Tarsus University
Faculty of Engineering
Electrical and Electronic Engineering

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Course Content Report

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 107	CAREER PLANNING	1	0	0	1.00	2.00	Compulsory

Course Content

Conceptual framework for career planning; Promotion of exchange programs and scholarship programs to support undergraduate education; Introduction of vocational national and international certificate and training-practice programs; Introduction of the program and elective courses for career alternatives; Explaining communication issues such as introducing oneself, official correspondence rules, addressing in official interviews and interviews; Giving information about the use of diction and body language; Introduction of the sector and related business lines; Transfer of professional experience with the participation of a sector representative or a successful professional in the sector; Preparing a CV and transferring basic information to the CV; Examining CV samples and introducing job/professional application platforms; Teaching interview techniques; Transfer of professional experience with the participation of a sector representative or a successful professional in the sector

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 105	INTRODUCTION TO ELECTRICAL ELECTRONICS ENGINEERING	2	0	0	2.00	2.00	Compulsory

Course Content

A Brief History of Electrical-Electronics Engineering, Definition and Scope of Electrical-Electronics Engineering and Fields of Study, Interaction of Electrical-Electronics Engineering with Other Sciences and Engineering Fields, Academic Staff of our Department, Departments and Laboratories, Vision and Mission of our Department, Educational Aims and Outputs of our Department Curriculum and Quality Improvement Program, Student Counseling System and Survey Applications of our Department, Internship and Technical Trip, Seminar and Meeting Activities of our Department, Education and Training in Engineering, Social and Universal Effects of Electrical and Electronics Engineering, Important and Basic Problems of Our Age, Project Management, Risk knowledge of business practices such as management and change management; awareness of entrepreneurship, innovation; Information about sustainable development, Effective Written and Verbal Communication in Engineering, Lifelong Learning Awareness, Professional and Ethical Rules in Engineering, Basic Electrical-Electronics Knowledge, Basic Measurement Knowledge.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 107	COMPUTER PROGRAMMING I	2	1	0	2.50	3.00	Compulsory

Course Content

Basic computer organization; binary data representation; introduction to an programming language; basic and container data types; variables, expressions, statements; repetitive programming; algorithmic thinking; functions; working with files; exception handling and debugging; scientific programming.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 111	ATATURK PRINCIPLES AND HISTORY OF TURKISH REVOLUTION I	2	0	0	2.00	2.00	Compulsory

Course Content

Atatürk's Principles and Revolution History-I expresses the historical conditions of Turkish Revolutions and includes purpose and meaning of the revolution.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 113	TURKISH I	2	0	0	2.00	2.00	Compulsory

Course Content

Definition and Features of Language; Language-Thought, Language-Nation and Language-Culture Relationship; Classification of World Languages, Language Families; The Place of Turkish Language Among World Languages ??and Its Historical Development; Sound Characteristics of Turkish; Turkish Language Association, Atatürk's Turkish View; Phonology, Sound Events; Writing rules; Punctuation.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 101	PHYSICS I	3	1	0	3.50	5.00	Compulsory

Course Content

This course includes these topics: units and physical quantities, vectors, motion in one or two dimensions, force, laws of conservation of work and energy, potential energy, circular motion, static equilibrium etc.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 107	GENERAL CHEMISTRY	3	1	0	3.50	5.00	Compulsory

Course Content

In this course, students will learn basic chemistry knowledge and will be able to perform chemical scale calculations with this information. They will also have detailed information about the compound types and their behavior.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 105	MATHEMATICS I	4	0	0	4.00	5.00	Compulsory

Course Content

This lesson includes the following subjects; limit and continuity, derivative and applications of derivative, integral and integral applications.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 119	ADVANCED ENGLISH I	3	0	0	3.00	4.00	Compulsory

Course Content

This course; Includes topics aimed to ensure academic level English reading skills.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 120	ADVANCED ENGLISH II	3	0	0	3.00	4.00	Compulsory

Course Content

This course includes advanced English grammar rules, effective writing techniques, oral communication skills, listening and reading skills, and advanced vocabulary studies.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 112	ATATURK PRINCIPLES AND HISTORY OF TURKISH REVOLUTION II	2	0	0	2.00	2.00	Compulsory

Course Content

The course of Atatürk's Principles and History of Turkish Revolution-II includes political, economical, cultural, social developments during the historical process from the foundation of Turkish Republic up to now. It deals with the changes that Turkey has experienced by being predicated on the important turning points of our recent history. The principles of Atatürkist thought and Atatürkism as a modern thought are included to the course content properly according to the aim of the course.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
OD 114	TURKISH II	2	0	0	2.00	2.00	Compulsory

Course Content

Expression disorders, types of written expression, thoughts, artistic writing, types of correspondence, types of verbal expression.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 102	PHYSICS II	3	1	0	3.50	5.00	Compulsory

Course Content

Electric Fields; Gauss's Law; Electric Potential; Capacitance and Dielectrics; Current and Resistance; Direct Current Circuits; Magnetic Field; Sources of the Magnetic Field; Faraday's Law; Inductance; Alternating Current Circuits.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 106	MATHEMATICS II	4	0	0	4.00	5.00	Compulsory

Course Content

This course includes sequences, series and applications, vectors, limit, continuity and derivative, direction derivatives and multiple integrals in multivariable functions etc.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 110	LINEAR ALGEBRA	3	0	0	3.00	4.00	Compulsory

Course Content

Matrices: Definition of matrix, types of matrices, equality of matrices, sum and difference of matrices, product of a matrix with a scalar, properties of sum of matrices and multiplication of scalars, multiplication of matrices and their properties, transpose of matrix and its properties -Some Special Matrices and matrix applications - Elementary row and column operations in matrices, reduced row (echolon) form of a matrix, rank of matrix, inverse of a square matrix -Determinants: Determinant of a square matrix, Laplace expansion, determinant properties -Sarrus rule, Supplementary matrix, inverse of a matrix with the help of additional matrix calculation, -Linear Equation Systems: Solution of systems of linear equations with the help of equivalent matrices, Systems of linear homogeneous equations, -Cramer's method, Solution with the help of coefficients matrix, -Vectors: Vector definition, sum of vectors, difference, analytical expression of vectors, scalar product of vectors, properties of the scalar product. Vector product and its properties, Mixed product and its properties, Double vector product and its properties, -Vector Spaces: Definition of vector spaces and related theorems. Sub vector space. The concept of stretching and basic theorems. Linear dependence and linear independence of vectors and related theorems, -Base and dimension concept and fundamental theorems. Definition of coordinates and transition matrices and related theorems. -Eigenvalues ??and Eigenvectors:Calculation of eigenvalues ??and eigenvectors of a square matrix, -Calculation of inverse and power of a square matrix with the help of Cayley-Hamilton Theorem

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 106	COMPUTER PROGRAMMING II	2	1	0	2.50	4.00	Compulsory

