

**TURKISH MILITARY ACADEMY COURSE CATALOGUE****INDUSTRY AND SYSTEM ENGINEERING****1st Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCE	Required	Cr.	3	45	3	
TURKISH LANGUAGE AND EXSPOSTARY WRITING-1	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES-1	Required	Cr.	2	30	2	2
MATHS-I	Required	Cr.	5	75	5	10
PHYSICS-I	Required	Cr.	4	60	3,5	8
CHEMICH	Required	Cr.	3	45	3	6
FOREING LANGUAGE-1	Required	Cr.	6	90	5	6
			25		23,5	34

**2nd Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND EXSPOSTARY WRITING -2	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES -2	Required	Cr.	2	30	2	2
MATHS-II	Required	Cr.	5	75	5	10
PHYSICS -II	Required	Cr.	4	60	3,5	8
TOPOGRAPHY	Required	Cr.	2	30	1,5	
FOREING LANGUAGE-2	Required	Cr.	6	90	5	6
			23		21	28

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO THE INDUSTRIAL AND SYSTEMS ENGINEERING	Required	Cr.	3	45	3	3
LINEER ALGEBRA	Required	Cr.	3	45	3	6
INTRODUCTION TO COMPUTER PROGRAMMING	Required	Cr.	4	60	3	6
SOCIOLOGY	Required	Cr.	2	30	2	2
THE BASICS OF LAW	Required	Cr.	3	45	3	3
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
STATISTIC	Required	Cr.	3	45	3	6
FOREIGN LANGUAGE - 3	Required	Cr.	3	45	2,5	5
			<b>25</b>		<b>23,5</b>	<b>33</b>

### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
OPERATIONS RESEARCH-I (MODELLING)	Required	Cr.	3	45	3	5
COST ANALYZE	Required	Cr.	2	30	2	2
MANAGEMENT AND ORGANIZATION	Required	Cr.	3	45	3	3
PROBABILITY	Required	Cr.	3	45	3	6
DIFFERENTIAL EQUATIONS	Required	Cr.	3	45	3	6
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 4	Required	Cr.	3	45	2,5	5
			<b>25</b>		<b>24,5</b>	<b>31</b>

### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
OPERATIONS RESEARCH-II (DETERMINISTIC)	Required	Cr.	3	45	3	5
ENGINEERING STATISTICS	Required	Cr.	3	45	3	5
PRODUCTION PLANNING-1	Required	Cr.	3	45	3	5
MATERIALS SCIENCE	Required	Cr.	3	45	3	4
ECONOMICS	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45	2,5	5
			<b>22</b>		<b>21,5</b>	<b>29</b>

**6th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
PRODUCTION PLANNING-2	Required	Cr.	3	45	3	5
PROJECT MANAGEMENT	Required	Cr.	3	45	3	5
OPERATIONS RESEARCH-III (STOCHASTIC)	Required	Cr.	3	45	3	5
DECISION ANALYSIS	Required	Cr.	3	45	3	4
SYSTEM SIMULATION	Required	Cr.	3	45	2,5	5
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45	2,5	5
			<b>22</b>		<b>21</b>	<b>29</b>

**7th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
WORK STUDY	Required	Cr.	3	45	2,5	5
PRODUCTION AND SERVICE INFORMATION SYSTEMS	Required	Cr.	4	60	3,5	5
FACILITY PLANNING AND LOCATION	Required	Cr.	3	45	3	4
ELECTIVE COURSE STRATEGIC MANAGEMENT	Optional	Cr.	3	45	3	5
COMMUNICATION	Required	Cr.	2	30	2	3
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 7	Required	Cr.	3	45	2,5	5
			<b>24</b>		<b>22,5</b>	<b>27</b>

**8th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ENGINEERING ECONOMICS	Required	Cr.	3	45	3	3
QUALITY PLANNING AND CONTROL	Required	Cr.	3	45	3	5
TECHNOLOGY MANAGEMENT	Required	Cr.	3	45	3	3
ELECTIVE COURSE INTERNATIONAL RELATIONS	Optional	Cr.	3	45	3	5
ELECTIVE COURSE RESEARCH METHODS	Optional	Cr.	2	30	1,5	3
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
PROJECT	Required	Cr.		0	1	2
FOREIGN LANGUAGE - 8	Required	Cr.	3	45	2,5	5
			<b>23</b>		<b>23</b>	<b>29</b>
<b>TOTAL</b>			<b>189</b>		<b>180,5</b>	<b>240</b>

## **Introduction to Industrial and Systems Engineering**

In this course, teaching field of studies in national and international size, problem solving approaches of industrial engineering and creating and understanding of industrial engineering is the main aim.

### **Statistic**

In this course, to form a basis for basic definitions and concepts which are necessary for analysis and scientific decision making processes, diminishing the uncertainties in decision making process for the future commanders of the Turkish Armed Forces is aimed.

### **Operations Research-I**

In this course, analytical scientific methods for solving battlefield problems and for increasing the efficiency of the military components in operations are taught to the cadets who are candidate officers to command military units or provide decision support for the headquarters.

### **Probability**

In this course, the purpose at the lessons is to teach basic of probability and possibility for modelling and decision making processes that cadets will encounter throughout their military service. The basics will cover theoretical and practical basic probability concepts and axioms.

### **Operations Research – II**

In this course, content is designed to equip military students who are to make sophisticated decisions during their military service, as the best decision makers and problem solvers making use of analytical thinking. Besides, scientific methodologies that will help determining all the possible course of actions finding the best decision among them is taught. Since optimization is everywhere in life briefly, this course tries to depict the real world problems that may occur in military service systems and provide some solution techniques for them.

### **Engineering Statistics**

In this course, the importance of statistics in engineering applications is introduced and statistical inference techniques are taught for engineers.

### **Production Planning-I**

In this course, design and analysis of production and service systems and their activities are taught according to qualitative and quantitative aspects. Topics focus on planning and execution of the production techniques to determine the most efficient, productive and appropriate production plan.

### **Project Management**

In this course, it is aimed to teach basic principles in project budgeting, scheduling, control and resource allocation to the future officers and the future military project managers in order to make them gain management perspective on these principles and manage projects successfully in the armed forces.

### **Operations Research III**

In this course, probability, risk and uncertainty, which are inherent in the decision making process, are handled in mathematical modelling and consequences are examined thoroughly. Additionally some implications of probability in Operations Research such as markov chains and queueing theory are thought in order to model real life problems. Another objective of this course is also to give basic concepts and theories of nonlinear programming.

### **Decision Analysis**

In this course, introducing decision making theory, teaching the factors and scientific approach for decision making, modelling decision problems, teaching methodologies for decision making under risk and uncertainty are aimed. Additionally, the position of information in decision making and multi-objective decision making methods, are taught. The course is supported by many military problems and their possible scientific solutions which cadets may face throughout their career.

### **Systems Simulation**

In this course, reviewing systems, establishing their priorities, and modelling the systems are aimed. Providing this aim, it is intended that cadets as the future decision makers solve the problems of complex process systems.

### **Production Planning-II**

In this course, the content is planned as a the following course for Production Planning I, keeping the common aim with it. In this course, design and analysis of production and service systems and their activities are studied according to qualitative and quantitative aspects. These studies focus on planning and execution of the production techniques to determine the most efficient, productive and appropriate production plan.

### **Work Study**

In this course, the content covers the implementation of methods and experiences related to the systematic review of (analyzing) business systems and the arrangement (synthesis) of them in accordance with their purposes. The aim is to teach how to improve the business and to make them more economical.

### **Production and Service Information Systems**

In this course, the purpose is determined as to teach information systems and their applications in engineering, solution approaches to problems and expectations from industrial engineers in detail. By this way, solution tools and methods other than analytical methods are applied to different problems in the field of industrial engineering.

### **Facility Planning and Location**

In this course, the scientific techniques to improve the efficiency and the effectiveness of the current military facilities regarding their layout and position as a whole are taught. Provided that this course is taken cadets gain knowledge and experience in deciding where to settle any military facility and how to design it.

### **Quality Planning and Control**

In this course, teaching basic principles of quality management is aimed. Quality management is data based, participants' management approach which is necessary for

cadets, who are to be commissioned in various positions of Turkish Armed Forces, to become a successful commander, manager and leader.

### **Technology Management**

In this course, the planned objective for students is to improve their ability for planning, applying, managing and developing the technology tools and capacity. By this way building up the technological situational awareness for cadets is aimed.

### **Cost Analysis**

In this course ,the content is to create one of the basic inputs in terms of management decisions to be made in non-profit organizations such as the Armed Forces, and to shed light on all kinds of financial planning and budgeting activities and purchasing decisions based on cost-effectiveness analysis. By this way the course aims to teach cost estimations and help to make decisions based on cost calculations made.

### **Engineering Economics**

In this course, Engineering Economics, Finance engineers to people in the status of the science is a course that aims to teach some basic issues, Systems Engineering is an integral part of the program. For-profit and non-profit enterprises will be given by every decision inevitably needed time value of money related to the information being taught and in this way the Armed Forces will be given in investment decisions involving administrative decisions

### **Economics**

In this course teaching fundamental economic concepts such as supply, demand, inflation; economic matters and systematic relationships between them and the perspectives of economic thoughts that source and shape today's economic and political relations.

