

Erciyes University, Faculty of Engineering,
Department of Electrical and Electronics Engineering

Course Contents

1. Semester

Term	Autumn				
Code	Course Title	T	P	K	ECTS-Cr
MAT 101	General Mathematics I	4	0	6	6
Course Description:					
Theory of sentences. Numbers. Absolute value. Inductive method. Functions. Junction functions. Trigonometric functions. Functions Limits and Continuity. Derivative. The mean value theorem. Finding Maximum and Minimum. Graph Drawing. Integral, fundamental theorem. Integration techniques. Indefinite Integrals. Integration methods. Definite integrals. Area, volume and arc length calculations.					

Term	Autumn				
Code	Course Title	T	P	K	ECTS-Cr
FİZ 101	Physics I	3	1	6	6
Course Description:					
Measuring and SI unit system. Vectors. Motion in one dimension. Movement on earth. Equations of motion. Newton's Laws and practices. Work and energy. Conservation of energy. Linear momentum and collisions. Particle systems and the conservation of momentum. Rotational motion and torque. Kinetic energy and angular momentum of rotation. Work and kinetic energy in rotational motion. Movements and resonance oscillations					

Term	Autumn				
Code	Course Title	T	P	K	ECTS-Cr
KİM 101	Chemical	3	1	5	5
Course Description:					
Atomic and molecular structure. Periodic System. Weighted semiconductor structures. Chemical bonds. Gases, liquids. Analysis of chemical reactions. Periodic and group relations. Crystallization. Sublimation. High temperature reactions. Electrochemistry. Thermodynamics.					

Term	Autumn				
Code	Course Title	T	P	K	ECTS-Cr
EM 101	Computer Programming I	3	0	3	3
Course Description:					
Algorithms, flowcharts, introduction to computer programming, the general form and concepts of C programming language, fundamentals of code development using C programming language, statements and operators in C, problem solving, assignment and input/output statements, selection structures and loops, modular programming, pointers, arrays and strings.					

Term	Autumn				
Code	Course Title	T	P	K	ECTS-Cr
	Basic Information Technology Usage	2	0	2	2
Course Description:					
Computer hardwares. Windows operating system. MS Office programs (Word, Excel, Powerpoint). Use of internet and browsers (Internet Explorer, Netscape Communicator). Electronic mail (MS Outlook, Windows Live Hotmail).					

Term	Autumn				
Code	Course Title	T	P	K	ECTS-Cr
YD 101	Foreign Language I	2	0	2	2
Course Description:					
Descriptions of basic terms and components of computer system technologies. Discussions on computer system technologies. Programming. Application Software. Operating Systems. Computer Security. Importance of communication for success. Importance of archives. Problem solving. Scientific meetings. Various technical reports. Writing technical reports, Letters. Letter formats. Seminars.					

2. Semester

Term	Spring				
Code	Course Title	T	P	K	ECTS-Cr
MAT 102	General Mathematics II	4	0	6	6
Course Description:					
Sequences and series. Polar coordinates. Significant figures. Cartesian and polar coordinates of the curve drawing. Complex numbers. Multivariate functions. Limit and continuity of multivariate functions. Partial derivatives, gradient vector, tangent plane, directional derivatives. Multiple integrals, line integrals, surface integrals.					

Term	Spring				
Code	Course Title	T	P	K	ECTS-Cr
EM 112	Linear Algebra For Engineering	2	0	4	4
Course Description:					
Matrices, determinants and linear equations system. Vector spaces. Eigenvalues and eigenvectors. Diagonalization, accurate and planes in three-dimensional space. Basic surfaces, cylindrical surfaces, quadric surfaces.					

Term	Spring				
Code	Course Title	T	P	K	ECTS-Cr
FIZ 102	Physics II	3	1	6	6
Course Description:					
Electric load. Electric field. Gauss's Law. Electric potential. Capacitors. Electric current, resistance and impedance. Electrical circuits. Magnetic Field. Ampere's Law. Faraday's Law. Inductance. Magnetic materials, Paramagnetism and Ferromagnetism, electromagnetic oscillations. Alternative current. Electromagnetic waves and light.					

Term	Spring				
Code	Course Title	T	P	K	ECTS-Cr
EM 110	Computer Programming II	2	0	2	2
Course Description:					
Structured programming. Data declaration. One dimensional and multi-dimensional arrays in programming languages. Basic concepts of programming with Delphi. Integrated Development Environment, Database Desktop ,DataAccess and DataControls' components, Usage of SQL, Table, DataSource, DBGrid, DBEdit and DBNavigator , Quick Report , OLE, DDE. Interactive computer usage. File input-output processes. Subprograms. Examples of scientific and business type data processing. Applications of Object Oriented Programming.					

Term	Spring				
Code	Course Title	T	P	K	ECTS-Cr
EM 122	Computer Aided Technical Drawing	2	0	2	2
Course Description:					
Descriptions of basic terms and components of computer system technologies. Discussions on computer system technologies. Programming. Application Software. Operating Systems. Computer Security. Importance of communication for success. Importance of archives. Problem solving. Scientific meetings. Various technical reports. Writing technical reports, Letters. Letter formats. Seminars.					

Term	Spring				
Code	Course Title	T	P	K	ECTS-Cr
YD 102	Foreign Language II	2	0	2	2
Course Description:					
Descriptions of basic terms and components of computer system technologies. Discussions on computer system technologies. Programming. Application Software. Operating Systems. Computer Security. Importance of communication for success. Importance of archives. Problem solving. Scientific meetings. Various technical reports. Writing technical reports, Letters. Letter formats. Seminars.					