Course Content

Programming and algorithm development, constants, variables, operators, conditional expressions, loops, functions, data structures, object-oriented programming, modules and packages, file operations, database operations, graphical interface operations, purposeful use of libraries, modules and packages.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 108	COMPUTER AIDED ENGINEERING DRAWING	2	2	0	3.00	4.00	Compulsory

Course Content

Introduction to technical drawing: Basic concepts, Geometric drawings, Line types, Layers, Projection, View extraction, Section views: applications of full, half and gradual section view, Creating Perspective, Dimensioning principles.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 215	CIRCUIT THEORY I	3	0	0	3.00	3.00	Compulsory

Course Content

Current, voltage, power, energy. Resistor. Sources. Ohm and Kirchoff's Laws, Circuit Analysis techniques (Node voltage, mesh current, Thevenin and Norton Theorems, superposition, source transformation). OPAMP, Capacitor and inductor. RL and RC circuits, Transient response. Step response. Transient and step response of RLC circuits.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 223	SEMICONDUCTORS	3	0	0	3.00	3.00	Compulsory

Course Content

Semiconductor materials. Crystal lattices. Growth of semiconductors. Atoms and electrons. The Bohr model. Quantum mechanics. Bonding forces and energy bands in solids. Charge carries in semiconductors. Electrons and holes. Conductivity and mobility. Excess carries in semiconductors. Photodetectors. p-n junction. p-n junction diode. Tunnel diodes. Photodiodes. Light emitting diode. Field effect transistors. Bipolar junction transistor. Integrated circuits. Fabrication of monolithic circuits. Very large scale integration.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 213	ENGINEERING MATHEMATICS	3	0	0	3.00	3.00	Compulsory

Course Content

This course includes matrices and linear systems, determinants, complex numbers and functions, complex integration topics etc.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 217	CIRCUIT THEORY LABORATORY I	0	2	0	1.00	2.00	Compulsory

Course Content

Current, voltage, power, energy. Resistor. Sources. Ohm and Kirchoff's Laws, Circuit Analysis techniques (Node voltage, mesh current, Thevenin and Norton Theorems, superposition, source transformation). OPAMP, Capacitor and inductor. RL and RC circuits, Transient response. Step response. Transient and step response of RLC circuits.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 219	LOGIC CIRCUITS	3	0	0	3.00	3.00	Compulsory

Course Content

Binary systems and Boolean algebra. Boolean function simplification. Combinational logic. Sequential synchronous logic. Registers and counters.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 221	LOGIC CIRCUITS LABORATORY	0	2	0	1.00	2.00	Compulsory

Course Content

Binary systems and Boolean algebra. Boolean function simplification. Combinational logic. Sequential synchronous logic. Registers and counters.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 203	DIFFERENTIAL EQUATIONS	3	0	0	3.00	5.00	Compulsory

Course Content

The content of this lesson; solution methods of first order differential equations, linear differential equations and solution methods of systems, laplace and inverse laplace transforms.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 203	PROBABILITY AND STATISTICS	3	0	0	3.00	4.00	Compulsory

Course Content

Introduction to probability, combination, permutation, relative frequency approximation, axioms of probability, set theory, conditional probability, Bayes' theorem, the concept of statistical independence, mutually exclusive events, discrete random variables, probability mass and distribution functions, expected value, variance, Bernoulli, Binomial and Poisson random variables, continuous random variables, their probability density and normal random distribution functions, their probability density and Gaussian supernormal distribution functions, expected value, variance variables, density function of the function of a random variable, composite probability density function, density function of the function of independent random variables, introduction to random processes.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 209	TECHNICAL ENGLISH	2	0	0	2.00	2.00	Compulsory

Course Content

The course includes the reading, writing and discussion of texts about different topics of electrical-electronic engineering.To understand native speakers, professionals, and students, talking about their work and study-to understand experts talking informally about aspects of electronics.Students will be able to understand a wide variety of text including diagrams, tables, graphs,and job advertisements. They will be able to compare different sources of information, written and spoken

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 211	OCCUPATIONAL HEALTH AND SAFETY I	2	0	0	2.00	3.00	Compulsory

Course Content

This course covers the basic concepts and historical development concepts about occupational health and safety; the duties, powers and responsibilities of the occupational physician and occupational safety specialist in the workplace; risk, danger, primary, secondary, tertiary protection concepts; physical, chemical, biological and psychosocial risks; It includes occupational health and safety legislation at workplaces and practices in the workplace.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 206	COMPLEX ANALYSIS	3	0	0	3.00	5.00	Compulsory

Course Content

Review of complex numbers. Complex functions and mappings: limits, continuity, differentiability, analyticity, Cauchy Riemann equations, harmonic functions. Elementary functions: exponential transformations, trigonometric, and hyperbolic functions, multi-valued functions, logarithmic and power functions. Complex integration, Cauchy's Integral Theorem, Cauchy's Integral Formula and consequences. Taylor and Laurent series, classification of singularities. Residues, the Residue Theorem, evaluation of improper real integrals using the Residue Theorem. Conformal mappings and applications.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 210	BUSINESS ENGLISH	2	0	0	2.00	2.00	Compulsory

Course Content

Prepare written and visual forms, CV, write technical reports, examine feasibility reports, prepare resumes, cover letters, business letters, short notes, proposal drafts in English. Ability to express thoughts in areas where people interact, such as meetings, collaboration, and teamwork in English. To be able to understand and follow current developments in the professional field in English. To be able to express oneself in English in professional meetings, symposiums, congresses, etc.None

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 212	OCCUPATIONAL HEALTH AND SAFETY II	2	0	0	2.00	3.00	Compulsory

Course Content

Risk Management, Risk Evaluation, Risk Analysis, Risk Perception, Psychosocial Risk Factors, Physical Risk Factors, Ergonomic Risk Factors, Chemical Risk Factors, Risk Evaluation Methods, Risk Control Steps, Risk Evaluation Stages, Risk Evaluation Documentation, Risk Evaluation Application, Working on Tools with Screen, Ergonomic Work, Protection from Occupational Musculoskeletal diseases

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
TM 204	NUMERICAL ANALYSIS	3	0	0	3.00	4.00	Compulsory

Course Content

This lesson contains solution methods of nonlinear equations, methods of numerical integral calculation, etc.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 214	CIRCUIT THEORY II	3	0	0	3.00	3.00	Compulsory

Course Content

This course includes sinusoidal continuous state analysis, sinusoidal steady state power calculations and balanced three-phase circuits.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 216	CIRCUIT THEORY LABORATORY II	0	2	0	1.00	2.00	Compulsory

Course Content

This course includes sinusoidal continuous state analysis, sinusoidal steady state power calculations and balanced three-phase circuits.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 218	SIGNALS AND SYSTEMS	3	0	0	3.00	3.00	Compulsory

Course Content

Continuous and Discrete Time Signals and Their Properties, Continuous and Discrete Time Systems and Their Properties, Linear Time Invariant Systems, Convolution in Continuous and Discrete Time Systems, Difference Equations, Fourier Analysis of Continuous and Discrete Time Signals, Fourier Series Expansion, Fourier Transform, Laplace Transform, z -Transformation. The content of the course covers signal operations, convolution operation, Fourier, Laplace and z-transforms and active use of MATLAB software in projects.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 220	ELECTROMAGNETIC FIELDS	3	0	0	3.00	3.00	Compulsory