### **Introduction to Computer Programming**

In this course teaching the basic concepts of computer programming, and advanced concepts like pointers, strings, structures and text files is aimed. To give basic understanding for computer programming and algorithm design and to provide basis in order to develop alternative solutions to various problems that students will encounter in the future are the other purposes.

## ELECTRONIC ENGINEERING

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCE	Required	Cr.	3	45	3	
TURKISH LANGUAGE AND EXPOSTARY WRITING-1	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES-1	Required	Cr.	2	30	2	2
MATHS-I	Required	Cr.	5	75	5	10
PHYSICS-I	Required	Cr.	4	60	3,5	8
CHEMICH	Required	Cr.	3	45	3	6
FOREING LANGUAGE-1	Required	Cr.	6	90	5	6
			25		23,5	34

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND EXPOSTARY WRITING -2	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES -2	Required	Cr.	2	30	2	2
MATHS-II	Required	Cr.	5	75	5	10
PHYSICS -II	Required	Cr.	4	60	3,5	8
TOPOGRAPHY	Required	Cr.	2	30	1,5	
FOREING LANGUAGE-2	Required	Cr.	6	90	5	6
			23		21	28

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO ELECTRONIC ENGINEERING	Required	Cr.	3	45	3	4
INTRODUCTION TO COMPUTER PROGRAMMING	Required	Cr.	4	60	3	6
LINEER ALGEBRA	Required	Cr.	3	45	3	6
THE BASICS OF LAW	Required	Cr.	3	45	3	3
SOCIOLOGY	Required	Cr.	2	30	2	2
STATISTIC	Required	Cr.	3	45	3	6
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - 1	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 3	Required	Cr.	3	45	2,5	5
			25		23,5	34

**4th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTRONIC CIRCUITS-1	Required	Cr.	4	60	4	5
CIRCUIT ANALYSIS	Required	Cr.	5	75	4,5	6
DIFFERENTIAL EQUATIONS	Required	Cr.	3	45	3	6
ELECTRONIC CIRCUITS LAB.-1	Required	Cr.	2	30	1	3
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 4	Required	Cr.	3	45,0	2,5	5
			25		23	29

**5th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTRONIC CIRCUITS-2	Required	Cr.	3	45	3	5
ELECTROMAGNETIC THEORY	Required	Cr.	3	45	3	4
DIGITAL DESIGN	Required	Cr.	3	45	3	4
SIGNALS AND SYSTEMS	Required	Cr.	3	45	3	4
ELECTRONIC CIRCUITS-2 LAB.-2	Required	Cr.	2	30,0	1,0	2
PROGRAMMING FOR ENGINEERING APPLICATIONS	Required	Cr.	3	45	2	4
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45,0	2,5	5
			24		21,5	28

**6th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
COMMUNICATION SYSTEMS	Required	Cr.	3	45	3	5
MICROPROCESSORS	Required	Cr.	3	45	3	5
AUTOMATIC CONTROL SYSTEMS	Required	Cr.	4	60	4	5
MICROWAVE TECHNIQUE	Required	Cr.	3	45	3	5
PROBABILITY AND RANDOM PROCESSES	Required	Cr.	3	45	3	3
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45,0	2,5	5
			23		22,5	28



### 7th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE DIGITAL COMMUNICATION	Optional	Cr.	3	45	3	5
ELECTIVE COURSE WORK STUDY	Optional	Cr.	3	45	3	5
ELECTIVE COURSE DIGITAL SIGNAL PROCESSING	Optional	Cr.	4	60	4	5
ELECTIVE COURSE FUNDAMENTALS OF ELECTRO-OPTICS	Optional	Cr.	3	45	3	5
ELECTIVE COURSE COMMUNICATION AND SIGNAL PROCESSING LABORATORY	Optional	Cr.	3	45	1,5	4
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 7	Required	Cr.	3	45,0	2,5	5
			25		23	29

### 8th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE BASE OF IMAGE PROCESSOR	Optional	Cr.	4	60	3,5	6
ELECTIVE COURSE ELECTRONIC WARFARE SYSTEMS	Optional	Cr.	3	45	3	4
ELECTIVE COURSE WEAPON SYSTEMS AND BALISTICS	Optional	Cr.	2	30	2	3
ELECTIVE COURSE COMPUTER NETWORKS AND APPLICATIONS	Optional	Cr.	3	45	2,5	4
ELECTIVE COURSE ENGINEERING ECONOMICS	Optional	Cr.	3	45	3	3
COMMUNICATION	Required	Cr.	2	30	2	3
PROJECT	Required	Cr.			1	2
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 8	Required	Cr.	3	45,0	2,5	5
			24		23,5	30
TOTAL			194		181,5	240

## **Introduction to Electronic Engineering**

The aim of this course is to teach the general concepts and terminology of electric and electronics to understand that high-tech electronic systems. The content of this course is current, voltage and resistance measurements, network currents and node voltages, superposition and Thevenin's theorem, capacitors and inductors, Series RLC circuits, semiconductor diodes, diode applications, Bipolar Junction Transistor (BJT), BJT various biasing structures, BJT amplifiers, Field Effect Transistor (FET), FET various biasing structures and FET amplifiers.

## **Introduction to Computer Programming**

This course is a gentle introduction to the fundamentals of computer programming, which is the foundation of Computer Science. Students design, write, and debug computer programs. No knowledge of programming is assumed.

## **Electronic Circuits-1**

The aim of this course is to teach the general concepts and terminology of basic semiconductor components and their circuits. The content of this course is semiconductor diodes, diode applications, bipolar junction transistors (BJT), DC biasing-BJTs, BJT AC analysis, Field Effect Transistors (FET), FET biasing, FET amplifiers.

## **Circuit Analysis**

The aim of this course is to teach the general concepts and terminology of AC electric circuits. The content of this course is response of first-order RL and RC circuits, natural and step responses of RLC circuit, sinusoidal steady-state analysis, sinusoidal steady-state power calculations, Laplace transform in circuit analysis.

## **Electronic Circuits Laboratory-1**

The aim of this course is to teach the basic practices and skills of electrical and electronic circuits. The content of this course is current, voltage and resistance measurements, network currents and node voltages, superposition and Thevenin's theorem, capacitors and inductors, Series RLC circuits, semiconductor diodes, diode applications, Bipolar Junction Transistor (BJT), BJT various biasing structures, BJT amplifiers, Field Effect Transistor (FET), FET various biasing structures and FET amplifiers.

## **Electronic Circuits-2**

The aim of this course is to teach the general concepts and terminology of basic semiconductor components and their circuits. The content of this course is BJT and FET frequency response, operational amplifiers, Op-Amp applications, power amplifiers, linear and digital ICs, feedback and oscillator circuits, power supplies (voltage regulators), two-terminal devices.

## **Electromagnetic Theory**

The aim of this course is to teach the general concepts of electromagnetics to understand of electromagnetic based warfare equipment working and their usage. The content of this course is vector analysis, static electric fields, steady electric current, static magnetic fields and time-varying fields and Maxwell equations.

## **Digital Design**

The aim of this course is to teach the general concepts of digital circuits and digital design. The content of this course is analog and digital parameters, number systems, coding, Boolean algebra and simplifying of logic expressions, simplifying of logic gates, Karnaugh maps, digital integrated circuits, combinational logical circuits, multivibrators and flip-flops, synchronous sequential circuits, counters, registers, memory circuits and Programmable Logic Devices (PLC).

## **Signals and Systems**

The aim of this course is to teach the mathematical concepts of continuous and discrete signals and their transforms to each other. The content of this course is introduction to signal and systems terms, Linear Time Invariant (LTI) systems, Fourier series representation of periodic signals, continuous time Fourier transform, discrete time Fourier transform, Laplace and z-transforms.

## **Electronic Circuits Laboratory-2**

The aim of this course is to teach the basic practices and skills of electrical and electronic circuits. The content of this course is BJT and FET amplifiers, frequency response of amplifiers, inverting, non-inverting, integrator, comparator and differentiator operational amplifiers, low, high and bandpass filters, Oscillators, Integrated Circuits.

## **Programming for Engineering Applications**

The aim of this course is to teach the basic concepts and practices of MATLAB and MATLAB/Simulink engineering program. The content of this course is introduction to MATLAB programming and its constants, variables, arrays, control types and loops, functions and scripts, file operations, graphical operations, solving equations, using graphical user interface, modelling with MATLAB/Simulink tools using signal processing functions and applications.

## **Communication Systems**

The aim of this course is to teach the general concepts, principles and terminology of the communication systems using in military and unmilitary applications. The content of this course is introduction of communication basics, Fourier theory and communication signals, amplitude modulation, phase and frequency modulations, random variables and processes, noise in analog modulation.

## **Microprocessors**

The aim of this course is to teach the general concepts, terminology and practices of microprocessors and microcontrollers for military and unmilitary applications. The content of this course is PIC16F877 microcontrollers, CCS C compiler, input/output ports using CCS decision making and cycle operations, interrupts, timers, counters and capture/compare/PWM units, keypad, interfacing LCD with PIC microcontroller, analog to digital (A/D) converters and internal EEPROM unit, RS232 serial communication, external memory operations and motor control operations with microprocessors.

