion, Reporting and Presentation.