Course Content

This course includes vector analysis, static electric field, solution of electrostatic problems, static electric field and static magnetic field.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 222	ELEKTRONİK I	3	0	0	3.00	3.00	Compulsory

Course Content

Semiconductors; Diodes; Electrical Behaviour of Diodes and Current-Voltage Curve; Different Diode Structures; Clippers; Rectifiers; Structure of Bipolar Junction Transistors (BJT) and Calculation of Operating Point; Examination of Various DC Bias Circuits; Analysis of Multi-Layer Circuits; Structure of MOSFET and Calculation of Operating Point; Analysis of MOSFET Amplifiers; Analysis of BJT and MOSFET Amplifiers in Low and High Frequency Regions;

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 224	ELECTRONICS LABORATORY I	0	2	0	1.00	2.00	Compulsory

Course Content

Diode Characteristics; Rectifiers; Trimmers; BJT DC Characteristics; Using BJTs as time, heat, and light switches; MOSFET DC Characteristics; Voltage Regulators; BJT Amplifier Frequency Response; MOSFET Amplifier Frequency Response

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
STJ 01	INTERNSHIP	0	0	0	0.00	5.00	Compulsory

Course Content

An internship offers students the opportunity to put the theoretical knowledge acquired during their undergraduate program into practice. Therefore, it encompasses all types of work-related activities. Students are required to work actively for 30 days in any field of work covered by the internship. Detailed daily records and reports are made of the work performed. The prepared internship report is approved by the relevant person in the work environment and submitted to the department for evaluation and grading.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 317	ELECTROMAGNETIC WAVES	3	0	0	3.00	4.00	Compulsory

Course Content

This course covers Maxwell's equations, time-varying fields and electromagnetic waves, the poynting vector and waves at the boundary between the two environments.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 319	ELEKTRONİK II	3	0	0	3.00	4.00	Compulsory

Course Content

Small signal theory and applications, small-signal model parameters, small signal models "hybrid p"i model, "T" model, single-level BJT/MOSFET amplifiers, high-frequency behavior of amplifiers, multistage amplifiers. CMOS principles, feedback concept, operational amplifiers, filter and oscillator circuits

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 321	ELECTRONICS LABORATORY II	0	2	0	1.00	2.00	Compulsory

Course Content

Applications of the analysis and synthesis of the load line in the characteristic functions of BJT and FET circuits in AC conditions in amplifier circuits, applications of analysis and synthesis of low, medium and high frequency equivalent circuits of transistors, applications of circuits related to the synthesis of multi-layer amplifier circuits (with Transistor or FET), amplifiers and operational amplifiers.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 311	FUNDAMENTALS OF CONTROL SYSTEMS LABORATORY	0	2	0	1.00	2.00	Compulsory

Course Content

Introduction. Open-loop, closed-loop. Block diagrams. Modeling dynamic systems. Electromechanical systems. Properties of feedback systems. Time response. Steady-state error. Stability. Root locus analysis. Designing Controller. Frequency response. Bode Criterias. Nyquist diagrams. Phase and gain margins.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 315	ANALOGUE COMMUNICATION	3	0	0	3.00	4.00	Compulsory

Course Content

Overview of communication systems, Fourier analysis and its applications in the analysis of signals and systems in the frequency domain, spectrum (spectra) concept, amplitude modulation and demodulation processes, angle modulation and demodulation processes, probability and random processes, noise and the effect of noise on communication systems.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 305	ELECTRIC MACHINS I	3	0	0	3.00	4.00	Compulsory

Course Content

Basic electromagnetic field principles, electromagnetic equivalent circuit, transformer structure, operation and basic concepts, continuous operation equivalent circuit and equivalent circuit parameters, three-phase transformer, transformer connection types and formation of excitation current, parallel connection of transformers, auto transformers and power gain, measurement transformers, determination of maximum efficiency point in transformers, windings and formation of rotating field in AC electrical machines, structure and operation of asynchronous machines and basic concepts, continuous operation equivalent circuit of asynchronous machines and derivation of equivalent circuit parameters, torque/power/speed characteristics of induction motors, variable speed and voltage driving, wind turbines, asynchronous generators, self-excited asynchronous generators, double feed asynchronous generators.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 307	ELECTRIC MACHINES LABORATORY I	0	2	0	1.00	2.00	Compulsory

Course Content

Basic electromagnetic field principles, electromagnetic equivalent circuit, transformer structure, operation and basic concepts, continuous operation equivalent circuit and equivalent circuit parameters, three-phase transformer, transformer connection types and formation of excitation current, parallel connection of transformers, auto transformers and power gain, measurement transformers, determination of maximum efficiency point in transformers, windings and formation of rotating field in AC electrical machines, structure and operation of asynchronous machines and basic concepts, continuous operation equivalent circuit of asynchronous machines and derivation of equivalent circuit parameters, torque/power/speed characteristics of induction motors, variable speed and voltage driving, wind turbines, asynchronous generators, self-excited asynchronous generators, double feed asynchronous generators.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 309	FUNDAMENTALS OF CONTROL SYSTEMS	4	0	0	4.00	5.00	Compulsory

Course Content

Introduction. Open-loop, closed-loop. Block diagrams. Modeling dynamic systems. Electromechanical systems. Properties of feedback systems. Time response. Steady-state error. Stability. Root locus analysis. Designing Controller. Frequency response. Bode Criterias. Nyquist diagrams. Phase and gain margins.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 306	CONTROL SYSTEMS II	3	0	0	3.00	4.00	Compulsory

Course Content

The course will focus on the basic concepts of communication theory, especially digital communication and random signals. The topics to be covered in the course can be summarized as follows: 1. Random processes and their applications in communication systems. 2. Transmission techniques in band-limited channels of digital communication systems. 3. Digital modulation techniques in digital communication systems. (ASK, FSK, PSK, QAM Modulation techniques and digital receiver designs Laboratory: In the laboratory, mainly MATLAB, block diagrams of digital communication systems will be realized and their performances will be analyzed with computer simulations.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 308	COMMUNICATION SYSTEMS II	0	2	0	1.00	2.00	Compulsory

Course Content

Oscillators, Filters, Amplitude Modulator and Modulator, Angle Modulation, Frequency and Phase Modulation and Demodulation, ADC and DAC, PCM, PPM, PWM, Multiplexing.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 310	POWER ELECTRONICS	3	0	0	3.00	4.00	Compulsory

Course Content

It covers the operating principles and characteristics of semiconductor power switches, power and harmonic calculations in electrical circuits containing non-linear source or load states, analysis of AC/DC, DC/DC and DC/AC power electronics converter circuits, special cases in power electronics converters.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 320	MICROPROCESSORS	3	0	0	3.00	3.00	Compulsory