## **Automatic Control Systems**

The aim of this course is to teach the general concepts and terminology of automatic control systems used in military and unimilitary applications. The content of this course is introduction to automatic control theory, Laplace transform, mathematical model of electrical and physical systems, system dynamics and analysis, transient and steady-state response analyses, stability, PID controllers, control systems analyses by the frequency-response method and the root-locus method.

## **Microwave Technique**

The aim of this course is to teach the general concepts and terminology of microwave techniques and antenna analyses to understand of based microwave techniques of warfare equipments and their usage. The content of this course is plane electromagnetic waves, equations transmission lines, waveguides and cavity resonators, propagation in the waveguide modes.

## **Probability and Random Processes**

The aim of this course is to teach the basic principles and mathematical techniques of probability theory, random variables and random processes which are contained in communication systems and signal processing. The content of this course is probability theory, probability distribution functions, multi-dimensional random variables, central limit theorem, random processes, random signal processing and noise.

## **Digital Communication**

The aim of this course is to teach the general concepts and terminology of the digital communication technics which is used in current communication equipment. The content of this course is converting analog signals to digital, pulse modulation techniques, baseband communication of digital signals, band pass communication of digital signals.

## **Work Study**

Work study is a term that is used to study all sources and factors affecting a certain event or activity in terms of economy and effectiveness in a broader way, especially for method study and work measurement techniques in order to search for a human activity. Therefore, this course is to grasp the methods that can be applied in order to increase the efficiency of an objective work.

## **Digital Signal Processing**

The aim of this course is to teach the general concepts and terminology of communication and signal operations of modern war platforms and electronic devices. The content of this course is discrete time signal and systems, discrete time linear time invariant systems, spectral analysis of signals, sampling and aliasing at time/frequency domain, z-transform, z-transform application, discrete Fourier transform, fast Fourier transform, implementing digital filters, general rules of digital filter design, FIR filter design methods, IIR filter design methods.

## **Fundamentals of Electro-Optics**

The aim of this course is to teach the general concepts, terminology and practices of basic electro-optic devices and circuits which is used in modern war platforms and electronic devices. The content of this course is basic electro-optical concepts, basic optical concepts

and components, basic topics in solid-state physics, photovoltaics, photodetectors, light emitter diodes, lasers and fiber optics.

### **Communication and Signal Processing Laboratory**

The aim of this course is to teach the basic practices and skills of the communication systems using in military and unmilitary applications. The content of this course is introduction of communication, amplitude modulation, frequency modulation, digital communication techniques and digital signal processing.

### **Fundamentals of Image Processing**

The aim of this course is to teach the general concepts and terminology of image fundamentals, mathematical transforms necessary for image processing, spatial and frequency domain filtering processes, wavelet and multiresolution image processing methods, morphologic image processing methods, image segmentation techniques. The content of this course is two dimensional systems and transforms, image acquisition, sampling and quantization, linear and non-linear techniques for image enhancement and restoration, spatial filtering, filtering in frequency domain, morphologic image processing methods, image segmentation techniques.

### **Electronic Warfare Systems**

The aim of this course is to teach the general concepts and terminology of electronic warfare (EW) systems and components, working principles of radar and infrared systems, Electronic Attack (EA) techniques, Electronic Electronic Protection (EP) techniques, recent advances in EW, latest developments in EW systems. The content of this course is EW systems and components, radar and infrared systems, guided missile systems, Electronic protection (EP) systems Electronic Attack (EA) and Electronic Protection (EP) techniques, new technologies in the field of EW.

### **Weapon Systems and Ballistics**

The purpose of this course is to introduce ballistics and explosives, the components weapon systems and provide cadets to gain fundamental knowledge for designing, developing and qualifying of weapon systems and related subsystem with weapon.

### **Computer Networks and Applications**

To know the technologies that form the infrastructure of computer networks, to acquire the theoretical knowledge necessary for building a basic computer network and to learn about the research topics of computer networks

### **Engineering Economics**

To enable students to understand the fundamental economic concepts applicable to engineering and to learn the techniques of incorporating inflation factor in economic decision making.

## COMPUTER ENGINEERING

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCE	Required	Cr.	3	45	3	
TURKISH LANGUAGE AND EXPOSTARY WRITING-1	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES-1	Required	Cr.	2	30	2	2
MATHS-I	Required	Cr.	5	75	5	10
PHYSICS-I	Required	Cr.	4	60	3,5	8
CHEMICH	Required	Cr.	3	45	3	6
FOREING LANGUAGE-1	Required	Cr.	6	90	5	6
			25		23,5	34

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND EXPOSTARY WRITING -2	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES -2	Required	Cr.	2	30	2	2
MATHS-II	Required	Cr.	5	75	5	10
PHYSICS -II	Required	Cr.	4	60	3,5	8
TOPOGRAPHY	Required	Cr.	2	30	1,5	
FOREING LANGUAGE-2	Required	Cr.	6	90	5	6
			23		21	28

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO COMPUTER ENGINEERING	Required	Cr.	3	45	3	4
PROGRAMMING WITH C-I	Required	Cr.	4	60,0	3,5	4
LINEER ALGEBRA	Required	Cr.	3	45	3	6
SOCIOLOGY	Required	Cr.	2	30,0	2,0	2
THE BASICS OF LAW	Required	Cr.	3	45	3	3
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
STATISTIC	Required	Cr.	3	45	3	6
FOREIGN LANGUAGE - 3	Required	Cr.	3	45,0	2,5	5
			25		24	32

#### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
PROGRAMMING WITH C-II	Required	Cr.	3	45	2,5	4
DISCRETE MATHEMATICS	Required	Cr.	4	60	4	5
DIFFERENTIAL EQUATIONS	Required	Cr.	3	45	3	6
DATA STRUCTURES	Required	Cr.	4	60	4	6
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 4	Required	Cr.	3	45,0	2,5	5
			25		24	30

#### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
DATABASE MANAGEMENT SYSTEMS -I	Required	Cr.	4	60	3,5	6
ELECTRONIC CIRCUITS	Required	Cr.	3	45	3	5
ALGORITHM DESIGN AND ANALYSIS	Required	Cr.	4	60	3,5	5
DIGITAL DESIGN	Required	Cr.	3	45	3	4
INFORMATION TECHNOLOGY LAW	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45,0	2,5	5
			23		21,5	28

#### 6th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
AUTOMATA AND COMPUTATION THEORY	Required	Cr.	3	45	3	5
MICROPROCESSORS	Required	Cr.	3	45	3	5
DATABASE MANAGEMENT SYSTEMS -II	Required	Cr.	3	45	2,5	5
SYSTEM SIMULATION	Required	Cr.	3	45	2,5	5
OBJECT ORIENTED PROGRAMMING	Required	Cr.	3	45	2,5	5
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45,0	2,5	5
			22		20	30

### 7th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE BASE OF IMAGE PROCESSOR	Optional	Cr.	3	45	3	5
COMPUTER NETWORKS	Required	Cr.	3	45	3	4
COMPUTER ARCHITECTURE	Required	Cr.	3	45	3	4
OPERATING SYSTEMS	Required	Cr.	3	45	3	4
SOFTWARE ENGINEERING	Required	Cr.	3	45,0	2,5	5
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 7	Required	Cr.	3	45,0	2,5	5
			24		23	27

### 8th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE WEB PROGRAMMING	Optional	Cr.	3	45	2,5	5
ARTIFICIAL INTELLIGENCE	Required	Cr.	3	45	3	4
COMPUTER NETWORK APPLICATIONS	Required	Cr.	3	45	2,5	4
PROGRAMMING LANGUAGES	Required	Cr.	3	45	3	5
COMMUNICATION	Required	Cr.	2	30	2	3
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
PROJECT	Required	Cr.			1	2
FOREIGN LANGUAGE - 8	Required	Cr.	3	45,0	2,5	5
			23		22,5	31
<b>TOTAL</b>			190		179,5	240



## **Introduction To Computer Engineering**

This course introduces the students to the fundamentals of computer engineering. The aim of this course is to provide introductory information about topics within the scope of Computer Engineering.

## **Programming With C-1**

This course provides elementary introduction to some of the tools, techniques and concepts in programming languages and implementing basic algorithms with C. The focus of the course is to give students fundamental coding ability and paradigms of general programming style.

## **Programming With C-2**

The purpose of this course is to develop basic algorithm and problem solving skills of students which studied in course Programming with C-I and to teach students advanced concepts like pointers, strings, structures and text files.

## **Data Structures**

The aim of this course is to introduce and teach basic data structures that are used in computer programming and algorithms. The objective of this course is to extend the students' knowledge of data structures, and to enhance their expertise in algorithmic analysis and algorithm design techniques.

## **Discrete Mathematics**

The aim of this course is to ensure that students understand the mathematical structure of the computer. By the help of this course the students will be able to understand common mathematical concepts used in computer sciences. This course will constitute a mathematical the basis for the other courses of the program.

## **Database Management Systems-1**

The aim of this course is to ensure that student understand media types for storing data, concept of file organizations and introductory concepts of databases.