Course Content

Historical development of microprocessors, Basic microprocessor architecture, Memories, Advanced microprocessor features, CISC and RISC architectures, x86 microprocessor families, Advanced microprocessors, assembly programming language, x86 instruction structure and set, addressing techniques, in microprocessor programming: arithmetic and logical operations, rotating and orientation commands, control commands, string operations, BIOS and OS relationship, interrupts, screen and keyboard operations, disk operations, basic input/output techniques, subprograms.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 318	MICROPROCESSORS	0	2	0	1.00	2.00	Compulsory

Course Content

Microprocessor hardware connections, microprocessor assembly compiler programs, microprocessor emulator program, microprocessor programming related: data transfer command applications, applications related to arithmetic and logic operations, rotating and routing applications, control instructions applications, string operations applications, time delay operations and applications related to subroutine, applications related to interrupts, applications related to basic input-output techniques.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 322	DESIGN PROCESSES	3	0	0	3.00	4.00	Compulsory

Course Content

Engineering design, problem definition. Identification of needs, and gathering information. Decision-making and concept selection. Definition of projects and project management. Gantt chart, project management using CPM and PERT techniques, resource scheduling in projects, project planning and tracking with MS Project, earned value analysis, and risk analysis. Detailed design. Modeling and simulation. Risk, reliability, and safety. Cost analysis. Quality and robust design. Legal and ethical issues.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 324	APPLICATIONS OF MATHEMATICS IN ELECTRICAL AND ELECTRONICS ENGINEERING	2	2	0	3.00	6.00	Compulsory

Course Content

n the context of a high-level programming language environment, the course covers topics such as file handling, loops, conditions and states, if-then-else statements, logical operations, function invocation, arrays/vectors/matrices, displaying and graphically representing data, debugging, and code aesthetics. Additionally, it includes various applications related to basic electrical-electronic engineering courses.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 312	POWER ELECTRONICS LABORATORY	0	2	0	1.00	2.00	Compulsory

Course Content

It covers the operating principles and characteristics of semiconductor power switches, power and harmonic calculations in electrical circuits containing non-linear source or load states, analysis of AC/DC, DC/DC and DC/AC power electronics converter circuits, special cases in power electronics converters.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
STJ 03	INTERNSHIP	0	0	0	0.00	5.00	Compulsory

Course Content

An internship offers students the opportunity to put the theoretical knowledge acquired during their undergraduate program into practice. Therefore, it encompasses all types of work-related activities. Students are required to work actively for 30 days in any field of work covered by the internship. Detailed daily records and reports are made of the work performed. The prepared internship report is approved by the relevant person in the work environment and submitted to the department for evaluation and grading.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 405	ELECTRICAL AND ELECTRONICS ENGINEERING APPLICATIONS	1	2	0	2.00	5.00	Compulsory

Course Content

Essential Rules of Teamwork, Identifying Research Problem, Identifying Design Constraints, Assumptions and Properties, Literature Search, Ideating possible solutions, Evaluating and selecting a promising solution, Testing and troubleshooting, Writing Research Grant Proposal, Technical Report Presentation

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 403	ELECTRICAL POWER SYSTEMS I	3	0	0	3.00	5.00	Compulsory

Course Content

Three Phase Systems, Synchronous Machines, Voltage and Reactive Power Control, System Stability

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 402	ELECTRICAL AND ELECTRONICS ENGINEERING APPLICATIONS II	0	2	0	1.00	5.00	Compulsory

Course Content

In this course, students' theoretical knowledge is applied to real life problems. It is a work chosen by the student in relation to the project work and developed by mutual consultation with his/her advisor at certain times. Within the scope of the course, the theoretical approach, concepts, national and international examples that support the project work are examined and compared with the field of study.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 406	ENERGY TRANSMISSION AND DISTRIBUTION SYSTEMS	3	0	0	3.00	5.00	Compulsory

Course Content

Electrical energy transmission and distribution networks, power transmission lines, network line constants, transformer centers and equipment, overhead line conductors, underground cables, poles, insulators, distribution of electrical energy, transformer selection, protection relays and grounding.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE GS I	GENEL SEÇMELİ I	2	0	0	2.00	3.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 001	RESEARCH METHODS	2	0	0	2.00	3.00	Seçmeli

Course Content

This course includes information about scientific research, research process, identification of research problem, literature review, data collection methods, creating hypothesis, universe, sample, analysis methods and research report.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 003	TECHNICAL COMMUNICATION	2	0	0	2.00	3.00	Seçmeli

Course Content

This course includes information about scientific research, research process, identification of research problem, literature review, data collection methods, creating hypothesis, universe, sample, analysis methods and research report.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 005	STRESS AND TIME MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

This lesson; historical development of occupational health and safety, occupational accident and occupational diseases and costs, the concept of occupational safety, the importance of occupational safety studies in terms of workforce efficiency, basic factors in occupational safety, sources of hazards, the concept of occupational health, psychosocial risk factors, ILO conventions, events that disrupt security Includes fire, earthquake and flood issues.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 009	PUBLIC ADMINISTRATION	2	0	0	2.00	3.00	Seçmeli

Course Content

The nature of public administration, Central government organizations, Local administrations; Subjects such as special provincial administration and the concept of bureaucracy constitute the content of this course.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 011	VOLUNTEERING STUDIES	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 013	ACADEMIC TURKISH	2	0	0	2.00	3.00	Seçmeli

Course Content

Definition of language, its characteristics, relations between language-nation / language-thought and language-culture. Language in the world; the place and importance of Turkish among them and its historical development. Ataturk's language revolution, concept and works. Sounds in Turkish. Phonology of Turkish. Spelling rules and application. Punctuation rules and application. Vocabulary. Productiveness of Turkish.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 015	CREATIVE DRAMA AND IMPROVISION	2	0	0	2.00	3.00	Seçmeli

Course Content

This course includes the sociological and psychological dimensions of drama, history of drama and its applications in education, drama in education, role play and improvisation, and the relationship of drama with creativity and communication concepts, drama practices and how to use drama activities in teaching different courses.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 017	HUMAN RESOURCES MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 019	FIRST AID	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 021	BUSINESS LAW	2	0	0	2.00	3.00	Seçmeli

Course Content

This lesson; the emergence of labor law, sources of labor law, types of employment contract, termination of employment contract, working hours, Permissions and wages, etc. covers topics.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 023	ENTERPRISE RESOURCE PLANNING	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 025	HUMAN RIGHTS	2	0	0	2.00	3.00	Seçmeli

Course Content

Historical Development of Human Rights, European Convention on Human Rights and International Fundamental Documents on the Protection of Human Rights, European Court of Human Rights and its Case Laws, Fundamental Rights and Freedoms, Generational Rights.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 027	ENTREPRENEURSHIP	2	0	0	2.00	3.00	Seçmeli

Course Content

Basic terms in entrepreneurship; Preparing a business plan; Basics of marketing research; Preparing a marketing plan; Production plan; Organization plan; Financial plans; Financial statement

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 031	HISTORY OF SCIENCE	2	0	0	2.00	3.00	Seçmeli

Course Content

Science. Science from the perspective of civilizations: Nile and Anatolian civilizations; Asian, Chinese, Indian, Roman, Greek and Islamic civilizations. European, American, Asian, Far East, Middle-Eastern civilizations. Turkish World History of Science and Technology; History of glass, textile and ceramic technology; history of iron-copper and casting technology.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 033	SOCIAL PSYCHOLOGY	2	0	0	2.00	3.00	Seçmeli

Course Content

Psychology science, fields of psychology, the place of social psychology in psychology, social psychology field and methods, human nature, socialization, social perception, attitudes and change, social impact, individual behavior in the group, interpersonal attraction and love.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 035	COMMUNICATION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 037	FINANCIAL LITERACY	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 039	SIGN LANGUAGE	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 041	DISASTER AND CRISIS MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

The principles of disaster and crisis management, concepts, definitions and standards, elements of the emergency plans and emergency management, emergency situations, the communication, the importance of evacuation, examination of mitigation-preparation-intervention improvement phase, the next desk applications; The objective of crisis management, identification of the crisis, characteristics, stages, aspects of crisis management, history and time, disaster management and crisis management as well as providing information on legislative issues

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 043	CITY AND SOCIETY	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 045	ENVIRONMENTAL PROTECTION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 047	BEHAVIORAL SCIENCES	2	0	0	2.00	3.00	Seçmeli

Course Content

Behavior, Behavioral Sciences, Development of Behavioral Sciences and Their Relationship with Other Social Sciences, Behavioral Plane and Social Institutions, Needs and Related Theories as the Main Source of Behaviors, Personality and Personality Traits, The Concept of Learning, Perception and Perception, Social Impact and Adaptation, Attitude Concept and Attitudes, Communication and Impressive Communication, Group Structure and Dynamics, Teaming, Group Team Decomposition, Effect of Culture and Behavior.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 049	HISTORY OF CLOTHING	2	0	0	2.00	3.00	Seçmeli

Course Content

Clothing in Prehistoric Societies; A.D. Clothing Culture in Various Regions of the World (Anatolia, Asia, Europe, Australia, Africa, America...) from the 5th Century to the 20th Century; the Latest Situation of Clothing Culture in the 21st Century.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 051	FINANCIAL INVESTMENT ANALYSIS	2	0	0	2.00	3.00	Seçmeli

Course Content

Financial markets, investment instruments, interest calculations, return and risk calculations, valuation, and portfolio transactions.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 053	SPECIAL EDUCATION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 055	INTERNATIONAL POLITICS	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 057	HISTORY OF TURKISH DEMOCRACY	2	0	0	2.00	3.00	Seçmeli

Course Content

Democracy, Political Party and Parliament; Parliamentary System, Presidential System, Parliamentary Government System; Emergence of Parliament: England; Emergence of Parliament: France; Turkish Modernization and Democratization: From Nizam-ı Cedid to the First Constitutional Monarchy; I. Constitutional Monarchy and II. Abdulhamid Eras; II. Constitutional Era; War of Independence and Parliamentary Government System; Early Republican Era; From Transition to Multi-Party Life to the Constitution of 61; Political Developments from the Adoption of the Constitution of 61 to the 12 March Regime; Political Developments from 1971 to the 12 September Regime; Political Developments from 12 September Regime to the 28 February; Political Developments Since the 28 February.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 059	CREATIVITY MANAGEMENT AT THE WORKPLACE	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 061	HISTORY OF MATHEMATICS	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 063	ANALYZING THE ECONOMICAL INDICATORS	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 065	ENGLISH-TURKISH TRANSLATION	2	0	0	2.00	3.00	Seçmeli

Course Content

This course follows a process consisting of material sharing that facilitates students' basic vocabulary knowledge and foreign language reading and writing skills, as well as provides guidance for translating the target language to the native language. It also includes regular assignments to practice and apply what they have learned.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 067	NEUROMARKETING	2	0	0	2.00	3.00	Seçmeli

Course Content

The basic topics in this course are; determining the methods of neuroscience methods on marketing strategies, using neuroscience data in the process of consumer protection, neuromarketing strategies and ethical side of neuromarketing.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 069	COMMUNICATION WITH DISABLED INDIVIDUALS	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 071	ADDICTION AND FIGHT AGAINST ADDICTION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 073	INFORMATION LITERACY	2	0	0	2.00	3.00	Seçmeli

Course Content

The importance of information literacy Information literacy: Concepts, definitions Legal and ethical issues in the scientific research process The scientific research process (wonder, research, select, binding, transfer and evaluation) Information access tools (library catalogs, databases, search engines) Information Search Strategies Principles of quotation, footnote and bibliography

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE GS II	GENEL SEÇMELİ II	2	0	0	2.00	3.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 002	MEDIA AND COMMUNICATION	2	0	0	2.00	3.00	Seçmeli

Course Content

The content of this course; It will provide a historical, economic, political and cultural general introduction to communication theories, current mass communication systems and different factors in their development. In addition to cultural industries such as internet, radio, television, cinema, newspaper, advertising and public relations, more comprehensive topics such as globalization will be examined.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 004	DICTION AND EFFECTIVE SPEAKING	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 006	BUSINESS ETHICS	2	0	0	2.00	3.00	Seçmeli

Course Content

The lesson contains these topics: Ethical and moral concepts - Ethical systems - Professional Concept and Professional Ethics - Ethical and Unethical Behaviors in Business Life - Professional Corruption and Ethics - Social Responsibilities of Business and Ethics etc.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 008	PROTOCOL AND SOCIAL BEHAVIOR RULES	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 010	PRODUCTION MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 012	VOLUNTEERING STUDIES	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 016	CREATIVE DRAMA AND IMPROVISATION	2	0	0	2.00	3.00	Seçmeli

Course Content

This course includes the sociological and psychological dimensions of drama, history of drama and its applications in education, drama in education, role play and improvisation, and the relationship of drama with creativity and communication concepts, drama practices and how to use drama activities in teaching different courses.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 018	HUMAN RESOURCE MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 020	FIRST AID	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 022	BUSINESS LAW	2	0	0	2.00	3.00	Seçmeli

Course Content

This lesson; the emergence of labor law, sources of labor law, types of employment contract, termination of employment contract, working hours, Permissions and wages, etc. covers topics.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 024	POLITICAL MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 026	SUSTAINABILITY	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 028	PROBLEM SOLVING AND DECISION MAKING	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 030	TECHNOLOGY ADDICTION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 032	BUSINESS ADMINISTRATION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 034	FACTORY ORGANIZATION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 036	QUALITY MANAGEMENT SYSTEMS	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 038	TECHNOLOGY MANAGEMENT AND R&D	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 040	MARKETING	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 042	SERVICE MARKETING	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 044	E-COMMERCE	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 046	CURRENT ECONOMIC ISSUES	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 048	PUBLIC RELATIONS	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 050	SOCIOLOGY	2	0	0	2.00	3.00	Seçmeli