## **Algorithm Design And Analysis**

This course is to provide an introduction to the design and analysis of computer algorithms. Students will become acquainted with both the strengths and limitations of major algorithm design approaches like divide and conquer, greedy methods and dynamic programming. In addition to the design and analysis of algorithms, students are expected to learn substantial discrete mathematics problem solving techniques in order to solve common real life engineering design problems in computer science.

## **Information Technology Law**

The aim of this course is to teach the legal duties of the information system administrators and the responsibilities of the information system administrators to learn the rules of law which regulate rapidly developing information processing technologies and the types of

crimes committed by using information processing technologies and in which cases the information in the information systems can be used as evidence.

### **Automata And Computation Theory**

The aim of this course is to explain the computation process of computers to the students by using abstract and algorithmic models like finite state machines, push down automata, regular expressions and languages and Turing machines. Using those abstract models, proofs of basic computation theories will be taught and sample problems that have or do not have solutions in polynomial time will be examined.

### **Database Management Systems-2**

The aim of this course to ensure that students gain practical and theoretical information on database management systems.

### **Object Oriented Programming**

The aim of this course is to describe the principles of object-oriented programming structure and give the ability to produce use cases for a given problem. In this introductory course, students will use Java programming language to develop, implement and test object-oriented programs.

### **Computer Networks**

The purpose of this course is to identify the technologies of computer networks, their infrastructure, to obtain basic theoretical and applied knowledge necessary to establish a computer network.

### **Computer Architecture**

The aim of this course is to inform the students about stratified architecture of the computers and examine, explain and compare contemporary processor technologies in detail.

### **Operating Systems**

The aim of this course is to explain to students the basic tasks of the operating system. Process, memory, file and I/O management functions of operating systems are explained in detail.

### **Software Engineering**

The aim of this course is to examine the principles, concepts and techniques of software engineering especially for large projects. This course covers a variety of engineering concepts such as project management, people management, requirement analysis, software lifecycles, system models etc.

### **Web Programming**

The aim of this course is to enable students to understand the basic components of web applications, to list the sequence of events of web forms, to learn the differences between server controls and other controls, and to learn basic objects for data access with their functions.

## **Artificial Intelligence**

In this course, artificial intelligence techniques will be taught in detail, design and application of intelligent agents and practical use of these techniques will be taught.

## **Computer Network Applications**

The purpose of this course is to identify the technologies of computer networks, their infrastructure, to obtain basic theoretical and applied knowledge necessary to establish a computer network.

## **Programming Languages**

The aim of this course is to ensure that students learn the common concepts of programming languages and gain a comprehensive perspective in this field.

## CONSTRUCTION ENGINEERING

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCE	Required	Cr.	3	45	3	
TURKISH LANGUAGE AND EXPOSTARY WRITING-1	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES-1	Required	Cr.	2	30	2	2
MATHS-I	Required	Cr.	5	75	5	10
PHYSICS-I	Required	Cr.	4	60	3,5	8
CHEMICH	Required	Cr.	3	45	3	6
FOREING LANGUAGE-1	Required	Cr.	6	90	5	6
			25		23,5	34

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND EXPOSTARY WRITING -2	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES -2	Required	Cr.	2	30	2	2
MATHS-II	Required	Cr.	5	75	5	10
PHYSICS -II	Required	Cr.	4	60	3,5	8
TOPOGRAPHY	Required	Cr.	2	30	1,5	
FOREING LANGUAGE-2	Required	Cr.	6	90	5	6
			23		21	28

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
STATICS	Required	Cr.	4	60	4	4
COMPUTER AIDED TECHNICAL DRAWING	Required	Cr.	3	45,0	2,5	5
LINEER ALGEBRA	Required	Cr.	3	45	3	6
SOCIOLOGY	Required	Cr.	2	30	2	2
THE BASICS OF LAW	Required	Cr.	3	45	3	3
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
STATISTIC	Required	Cr.	3	45	3	6
FOREIGN LANGUAGE - 3	Required	Cr.	3	45,0	2,5	5
			25		24	33

**4th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
DYNAMICS	Required	Cr.	3	45	3	3
STRENGTH OF MATERIALS I	Required	Cr.	4	60	3,5	5
MATERIALS SCIENCE	Required	Cr.	2	30	2	2
GEOLOGY FOR CIVIL ENGINEER	Required	Cr.	2	30,0	2,0	3
DIFFERENTIAL EQUATIONS	Required	Cr.	3	45,0	3,0	6
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30,0	2,0	2
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 4	Required	Cr.	3	45,0	2,5	5
			25		24	28

**5th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
SOIL MECHANICS	Required	Cr.	4	60	3,5	5
FLUID MECHANICS	Required	Cr.	3	45	3	5
STRENGTH OF MATERIALS II	Required	Cr.	3	45	3	4
THEORY OF STRUCTURES I	Required	Cr.	3	45	3	5
BUILDING MATERIALS	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45,0	2,5	5
			23		22	29

**6th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
HYDROLICS	Required	Cr.	3	45	2,5	5
FOUNDATION ENGINEERING	Required	Cr.	3	45	2,5	5
REINFORCED CONCRETE I	Required	Cr.	3	45	2,5	5
THEORY OF STRUCTURES II	Required	Cr.	3	45	3	5
SURVEYING	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45,0	2,5	5
			22		20	30

**7th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE STEEL STRUCTURES	Optional	Cr.	4	60	4	5
ELECTIVE COURSE REINFORCED CONCRETE	Optional	Cr.	3	45	2,5	5
ELECTIVE COURSE WATER SUPPLY AND ENVIRONMENTAL SANITATION	Optional	Cr.	3	45	2,5	5
ELECTIVE COURSE CONSTRUCTION MANAGEMENT	Optional	Cr.	3	45	3	5
ELECTIVE COURSE ENGINEERING ECONOMICS	Optional	Cr.	3	45	3	5
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 7	Required	Cr.	3	45,0	2,5	5
			25		23,5	30

**8th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE WATER RESOURCES AND HYDROLOGY	Optional	Cr.	3	45	2,5	4
ELECTIVE COURSE HIGHWAY ENGINEERING	Optional	Cr.	4	60	3,5	5
ELECTIVE COURSE CONSTRUCTION MANAGEMENT	Optional	Cr.	2	30	2	3
ELECTIVE COURSE WEAPON SYSTEMS AND BALLISTICS	Optional	Cr.	2	30	2	3
ELECTIVE COURSE STRUCTURAL DESIGN	Optional	Cr.	3	45	3	3
COMMUNICATION	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
PROJECT	Required	Cr.			1	2
FOREIGN LANGUAGE - 8	Required	Cr.	3	45	2,5	5
			23		22,5	28
TOTAL			191		180,5	240

## **Statics**

Civil engineering (like many others) is based on mechanics. The major objectives of this course are: 1) To establish the concept of equilibrium , 2) To introduce the concept of structural analysis with reference to statically determinate trusses and beams, 3) To introduce properties of surfaces used in mechanics. At the end of the course, students are expected to have an ability to identify, formulate and solve engineering problems, an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice, and an ability to apply knowledge of mathematics, science, and engineering

## **Computer Aided Technical Drawing**

The objectives of this course are to enable the students to understand the general concepts of engineering drawing and general principles on a CAD (particularly AUTOCAD provided by AUTODESK) and extend this knowledge to general use of CADs. This course mainly aims to increase the students' ability to use IT, to carry out teamwork and to communicate effectively and to enhance the students' sketching/drawing skills.

## **Dynamics**

The course provides engineering students firm foundations in the study of motion, forces that cause motion and their relationships for rigid bodies using Newton's Laws, energy and momentum principles and introduces systems governed by ordinary differential equations. The students fulfilling the course requirements satisfactorily are expected to -Determine the kinematic relationship for two dimensional (2-D) motion of system of particles and rigid bodies. -Apply Newton's equations to 2-D problems to determine forces resulting from a specified motion. -Analyze 2-D motion of particles and rigid bodies using energy and momentum principles. -To study and discuss one-degree-of-freedom undamped free and forced vibrations of rigid bodies using Newton's equations of motion and energy methods.

## **Strength Of Materials-I**

The objective of this course is to teach students the fundamentals related with the mechanics of deformable bodies. At the end of this course, the learner is expected to be able to perform calculations of stress and strain on simple structural members. Be able to solve simple problems related with indeterminate structures.

## **Materials Science**

All engineers are concerned with the structural safety, serviceability and the economics of the constructions with which they are involved. The successful approach to the problem can only be established through a sound knowledge of computational methods of engineering and a thorough understanding of the properties and behavior of engineering materials. The purpose of this course is to emphasize the basic principles necessary for an understanding of the fundamental nature and properties of engineering materials and to make clear the significance of these principles in engineering practice. At the end of the course, students are expected to have an ability to apply knowledge of mathematics, science, and engineering, an ability to identify, formulate and solve engineering problems, and an understanding of professional and ethical responsibility.

## **Geology For Civil Engineering**

The objectives of this course are 1) To provide students the basic knowledge of the layers of the earth, rocks and minerals, external and internal earth processes. 2) To introduce students the techniques used in geological studies. 3) To develop students ability to visualize three dimensional nature of the geological units. 4) To explain students the significance of the geological materials and processes in civil engineering applications. 5) To teach students the contemporary issues related to geological engineering. At the end of the course, students are expected to determine the basic types of earth materials, earth structures and earth processes and expected to link this information to Civil Engineering applications.