Course Content

Within the scope of the course, the definition of sociology, its basic concepts, its emergence as a science will be emphasized. Afterwards, some topics of sociological interest (such as modernization, globalization, social stratification, class, gender) will be discussed.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 052	GLOBALIZATION READINGS	2	0	0	2.00	3.00	Seçmeli

Course Content

The course covers the modern and its conceptual concepts, the general outlines of the modernization process and evolution from the past to the present, 20th-century modernization theories and their criticism, the post-modern period, the emergence conditions and historicity of globalization, the large-scale changes that occurred in the post-globalization period and their economic, political discusses and discusses the topics that will reveal the social and cultural consequences of these developments, and finally question the effects, results, and meanings of these developments in Turkey.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 054	PHOTOGRAPHY	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 056	PROJECT MANAGEMENT	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 058	INTRODUCTION TO BUSINESS SCIENCE	2	0	0	2.00	3.00	Seçmeli

Course Content

Basic concepts of business organizations, organizations' objectives and environment, establishment and classification of organizations, expansion of organizations, the concept of international business and business functions.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 060	HEALTHY AND ACTIVE AGEING	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 062	SALES TECHNIQUES	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 014	ACADEMIC TURKISH II	2	0	0	2.00	3.00	Seçmeli

Course Content

Definition of language, its characteristics, relations between language-nation / language-thought and language-culture. Language in the world; the place and importance of Turkish among them and its historical development. Ataturk's language revolution, concept and works. Sounds in Turkish. Phonology of Turkish. Spelling rules and application. Punctuation rules and application. Vocabulary. Productiveness of Turkish.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 064	DIGITAL TRANSFORMATION AND INDUSTRY 4.0	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 066	HISTORY OF CLOTHING	2	0	0	2.00	3.00	Seçmeli

Course Content

Clothing in Prehistoric Societies; A.D. Clothing Culture in Various Regions of the World (Anatolia, Asia, Europe, Australia, Africa, America...) from the 5th Century to the 20th Century; the Latest Situation of Clothing Culture in the 21st Century.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 068	ADDICTION AND FIGHT AGAINST ADDICTION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
GS 070	CHILD RIGHTS AND FAMILY EDUCATION	2	0	0	2.00	3.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS I	TEKNİK SEÇMELİ I	3	0	0	3.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 417	ELECTRIC VEHICLES	3	0	0	3.00	5.00	Seçmeli

Course Content

Fundamentals of electric vehicles/Energy management in electric vehicles/Examination of the effect of electric vehicle integration on the distribution grid/Electric vehicles today and tomorrow

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 419	WIRELESS AND MOBILE COMMUNICATIONS	3	0	0	3.00	5.00	Seçmeli

Course Content

The aim of the course is to establish a foundation for wireless communication networks. The course begins with a focused introduction to the fundamentals of wireless communication technologies. It then continues with the topics of wireless channel and signal coding, important technologies such as OFDM and spread-spectrum. The details of wireless local and personal networks are explained, including LAN and Bluetooth technologies and IEEE 802.11 and IEEE 802.15 standards. Finally, with a focus on cellular networks, wireless mobile communication networks are explained, including 5G studies.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 421	DIGITAL SIGNAL PROCESSING	3	0	0	3.00	5.00	Seçmeli

Course Content

Discrete-time signals and systems, Discrete-time Fourier transform (DTFT), Discrete Fourier transform (DFT), Discrete-time processing of continuous-time signals, z-transform, Frequency domain analysis of linear and time-invariant systems, Digital filter design techniques. Computer applications.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 423	COMPUTER AIDED CIRCUIT DESIGN	3	0	0	3.00	5.00	Seçmeli

Course Content

Using computer-aided circuit design program, electronic circuit diagram drawing, circuit analysis, manual printed circuit drawing, automatic printed circuit drawing, and printed circuit assembly.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 425	COMMUNICATION ELECTRONICS	3	0	0	3.00	5.00	Seçmeli

Course Content

Series and paralel rezonant circuits, Coupling circuits, Noise , noise figure, Tuned Amplifiers, Oscillators, Superheterodyning receivers, Mixers.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 427	ANTENNAS AND PROPAGATION	3	0	0	3.00	5.00	Seçmeli

Course Content

This course includes antenna theory and basic properties of antennas, power density, radiation density, directivity, gain, polarization, antenna impedance, effective aperture, antenna temperature and noise, Friis transmission formula, radiation integrals and wave equation, basic antenna types, dipole, horn, microstrip and aperture antennas, antenna arrays and antenna measurement principles.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 429	IMAGE PROCESSING	3	0	0	3.00	5.00	Seçmeli

Course Content

This course covers digital image and image processing concepts, image acquisition, sampling and quantization, point and neighborhood operations, frequency domain operations, morphological operations, image enhancement, filtering, analysis, image processing applications, image compression.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 431	PRODUCTION PLANNING AND CONTROL I	3	0	0	3.00	5.00	Seçmeli

Course Content

Analysis of Production Systems and Production Management Concepts, Balancing Production Lines, Capacity Planning, Production Programming, Routing, Loading, Sorting, Programming (Scheduling), Machine Deductions, Sales and Demand Forecasting, Mass Production Planning and Main Production Programming, Production Planning and Control Network Analysis Activity Node Technique, Acceleration of Projects and Time Cost Analysis.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 433	FACILITY DESIGN AND PLANNING	3	0	0	3.00	5.00	Seçmeli

Course Content

Selection of Facility Location and Facilities, Selection of Facility Location and Methods of Analysis in Facility Arrangement, Evaluation Methods in Site Selection, Basic Plant Placement Problems, Fixed Cost Location Selection Analysis, Non-Assignment Settlement Areas, Continuous Facility Placement Problems, Algorithms Used in Computer Aided Installation

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 437		3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS II	TEKNİK SEÇMELİ II	3	2	0	4.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 441	MICROCONTROLLER PROGRAMMING	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 443	LIGHTING TECHNIQUES AND INTERIOR INSTALLATION PROJECT	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 437		3	2	0	4.00	5.00	Seçmeli

Course Content

Differences between microprocessor systems and microcontroller systems, Microcontroller systems, Programmer cards, Translation program to machine language, Installation of the compiled program to microcontroller, Algorithms, Flow diagrams, Microcontroller memory map, Digital input-output applications with a microcontroller, Analog applications with a microcontroller, Display (Display, LCD) applications with a microcontroller, Keypad applications with a microcontroller, Motor control applications with a microcontroller, Communication applications (Serial, I2C, SPI) with a microcontroller, Timer applications with a microcontroller, Various sensors applications with microcontroller.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 445	ARTIFICIAL INTELLIGENCE AND OPTIMIZATION	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 447	ROBOTIC SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 449	FPGA PROGRAMMING AND APPLICATIONS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 451	PROTECTION IN POWER SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 453	DATA COMMUNICATIONS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 439	BIOMEDICAL SIGNALS AND SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS III	TECHNICAL ELECTIVE III	3	0	0	3.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 455	ENGINEERING MECHANICS	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 457	ELECTRICAL POWER GENERATION AND RENEWABLE ENERGY	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 459	ARTIFICIAL NEURAL NETWORKS	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 461	MEDICAL IMAGING TECHNIQUES	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 463	HIGH VOLTAGE TECHNIQUES	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 465	ELECTRONIC DEVICE TECHNIQUES	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 467	WIRELESS COMMUNICATIONS	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 469	PRINCIPLES OF ENERGY CONVERSION	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 471	DYNAMICS	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS IV	TECHNICAL ELECTIVE IV	3	2	0	4.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 473	LINEAR CONTROL SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 475	MECHATRONICS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 477	MICROCONTROLLER PROGRAMMING	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 479	DATABASE PROGRAMMING FOR INTERNET APPLICATIONS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 481	AERODYNAMICS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 496	ELECTRIC MACHINES II	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 485	SYSTEM DYNAMICS AND CONTROL	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 487	OPTIMIZATION METHODS FOR ENGINEERING APPLICATIONS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS V	TEKNİK SEÇMELİ V	3	0	0	3.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 412	ELECTRICAL POWER SYSTEMS II	3	0	0	3.00	5.00	Seçmeli

Course Content

Power flow analysis, symmetrical faults, symmetrical components, analysis of unsymmetrical faults, protection systems, power system controls, transient stability.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 414	HIGH VOLTAGE TECHNIQUES	3	0	0	3.00	5.00	Seçmeli

Course Content

Introduction to high voltage engineering, conduction and breakdown in gases, conduction and breakdown in liquid dielectrics, breakdown in solid dielectrics, corona discharges, applications of insulating materials, generations of high voltages and currents, measurements of high voltages and currents, overvoltage phenomenon and insulation coordination in power systems, non-destructive testing of materials and electrical apparatus, high voltage testing of electrical apparatus, design, planning and layout of high voltage laboratories.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 416	RENEWABLE ENERGY SOURCES	3	0	0	3.00	5.00	Seçmeli

Course Content

Renewable energy sources; Solar energy systems; Wind energy systems; Hydropower; biomass; Wave energy; Geothermal energy; Hydrogen energy.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 418	OPTICAL COMMUNICATION SYSTEMS	3	0	0	3.00	5.00	Seçmeli

Course Content

Historical Process of Electromagnetism. Historical Process of Optical Communication. The Place and Importance of Optical Communication in Communication Technologies. Optical Theory, Geometric Optics, Wave Optics, Fiber Optics. Basic Concepts Used in Optical Communication. Fiber Optic, Optical Waveguides (Optical Fibers). Data Distortion Factors in Optical Communication. Nonlinear Fiber Optic. Polarization, Linear Polarization, Elliptical Polarization. Optical Communication Systems. Production Techniques of Optical Fibers. Modulation Techniques in Optical Communication, Analog Modulation, Digital Modulation. Multiplexing Techniques in Optical Communication. Processing of Optical Signal. Optical Circuit Elements. Performance of Optical Communication Systems. Determination of Characteristic Properties of Optical Signal. Design of Optical Communication Systems. Use of Optical Communication with Other Communication Technologies. Applications of Optical Communication in Other Disciplines and Interdisciplinary Studies. Optical Assembly Applications with OptiWave, OptiSystem, OptiBpm and Matlab. Seminars on Optical Communication.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 420	MICROWAVE THEORY	3	0	0	3.00	5.00	Seçmeli

Course Content

This course covers the concepts of microwave engineering, high-frequency phenomena, Maxwell's equations and boundary conditions, basic transmission line theory, waveguides and applications, Smith chart, passive microwave elements and basic radar principles.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 422	DIGITAL DESINGS	3	0	0	3.00	5.00	Seçmeli

Course Content

Equivalence relation, partial order relation, lattice structures, Boolean algebra. State reduction on completely specific sequential machines. State coding in synchronous sequential circuits. Separation of sequential machines. Circuit design with field-programmed gate arrays. Design of asynchronous sequential circuits, critical race-free coding methods. Circuit design with programmable logic controllers. Error analysis in logic circuits.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 424	CIRCUIT SYNTHESIS	3	0	0	3.00	5.00	Seçmeli

Course Content

Introduction, Basic Circuit Blocks, Properties of circuit functions, Positive real functions and passivity, Properties and implementation of LC input-functions, Properties and implementation of RC/RL input-functions, Passive implementation of transfer functions, Filter approach, Active filters, Sensitivity.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 426	PROCESS CONTROL	3	0	0	3.00	5.00	Seçmeli

Course Content

Basic Concepts in Process Control, Basic Principles of Modeling Chemical Processes, Modeling of Systems Commonly Encountered in Industry such as Stirred Heater Tank, Absorption and Distillation Tower, Isothermal Continuously Stirred Reaction Tank, Analysis and Design of Feedback and Feed Forward Control Methods.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 428	ELECTROCHEMISTRY	3	0	0	3.00	5.00	Seçmeli

Course Content

Fundamentals of electrochemistry/industrial applications of electrolysis/Cathodic procedures, electrolytic depositions of metals and alloys, metal powders, electrolytic forming refining/Electrolytic reductions and oxidations, anodic oxidations/ Electroorganic and electroanorganic syntheses/ Electrometallurgy, Electrolysis of molten salts and alcaline chlorides / Electroplating /Generators

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 430	STATIC	3	0	0	3.00	5.00	Seçmeli

Course Content

Introduction and Fundamental Principles; Vectors and Forces; Force Systems; Equilibrium of Particles and Rigid Bodies; Center of Gravity; Internal Forces; Trusses; Cables; Moments of Inertia; Friction; Virtual Work

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 432	COMPUTER ARCHITECTURE	3	0	0	3.00	5.00	Seçmeli

Course Content

Computer System, Coputer Evolution and Performance, Central Processing Unit Design, Cache, Cache Optimization, Virtual Memory, Instruction-Level Parallelism, Pipeline, Data-Level Parallelism, GPU Architectures, Thread-Level Parallelism, Multicore Processors

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 434	DATABASE MANAGEMENT	3	0	0	3.00	5.00	Seçmeli

Course Content

Conceptual Design with ER/UML Modelling; Relational Model; Relational Algebra; SQL; DB Integrity Programming Techniques (Assertions, Triggers); DB-driven Programming Languages (Stored Procedures, Embedded SQL, JDBC); Normalization;Physical Design

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 436	PRODUCTION SYSTEMS	3	0	0	3.00	5.00	Seçmeli

Course Content

Introduce Production Systems, Modern Manufacturing Systems,Transfer line, NC, CNC, DNC, AC Machining tools,machinin centers, CAD-CAM, Industrial Robots, material handling systems, Flexible manufacturing systems, group technology and cellular manufacturing

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 438	STATISTIC	3	0	0	3.00	5.00	Seçmeli

Course Content

Series; Means; Dispersion; Skewness; Kurtosis; Probability; Probability Distribution; Tests for Goodness of Fit; Regression; Correlation