## **Soil Mechanics**

The Objective of this course is to introduce the students to the fundamental principles of soil mechanics and the behavior of engineering soils; how these properties are used to solve some civil engineering problems like earth pressure and slope stability is also covered. By the end of the course, the students will be able to 1) perform the tests and operations needed to classify soils; 2) perform the necessary tests, and evaluate seepage losses through and beneath dams; 3) perform the necessary tests, and analyze the stability of slopes; 4) perform the necessary tests, and apply simple calculations for the estimation of settlements beneath uniformly loaded soil layers; 5) perform the necessary tests, and estimate the earth pressure on earth retaining structures.

## **Fluid Mechanics**

The objective of this course is to introduce the students the fundamental principles of fluid mechanics and to form a background for the courses in the field of hydraulics. At the end of the course, students are expected to learn hydrostatics, forces on plane and curved surfaces, buoyancy, hydrostatics in moving and rotating containers. Lagrangian and Eulerian descriptions, rate of deformation, system and control volume approach, Reynolds transport theorem, principles of conservation of mass, momentum and energy and Bernoulli equation.

## **Strength Of Materials-II**

The objective of this course is to teach students the fundamentals related with the mechanics of deformable bodies. At the end of this course, the students are expected to learn plasticity, failure criteria, bending and shear, eccentric normal force, elastic curve, torsion and bending moments, energy methods and elastic stability.

## **Structural Analysis I**

The aim of structural analysis is to evaluate the external reactions, the deformed shape and internal stresses in the structure. At the end of the course, students are expected to learn and analyse determinate isostatic plane trusses, fixed loaded isostatic systems, three hinged arches and frames, hinged compound systems, trusses, mixed systems, random loads and influence lines.

## **Materials Of Construction**

The aim of the course is to provide the scientific basis for the understanding and development of construction materials. In this course the students will learn production,



types, uses in construction, properties and tests for these materials: lime, gypsum, hydraulic cements, mineral aggregates, concrete, clay products, ferrous metals, polymers, bituminous materials, timber. Constituents, theories of mix design, principal steps in production, physical and mechanical properties of concrete.

### **Hydrolics**

The aim of the course is to teach the basic concepts of flows in pipes and open channels; to apply continuity, momentum and energy principles for the solution of various pipeline and open channel problems. At the end of the course, students are expected to increase the ability to use the basic fluid mechanics principles to solve pipe and channel flow problems, to apply knowledge of mathematics and fluid mechanics to design and conduct experiments, to analyze and interpret data and to analyze and design pipeline systems, open channel systems.

### **Foundation Engineering I**

The course is aimed at introducing the basic principles of foundation design of civil engineering structures to civil engineering students. Some theoretical background information is also given in addition to the fundamental concepts explained in Soil Mechanics. At the end of the course, students are expected to apply knowledge of mechanics; to gain an ability of engineering design and solving engineering problems; understanding of professional responsibility in the field of engineering; to gain an ability of using the techniques and skills necessary for engineering practice

### **Reinforced Concrete I**

The major objectives of this course are to establish the basic principles of reinforced concrete structural member and sytem behaviour and to introduce the basic principles of the analytical methods and design procedures. At the end of the course, the successful student is expected to be able to interpret indications of different reinforced concrete structural behaviour types to a certain extent and to perform analysis and design computations for some basic structural members concerning some basic problems.

### **Structural Analysis II**

The aim of structural analysis is to evaluate the external reactions, the deformed shape and internal stresses in the structure. At the end of the course, students are expected to learn computation of statically indeterminate planar structures under fix loads using the force method and computation of statically indeterminate planar structures under fix loads using the displacement method.

### **Surveying**

The objective of this course is to gain the students the ability to apply knowledge of mathematics, science, and engineering to understand the measurement techniques and equipment used in land surveying, to appreciate the need for accurate and thorough note taking in field work to serve as a legal record and to gain the ability to use modern survey equipment to measure angles and distances.

## **Steel Structures**

The aim of the course is to introduce the students to the steel structures design codes and specifications, design philosophies, choice of the appropriate structural steel systems for multipurpose halls, elements design: cross section classification, tension members, compression members, floor beams and crane girders, analysis and design of bolted connections subjected to shear and tension forces, welds: types of welds, analysis and design of bolted connections subjected to shear and tension forces.

## **Reinforced Concrete II**

The objective of this course is to teach students to design reinforced concrete flooring, foundation and concrete walls. At the end of the course, the successful student is expected to be able to interpret indications of different reinforced concrete structural behaviour types to a certain extent and to perform analysis and design computations for some basic structural members concerning some basic problems.

## **Water Supply And Environmental Sanitation**

The course will deal with technical aspects of drinking water supply and sanitation in an integrated way, pay attention to the choice of technologies and tools, ranging from low cost to advance options. At the end of the course, the successful student is expected to learn dealing with water supply and distribution, design and operation of conventional water treatment plants for ground and surface water, advance water treatment options, sewage treatment and disposal, planning for water supply projects and pollution control strategies.

## **Construction Management-I**

The objective of this course is 1) to introduce the students a general picture of the construction industry together with the contemporary management topics, 2) to provide the students with basic information on principles of construction project management and increase their awareness on major tasks of a construction manager, 3) to present some of the techniques and methods used during the management of a construction project such as network analysis, cost estimating techniques, hourly output estimation of equipment etc. At the end of this course the student will be furnished with the basic principles of construction project management, project delivery systems and contract strategy, cost estimating and tendering, construction planning. This course is designed to give an overall introductory information in the field of construction management at the undergraduate level.

## **Water Resources And Hydrology**

The objective of the course is to; enable students to understand the basic concept of the water resources engineering, assess the environmental, economic and social impacts of potential solutions to water resources engineering problems, teach students how to evaluate approaches to water resources problems, educate the students on making research and presenting the outcomes of scientific study in water resources engineering. Some of the subjects dealt in this course are as follows: Basin and hydrologic processes, precipitation, stream flow, infiltration. Hydrograph analysis. Hydrologic flood routing. Groundwater hydrology. Dams and spillways. Municipal water supply systems. Wastewater and stormwater collection and discharge. Irrigation and drainage.

## **Highway Engineering**

The aim of the course is to get acquainted all civil engineering students with geometric elements of highways to be used in highway design first, and then provide the basic determinants of traffic system to alleviate traffic problems. The students would be capable to carry out a highway design project starting with route location and continuing with all phases of the design by considering those geometric elements conformal with the economical mass distribution, and would be able to search solutions to traffic problems with analytical methods of traffic engineering taught at an introductory level.

## **Construction Management-II**

The objective of this course is to introduce quantity measurement methods and to give them brief information about the Turkish construction industry and Turkish practice giving reference to current rules and regulations (eg. Health and Safety Regulations for Public Works). Learning outcomes of this course are the broad education necessary to understand the impact of engineering solutions in a global and societal context., an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice, and a recognition of the need for and an ability to engage in life-long learning

## **Structural Design**

A structure is expected to be safe, stable, serviceable and durable. The objective of this course is the students to be able to perform analysis and design of reinforced concrete members and connections, to identify and interpret the appropriate relevant industry design codes, to become familiar with professional and contemporary issues in the design and fabrication of reinforced concrete members.

## MECHANICAL ENGINEERING

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCE	Required	Cr.	3	45	3	
TURKISH LANGUAGE AND EXSPOSTARY WRITING-1	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES-1	Required	Cr.	2	30	2	2
MATHS-I	Required	Cr.	5	75	5	10
PHYSICS-I	Required	Cr.	4	60	3,5	8
CHEMICH	Required	Cr.	3	45	3	6
FOREING LANGUAGE-1	Required	Cr.	6	90	5	6
			25		23,5	34

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND EXSPOSTARY WRITING -2	Required	Cr.	2	30	2	2
TURKISH HISTORY OF REVOLUTION AND ATATURK'S PRINCIPLES -2	Required	Cr.	2	30	2	2
MATHS-II	Required	Cr.	5	75	5	10
PHYSICS -II	Required	Cr.	4	60	3,5	8
TOPOGRAPHY	Required	Cr.	2	30	1,5	
FOREING LANGUAGE-2	Required	Cr.	6	90	5	6
			23		21	28

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
STATICS	Required	Cr.	3	45	3	5
COMPUTER AIDED ENGINEERING DRAWING	Required	Cr.	3	45	2,5	5
LINEER ALGEBRA	Required	Cr.	3	45,0	3,0	6
THERMODYNAMICS-1	Required	Cr.	3	45,0	3,0	4
THE BASICS OF LAW	Required	Cr.	3	45	3	3
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
STATISTIC	Required	Cr.	3	45	3	6
FOREIGN LANGUAGE - 3	Required	Cr.	3	30,0	2,5	5
			25		24	36

#### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
DIFFERENTIAL EQUATIONS	Required	Cr.	3	45	3	6
PRINCIPLES OF ELECTRICAL AND ELECTRONICS ENGINEERING	Required	Cr.	2	30	2	3
DYNAMICS	Required	Cr.	3	45	3	4
STRENGTH OF MATERIALS	Required	Cr.	3	45	3	4
THERMODYNAMICS-2	Required	Cr.	3	45	3	4
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 4	Required	Cr.	3	45,0	2,5	5
			25		24,5	30

#### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MACHINE ELEMENTS-1	Required	Cr.	3	45	3	4
FLUID MECHANICS-1	Required	Cr.	3	45	2,5	4
MECHANISM TECHNIQUE	Required	Cr.	3	45	3	4
HEAT TRANSFER	Required	Cr.	3	45	3	4
MATERIALS SCIENCE	Required	Cr.	3	45	3	4
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45,0	2,5	5
			22		21	25

#### 6th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MACHINE ELEMENTS-2	Required	Cr.	3	45	3	4
FLUID MECHANICS-2	Required	Cr.	3	45	2,5	4
MANUFACTURING PROCESSES	Required	Cr.	3	45	2,5	5
ELECTIVE COURSE ENGINEERING DESIGN	Optional	Cr.	3	45	2,5	5
ELECTIVE COURSE INTRODUCTION COMPUTER PROGRAMMING	Optional	Cr.	4	60	3	6
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45,0	2,5	5
Total (8 Lesson)			23		20	29

**7th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MACHINE LABORATORY-1	Required	Cr.	4	60	2	6
ELECTIVE COURSE WORK STUDY	Optional	Cr.	3	45	3	3
ELECTIVE COURSE ENGINEERING APPLICATIONS	Optional	Cr.	3	45	3	4
ELECTIVE COURSE ENGINEERING ECONOMICS	Optional	Cr.	3	45	2	4
COMMUNICATION	Optional	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 7	Required	Cr.	3	45,0	2,5	5
			24		20,5	25

**8th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MACHINE LABORATORY-2	Required	Cr.	4	60	2	6
ELECTIVE COURSE LIGHT WEAPON DESIGN	Optional	Cr.	3	45	3	4
ELECTIVE COURSE INTERNATIONAL RELATIONS	Optional	Cr.	3	45	3	5
ELECTIVE COURSE SURVEYING	Optional	Cr.	3	45	3	4
ELECTIVE COURSE MOTORS FIRED WITH COMPRESSION	Optional	Cr.	3	45	3	4
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
PROJECT	Required	Cr.			1	2
FOREIGN LANGUAGE - 8	Required	Cr.	3	45,0	2,5	5
			25		23,5	33
<b>TOTAL</b>			192		178	240

## **Statics**

The purpose of this course is to provide cadets to teach fundamentals of mechanical engineering and gain the ability of a solution in a simple and logical way. This course which is the beginner of mechanical engineering training covers the rigid bodies in equilibrium condition that is the first law of the mechanic. Thus this course is basically to aim cadets to teach the static equilibrium positions of the rigid bodies under certain forces.

## **Thermodynamics-1**

The purpose of this course is to introduce all systems that directly related to energy. Carve out an energy conservation awareness at systems. Bring in knowledge and skills about energy cycles.

## **Strength Of Materials**

The main topics of Mechanical and Mechanical Engineering and forms the basis of mechanical design. Understanding of stress and strain concepts for the elastic bodies. Ability to calculate the stress state at a point under the combined loading effect for the mechanical design. Ability to solve the statically undetermined problems. Understanding the principle stress concepts and ability to apply the stress transformation.

## **Dynamics**

The purpose of this course is to give the abilities of calculating the motion that results due to applied forces and moments and calculating the forces and moments that are necessary to result in prescribed motion characteristics. Dynamics, which is one of two main subjects, investigates moving objects under the influence of forces. It can be shown as motion of rockets, missile, light weapon bullet and artificial satellite as an example. In this course that provides not only the bases to the top-level subjects of mechanical engineering, but also gains abilities to more evaluate and understand physical events in our environment, the moving objects are firstly assumed as a particle and their movements are examined with this assumption.

## **Thermodynamics-2**

The purpose of this course is to Introduce all systems that are directly related to energy. carve out an energy conservation awareness at systems. Bring in knowlwdge and skills about energy cycles.

## **Machine Elements-1**

The purpose of this course is to Introduce all machine elements in mechanical design. Analyze as functional and stress calculation of machine elements by using mechanics. Determine the input and output values of the machine system elements By using the available experimental models. Use the standards and design criteria. Provide the necessary knowledge, capability and creativity for task specification and concept formation of the machine design, so to progress design ability and capability

## **Fluid Mechanics-1**

The purpose of this course is to introduce the basic principles of fluid mechanics. Define, formulate and simplify the equations of fluid flow. Gain ability to use them for the solution of fluid flow problems.

## **Heat Transfer**

The purpose of this course is to introduce heat transfer modes; conduction, convection and radiation. Interpret ability calculate of thermal systems by using heat transfer principles. Teach heat transfer in plane wall, cylindrical wall, spheres and extended surfaces. Introduce heat transfer heat source systems. Teach forced and natural convection systems and radiation heat transfer. Introduce types and analysis of heat exchangers.

## **Material Science**

The purpose of this course is to provide cadets to teach the concepts of material science, and help them gain ability for evaluation and relation between concepts and behavior of engineering materials and gain knowledge about casting, welding, plastic forming and machining processes in order to introduce the principles of these processes.

## **Machine Elements-2**

The purpose of this course is to give constructive characteristics and design methods of cycloid, involute, helical, conic, cylindrical, bevel, spiral and worm gear mechanisms, belt-pulley and chain mechanisms. To introduce form connected speed reduction mechanisms and their drives. To improve knowledge on mechanical design and to develop capability on prototype preparation by means of projects. To give fundamentals of synthesis phase of design.

## **Fluid Mechanics-2**

The purpose of this course is to describe and explain theoretical principles of fluid mechanics and related mathematical relations. Cadets can understand and solve basic engineering computational problems of fluid mechanics.

## **Manufacturing Processes**

To gain knowledge about casting, welding, plastic forming and machining processes, powder metallurgy and introducing the principles of methods, used equipment and application areas and giving basic calculation knowledge about these methods as well.

## **Machine Laboratory 1-2**

The purpose of this course is to reinforcement of the theoretical information throughout mechanical engineering education with the practical application and making cadets to gain practical information in the stage of becoming an engineer.

## **Final Project 1-2**

The purpose of this course; to provide the students to have enough information and to carry on practices about the subjects related to Mechanical engineering.



## **Light Weapon Design**

Purpose of this course is to provide cadets to learn components of small arms, the requirements of designing or developing and qualifying a weapon with technical fundamental components and auxiliary accessories.

## **Motors Fired With Compression**

The purpose of this course is to provide the theory, principles, definitions and basic laws about starting principles of diesel engines, fuels, ignitions and combustion chamber, mixture formation and emissions, supercharging, injection systems, types of pumps, injectors and diesel fuel heater, electronic controls systems, common-rail injection systems.

## SOCIOLOGY

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCES	Required	Cr.	3	45	3	
TOPOGRAPHY	Required	Cr.	2	30	1,5	
TURKISH LANGUAGE AND COMPOSITION - I	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - I	Required	Cr.	2	30	2	2
MATHEMATICS - I	Required	Cr.	2	30	2	4
PHYSICS	Required	Cr.	2	30	2	4
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE - 1	Required	Cr.	6	90	5	6
LISTENING AND SPEAKING ON FOREIGN LANGUAGE - I	Required	Cr.	4	60	3,5	8
			25		23	29

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND COMPOSITION - II	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - II	Required	Cr.	2	30	2	2
MANAGEMENT AND ORGANIZATION	Required	Cr.	3	45	3	3
MATHEMATICS - II	Required	Cr.	2	30	2	4
THE PRINCIPLES OF LAW	Required	Cr.	3	45	3	4
FOREIGN LANGUAGE - 2	Required	Cr.	6	90	5	6
LISTENING AND SPEAKING ON FOREIGN LANGUAGE - II	Required	Cr.	4	60	3,5	8
			24		22,5	29

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
SOCIOLOGY	Required	Cr.	3	45	3	5
INTRODUCTION TO PHILOSOPHY	Required	Cr.	3	45	3	5
SOCIAL PSYCHOLOGY-I	Required	Cr.	3	45	3	5
HISTORY OF SOCIOLOGY-1	Required	Cr.	3	45	3	4
INTRODUCTION TO COMPUTING AND INFORMATION TECHNOLOGY	Required	Cr.	2	30	2	4
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 3	Required	Cr.	3	45	2,5	5
			23		22,5	30

#### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
CLASSICAL SOCIOLOGICAL THEORY-2	Required	Cr.	3	45	3	4
SOCIOLOGY OF INSTITUTIONS	Required	Cr.	3	45	3	5
SOCIAL PSYCHOLOGY-II	Required	Cr.	3	45	3	4
DEMOGRAPHICS	Required	Cr.	2	30	2	3
INTRODUCTION TO ECONOMICS	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
STATISTICS - I	Required	Cr.	3	45	3	4
FOREIGN LANGUAGE - 4	Required	Cr.	3	45	2,5	5
			23		22,5	30

#### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
SOCIOLOGY OF COMMUNICATION	Required	Cr.	3	45	3	5
RESEARCH METHODS	Required	Cr.	3	45	3	5
CONTEMPORARY SOCIOLOGICAL THEORIES-1	Required	Cr.	4	60	4	5
FAMILY SOCIOLOGY	Required	Cr.	3	45	3	5
ELECTIVE COURSE	Optional	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45	2,5	5
			23		22,5	30