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 440	ADAPTIVE SIGNAL PROCESSING	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS VI	TEKNİK SEÇMELİ VI	3	2	0	4.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 442	DSP PROGRAMMING AND APPLICATIONS	3	2	0	4.00	5.00	Seçmeli

Course Content

Introduction to Digital Signal Processors. DSP Development System. Input and Output with DSP Starter Kit. Architecture of C6x Processors and Command Kit. Finite Impulse Response Filters. Infinite Impulse Response Filters. Fast Fourier Transform. Adaptive Filters. Code Optimization. DSP/BIOS and RTDX Using Matlab, Visual C++, Visual Basic and LabVIEW. DSP Applications and Student Projects.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 448	EMBEDDED SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Introduction of embedded systems and system hardware, microprocessor selection, ARM microcontroller architecture, properties of elements, elements and circuits that make up embedded systems; Basic tools and software methods used in programming embedded systems, ARM microcontroller based embedded system application examples; GPIO, interrupts, timers, ADC, USART, DMA, loop resources and PLL, SPI, I2C communication.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 450	PROGRAMMABLE LOGIC CONTROLLERS	3	2	0	4.00	5.00	Seçmeli

Course Content

This course includes memory structure of programmable logic controllers (PLC), digital and analog inputs / outputs, programming with ladder and command list, bit logic commands, timers, counters, comparison of variables, subroutines and shift registers.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 454	INDUSTRIAL ELECTRONICS	3	2	0	4.00	5.00	Seçmeli

Course Content

Circuit Components used in Industrial Applications, Power Electronics, Power Electronics Applications, Motor Speed Control, Sensors and Controllers.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 456	INTRODUCTION TO MEDICAL IMAGING	3	2	0	4.00	5.00	Seçmeli

Course Content

X-ray Generation and Method, Interaction between X-rays and Matter, Dose and Exposure, Propagation Model, X-Ray Tubes and Generators, Scattering and Image, The Prevention of Scattered Light and Image Noise, Detectors and Grids, Image Geometry and Algorithms, The Parameters used in the Formation of Radiographic Image, Image Intensifier Screens, Introduction to Medical Imaging Instruments

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 458	DIGITAL CONTROL SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Linear discrete systems and Z-transform theory. Digital filter design. Numerical methods. Control system design with transformation and state-space methods. Application of controllers with microprocessors. Sampled data systems. Quantization effects. Multivariate and optimal control. System identification.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 460	SENSORS, SIGNAL OPTIMIZATION AND DATA	3	2	0	4.00	5.00	Seçmeli

Course Content

Resistive sensors, signal matching for resistive sensors. Signal matching for variable reactance and electromagnetic sensors, variable reactance, and electromagnetic sensors. Signal matching for electrical signal generating sensors, electrical signal generating sensors. Digital sensors, smart sensors, signal conversion, and transmission circuits. Noise and interference, structures of data collection cards, sampling rate, and sampling methods.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 462	SOFTWARE DEFINED RADIO PROGRAMMING AND APPLICATIONS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 464	INFORMATION THEORY AND CODING	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 444	ELECTRONIC MEASUREMENTS AND INSTRUMENTATION	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 446	COMPUTER AIDED ELECTRICAL PROJECT DRAWING	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 452	INTEGRATED CIRCUIT DESIGN	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS VII	TECHNICAL ELECTIVE VII	3	0	0	3.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 466	CONTROL OF ROBOTS	3	0	0	3.00	5.00	Seçmeli

Course Content

Robots are used to control actuators and sensors, Trajectory planning: Basic principles, joint space, Trajectory planning: Cartesian space, geometric problems in Cartesian space, trajectory planning using a dynamic model, Linear control of robots: Feedback and closed-loop control, second order linear systems, Linear control of robots: Second order systems control, follow the control trajectory, linear control: Elimination of Interference effects, modeling and control of a single joint, industrial robot controller architectures, Non-linear control of robots: Basic structures and concepts, nonlinear and time-varying systems, so the input and output systems, Control problems of robots, Cartesian robot control structures, adaptive robot control structures, Interactive robot control: Compliance control, Interactive control of robots: Impedance control.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 470	INTRODUCTION TO CYBER SECURITY	3	0	0	3.00	5.00	Seçmeli

Course Content

A basic introduction to all aspects of cybersecurity, including communications security, network security, security management, legal issues, political issues, and technical issues.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 472	SMART GRID	3	0	0	3.00	5.00	Seçmeli

Course Content

Smart Grid, Renewable Energy Sources & Distributed Generation, Smart pricing, Smart devices, Energy efficiency & Demand Forecasting, Energy Management, Smart Homes, Applications.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 476	FLIGHT STABILITY AND CONTROL	3	0	0	3.00	5.00	Seçmeli

Course Content

System Modeling; Fundamentals of Control Theory and Flight Control Systems; State Space Modeling; Full State Feedback Control, Pole Placement Method; LQR Control, Controllability and Observability; Frames of Reference, Earth Axes, and Notations; Euler Angles; Fundamentals of Aerodynamics; Forces and Moments Acting on an Aircraft; Static and Dynamic Stability of an Aircraft; Aircraft Pitch Motion Model and Analysis; Aircraft Pitch Motion Control System Design

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 478	GENERAL ECONOMICS	3	0	0	3.00	5.00	Seçmeli

Course Content

Basic Economy Definitions and Terms, Principles / Schools / Solidarity and Trade / Supply and Demand Market / Elasticity / Effects of the State on Market and Control Mechanisms / Effect of Markets / Public Economy / Organization of Industry and Markets / Consumer Selection Theory / Monetary System / Growth and Inflation

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 480	PRODUCTION PLANNING AND CONTROL II	3	0	0	3.00	5.00	Seçmeli

Course Content

Analysis of Production Systems and Production Management Concepts, Balancing Production Lines, Capacity Planning, Production Programming, Routing, Loading, Sorting, Programming (Scheduling), Machine Deductions, Sales and Demand Forecasting, Mass Production Planning and Main Production Programming, Production Planning and Control Network Analysis Activity Node Technique, Acceleration of Projects and Time Cost Analysis.

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 468	COMPUTER AIDED CIRCUIT DESIGN	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 474	COMPUTER NETWORKS	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 482	IMAGE PROCESSING	3	0	0	3.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE TS VIII	TECHNICAL ELECTIVE VIII	3	2	0	4.00	5.00	

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 484	INTRODUCTION TO NONLINEAR CONTROL	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 486	INDUSTRIAL SYSTEMS AND CONTROL	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 488	ADVANCED COMPUTER PROGRAMMING	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 486	PROGRAMMABLE LOGIC CONTROLLERS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 492	EMBEDDED SYSTEMS	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 490	MATLAB APPLICATIONS FOR ENGINEERING	3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 496		3	2	0	4.00	5.00	Seçmeli

Course Content

Course Unit Code	Course Name	T	U	L	Credit	ECTS	Type
EE 498		3	2	0	4.00	5.00	Seçmeli

Course Content