#### 6th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
RESEARCH METHODS II	Required	Cr.	3	45	3	5
CONTEMPORARY SOCIOLOGICAL THEORIES-2	Required	Cr.	3	45	3	5
HISTORY OF TURKISH SOCIOLOGY	Required	Cr.	3	45	3	5
POLITICAL SOCIOLOGY	Required	Cr.	3	45	3	5
ELECTIVE COURSE	Optional	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45	2,5	5
			22		21,5	30

### 7th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE HISTORY OF TURKISH SOCIOLOGY	Optional	Cr.	3	45	3	5
ELECTIVE COURSE SOCIAL STRUCTURE OF TURKEY	Optional	Cr.	3	45	3	5
ELECTIVE COURSE PHYSIOLOGICAL PSYCHOLOGY	Optional	Cr.	3	45	3	5
CONTEMPORARY POLITICAL SYSTEMS AND COMPARISON OF DIFFERENCES	Required	Cr.	3	45	3	5
APPLIED RESEARCH METHODS	Required	Cr.	3	45	3	4
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required		2	30	2	
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE - 7	Required	Cr.	3	45	2,5	5
			24		23,5	32

### 8th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ELECTIVE COURSE SOCIOLOGY OF CRIME	Optional	Cr.	3	45	3	5
ELECTIVE COURSE MILITARY PSYCHOLOGY	Optional	Cr.	3	45	3	5
ELECTIVE COURSE TURKISH ECONOMY	Optional	Cr.	3	45	3	5
MILITARY SOCIOLOGY	Required	Cr.	3	45	3	4
SOCIAL MOVEMENTS	Required	Cr.	3	45	3	4
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 8	Required	Cr.	3	45	2,5	5
PROJECT	Required	Cr.			1	2
			24		24,5	30
<b>TOTAL</b>			<b>188</b>		<b>182,5</b>	<b>240</b>

## **Introduction To Psychology**

In this course theoretical and applied fields of psychology are introduced to the students at a general level.

## **Sociology**

In this course the origins, basic concepts and methods of sociological studies are introduced to the students at a general level.

## **Introduction To Philosophy**

The objective of this course is to provide an introduction to the fundamental concepts and argumentative strategies of philosophy.

## **Social Psychology-I**

In this course students are introduced with the basic topics, approaches and methods of social psychology.

## **History Of Sociology-I**

The objective of this course is to introduce students the early developments of sociology.

## **Classical Sociological Theories-II**

The objective of this course is to make students familiar with concepts, issues and debates in the field of classical sociology.

## **Sociology Of Institutions**

This course aims to help the students to develop an understanding of sociological theories in literature and to make differences between approaches developed to analyze social institutions and associations.

## **Social Psychology-II**

To introduce the students with the study topics, approaches, and research methods of social psychology.

## **Demography**

The objective of this course is provide a general overview on the history of demography as a science and demographic theories.

## **Sociology Of Communication**

This course aims to introduce students communication theories and their roles in social institutions.

## **Research Methods**

The goal of this course is to provide students with necessary theoretical and practical knowledge base for sociological research methods.

## **Contemporary Theories Of Sociology**

The objective of this course is to provide a thorough introduction to theoretical orientations in contemporary sociological theory.

## **Sociology Of Family**

The goal of this course is introduce the students with the family as a social institution; the structure and types of family; the functions of the family; changing role of the family.

## **Research Methods II**

The goal of this course is to provide students with necessary theoretical and practical knowledge base for planning, implementation and presentation of research.

## **Contemporary Theories Of Sociology II**

The objective of this course is to examine the major approaches in contemporary social and critical theory.

## **History Of Turkish Sociology**

This course aims a comprehensive study of Turkish sociology in historical perspective.

## **Political Sociology**

The course draws together the perspectives of two disciplines, politics and sociology in an attempt to understand political structures and processes.

## **Social Structure Of Turkey**

The objective of this course is to introduce students to the history and social structure of Turkey.

## **Physiological Psychology**

This course aims to teach the complex relations between brain systems, at the cellular and neurochemical levels, and behavior.

## **Contemporary Political Systems And Comparison Of Differences**

The aim of this course is to introduce students main themes and issues in politics and issues in politics and its relations with society.

## **Applied Research Methods**

The course will make the students of sociology familiar with the methodology of social sciences and provide them with skills required for conducting a sociological research by using qualitative research techniques.

## **Sociology Of Crime**

The aim of this course is to analyze fundamental debates about the social origins and outcomes of crime.

### **Military Psychology**

The objective of this course is to take a closer look at the role of psychology in military context.

### **Military Sociology**

This course aims to introduce students the intersection of the military and the larger society.

### **Social Movements**

The basic purpose of this course is to acquaint students with the dynamics, the components and the engines of social movements.

## BUSINESS ADMINISTRATION

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCES	Required	Cr.	3	45	3	
TOPOGRAPHY	Required	Cr.	2	30	1,5	
TURKISH LANGUAGE AND COMPOSITION - I	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - I	Required	Cr.	2	30	2	2
MATHEMATICS - I	Required	Cr.	2	30	2	4
PHYSICS	Required	Cr.	2	30	2	4
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE - 1	Required	Cr.	6	90	5	6
LISTENING AND SPEAKING ON FOREIGN LANGUAGE - I	Required	Cr.	4	60	3,5	8
			25		23	29

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND COMPOSITION - II	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - II	Required	Cr.	2	30	2	2
MANAGEMENT AND ORGANIZATION	Required	Cr.	3	45	3	3
MATHEMATICS - II	Required	Cr.	2	30	2	4
THE PRINCIPLES OF LAW	Required	Cr.	3	45	3	4
FOREIGN LANGUAGE - 2	Required	Cr.	6	90	5	6
LISTENING AND SPEAKING ON FOREIGN LANGUAGE - II	Required	Cr.	4	60	3,5	8
			24		22,5	29

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
GENERAL ACCOUNTING - I	Required	Cr.	3	45	3	5
GENERAL BUSINESS ADMINISTRATION - I	Required	Cr.	3	45	3	5
ORGANIZATIONAL BEHAVIOR	Required	Cr.	3	45	3	5
INTRODUCTION TO COMPUTING AND INFORMATION TECHNOLOGY	Required	Cr.	2	30	2	4
ADMINISTRATIVE LAW	Required	Cr.	2	30	2	3
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 3	Required	Cr.	3	45	2,5	5
			22		21,5	29



#### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
GENERAL ACCOUNTING - II	Required	Cr.	3	45	3	4
MICROECONOMICS	Required	Cr.	3	45	3	5
COMMUNICATION	Required	Cr.	2	30	2	3
OPERATIONAL RESEARCH - I (MODELING)	Required	Cr.	3	45	3	5
HUMAN RIGHTS LAW	Required	Cr.	2	30	2	3
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
STATISTICS - I	Required	Cr.	3	45	3	4
FOREIGN LANGUAGE - 4	Required	Cr.	3	45	2,5	5
			23		22,5	31

#### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
PRODUCTION MANAGEMENT	Required	Cr.	3	45	3	5
COST ACCOUNTING	Required	Cr.	3	45	3	5
OPERATIONAL RESEARCH - II (DETERMINISTICS)	Required	Cr.	3	45	3	5
HUMAN RESEOURCES MANAGEMENT	Required	Cr.	3	45	3	5
MACROECONOMICS	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45	2,5	5
			22		21,5	30

#### 6th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MANAGEMENT INFORMATION SYSTEM	Required	Cr.	3	45	3	5
MARKETING MANAGEMENT	Required	Cr.	3	45	3	5
MANAGERIAL ACCOUNTING	Required	Cr.	3	45	3	5
CONTEMPORARY APPROACHESS ON MANAGEMENT	Required	Cr.	3	45	3	5
QUALITY AND SERVICE MANAGEMENT	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45	2,5	5
Total (8 Lesson)			22		21,5	30

**7th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
FINANCIAL MANAGEMENT - I	Required	Cr.	3	45	3	4
PUBLIC FINANCE	Required	Cr.	3	45	3	5
STRATEGIC MANAGEMENT	Required	Cr.	3	45	3	5
LABOR LAW	Required	Cr.	3	45	3	4
ELECTIVE/OPTIONAL COURSE FACILITY PLANNING AND LOCATION	Optional	Cr.	3	45	3	5
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
MILITARY HISTORY-3	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 7	Required	Cr.	3	45	2,5	5
			24		23,5	31

**8th Term**

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
FINANCIAL MANAGEMENT - II	Required	Cr.	3	45	3	4
SOCIOLOGY	Required	Cr.	2	30	2	3
INTERNATIONAL RELATIONSHIPS	Required	Cr.	3	45	3	5
LEADERSHIP THEORIES	Required	Cr.	3	45	3	4
RESEARCH METHODS ON SOCIAL SCIENCES	Required	Cr.	2	30	1,5	3
ELECTIVE/OPTIONAL COURSE TECHNOLOGY AND INNOVATION MANAGEMENT	Optional	Cr.	3	45	3	5
PROJECT	Required	Cr.			1	2
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 8	Required	Cr.	3	45	2,5	5
			25		25	31
TOTAL			187		181	240

## **Management And Organization**

Aim of this course is to teach basic principles of managin, knowledge and skill and techniques which are needed to provide by cadets, who will be commissioned in various ranks of Turkish Armed Forces, to become a successful commander, manager and leader.

## **General Accounting I-II**

General Accounting-I and General Accounting-II courses, the accounting concepts and principles, balance sheet and accounting concepts, accounting, workflow, assets and resources, account monitoring, income statement accounts, year-end accounting procedures and accounting practices are carried out.

## **General Business**

Aim of this course is to develop cadets' analytical thinking, communication and problem solving skills upon understanding Turkish Armed Forces' organizational structure by teaching basic concepts related to organizations' establishment, structure, action and their activities in system approach framework.

## **Organizational Behavior**

Aim of this course is to teach basic principles of institutional behavior, knowledge and skills which are needed by cadets, who are tobe commissioned in various ranks of Turkish Armed Forces, to become a successful commander, manager and leader.

## **Communication**

Aim of this course is to teach meaning and, importance of communication and, issues to be considered during communication, which are needed by cadets, who are to be commissioned in various ranks of Turkish Armed Forces, to become a successful commander, manager and leader.

## **Production Management**

It is aimed to teach the cadets the principles of planning and production techniques that enable people to produce maximum by using minimum and to prevent the waste of sources be making the best use of the available features.

## **Cost Accounting Managerial Accounting**

In Cost and Management Accounting course, management accounting, cost and elements of cost accounting record layout, cost determination, expenses, expenditure areas and distribution expenses to the product installation, cost-volume relationships, cost-volume relation between the cost-volume-profit analysis, Full Cost, Normal Cost and Variable Methods cost, current Cost Analysis of Management Decision and operating budgets are processed.

## **Human Resource Management**

Human Resources Management course, the Harbiye of the armed forces, especially to take part in organizations organization for the whole of skilled labor creation, by motivating and training the task required level of employment and ensure continuity for Human Resources in the field approach, and basic applications is to gain.

## **Management Information Systems**

The purpose of the course is to teach the management information technologies, which can be used for collecting and processing the data that is essential for operating the management functions like decision-making, coordination, control and analyzing, to the Cadets who will command to the socio- technical military units, headquarters while solving the different kinds of problems about the military affairs by the way of applying the policies and alternative course of action plans.

## **Marketing Management**

Organizations to sustain their existence have produced the demands of customers for the product or service you need to pull. This topic is of great importance in marketing. Armed Forces of the security services organization, producing the most important is protecting the integrity of the country. Today, the public awareness on the importance of security services and support for the formation of the Armed Forces that produce conscious use of marketing techniques for security services is required. In this context, the purpose of marketing courses, marketing strategies and techniques to teach cadets, to move more consciously is to provide professional lives.

## **Contemporary Approaches To Management**

The purpose of this program is to equip the Cadets with required management knowledge to ensure that they are groomed as successful leaders and commanders to serve at posts at different levels of the Turkish Armed Forces and to have them master the management approaches prevalent in the recent years and to implement these approaches in their lives.

## **Quality and Service Management**

Aim of this course is to teach basic principles of quality and service management. Quality management is data based, participants management approach which are needed by cadets, who are to be commissioned in various ranks of Turkish Armed Forces, to become a successful commander, manager and leader.

## **Financial Management I-II**

This course of undergraduate studies in Business Administration with a financial point of view to imparting to the cadets who, in the field of economics and finance with existing applications and is intended to provide information on methods.

## **Strategic Management**

Aim of this course is to teach basic principles of strategic management, knowledge and skill and techniques which are needed to provide by cadets, who will be commissioned in various ranks of Turkish Armed Forces, to become a successful commander, manager and leader.

## **Research Methods in Social Sciences**

Course purpose that teach scientific research methods with the basic concepts of identification, the importance of scientific research to express, scientific research proposal preparation process description, scientific research proposal preparation process implementation, literature and literature studies to conduct statistics related to the basic concepts of identification, statistical hypothesis writing, tests necessary for measuring the linear relationship to be applied, the application of parametric tests and scientific research aims to make a report.

## **Technology and Innovation Management**

Technology to business processes effects, to business functions impact, social impact, business objectives in achieving the role of technology, competitiveness in terms of the importance of technology and the business of technology adaptation investigate the factors influencing and provide information.

## **Engineering Economics**

Engineering Economics, Finance engineers to people in the status of the science is a course that aims to teach some basic issues, Systems Engineering is an integral part of the program. For-profit and non-profit enterprises will be given by every decision inevitably needed time value of money related to the information being taught and in this way the Armed Forces will be given in investment decisions involving administrative decisions required in the time value of money of the information produced aims.

## **Military Leadership**

Our objectives are to help the cadets develop and improve their characters and leadership, to teach them what qualities a leader is supposed to have, to help them be officer who have the ability to manage to win the battle under the great stress of war and to provide the cadets with the necessary knowledge and experience in relation to leadership in their process of being a commissioned officer.

## **Financial Statement Analysis**

Accounting is an information system that meets the information needs of users. Accounting, the main function, which is defined as the content of some legal and financial structure (financial) statements performs through. However, the tables, the raw data in terms of meeting the needs of the user comprises an information processing of the data included in these tables should be converted into. Financial Statement Analysis course, the financial statements contained in the crude processed in accordance with the needs of data users to be transformed into information to make healthy decisions and thus aims to teach the basic information to be provided.

## **International Business**

The purpose of this course is to develop students' fundamental knowledge of the history of international finance, its comparative frame structure, concepts, institutions, multinational business and investment, world finance world, global strategy, structure, applications and international operations.

## **Leadership Theories**

In this course, in the frame of developing process of the practices and improvements, of leadership theories, the theory, implementation and searches are focused on. In this context, the aim of the course is to provide the cadets to comprehend the types of the leadership, and the differences between the terms and qualities of leader-manager, and also to gain a scientific background to the cadets who will be future military leaders.

## **Cost Analysis**

To create one of the basic inputs in terms of management decisions to be made in non-profit organizations such as the Armed Forces, and to shed light on all kinds of financial planning and budgeting activities and purchasing decisions based on cost-effectiveness analysis. To teach cost estimations and help to make decisions based on cost calculations made.

## **Accounting and Auditing**

This course Bachelor in Business Administration with accounting and auditing training for cadets who imparting perspective, especially regarding international accounting standards existing theoretical approaches in the field of audit and accounting is to provide information about the applications. Auditing course, the general concepts related to auditing, inspection and related services in accordance with international auditing standards, auditing standards, and implementation phases of the audit process and the audit process control areas are examined.

## PUBLIC ADMINISTRATION

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCES	Required	Cr.	3	45	3	
TOPOGRAPHY	Required	Cr.	2	30	1,5	
TURKISH LANGUAGE AND COMPOSITION - I	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - I	Required	Cr.	2	30	2	2
MATHEMATICS - I	Required	Cr.	2	30	2	4
PHYSICS	Required	Cr.	2	30	2	4
INTRODUCTION TO PSYCHOLOGY	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE - 1	Required	Cr.	6	90	5	6
LISTENING AND SPEAKING ON FOREIGN LANGUAGE - I	Required	Cr.	4	60	3,5	8
			25		23	29

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND COMPOSITION - II	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - II	Required	Cr.	2	30	2	2
MANAGEMENT AND ORGANIZATION	Required	Cr.	3	45	3	3
MATHEMATICS - II	Required	Cr.	2	30	2	4
THE PRINCIPLES OF LAW	Required	Cr.	3	45	3	4
FOREIGN LANGUAGE - 2	Required	Cr.	6	90	5	6
LISTENING AND SPEAKING ON FOREIGN LANGUAGE - II	Required	Cr.	4	60	3,5	8
			24		22,5	29

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
PUBLIC ADMINISTRATION	Required	Cr.	3	45	3	4
COMMUNICATION	Required	Cr.	2	30	2	3
ORGANIZATIONAL BEHAVIOR	Required	Cr.	3	45	3	5
POLITICAL SCIENCE	Required	Cr.	3	45	3	5
CONSTITUTIONAL LAW	Required	Cr.	3	45	3	5
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 3	Required	Cr.	3	45	2,5	5
			23		22,5	29

#### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
ADMISTIRATION LAW-I	Required	Cr.	2	30	2	3
TURKISH ADMINISTRATIVE HISTORY	Required	Cr.	3	45	3	4
HISTORY OF POLITICAL THOUGHT	Required	Cr.	3	45	3	5
HUMAN RIGHTS LAW	Required	Cr.	2	30	2	3
MICROECONOMICS	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
STATISTICS - I	Required	Cr.	3	45	3	4
FOREIGN LANGUAGE - 4	Required	Cr.	3	45	2,5	5
			23		22,5	31

#### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
CIVIL LAW	Required	Cr.	4	60	4	5
ADMISTIRATION LAW-II	Required	Cr.	3	45	3	5
INTERNATIONAL LAW	Required	Cr.	3	45	3	5
MACROECONOMICS	Required	Cr.	3	45	3	5
HUMAN RESEOURCES MANAGEMENT	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 5	Required	Cr.	3	45	2,5	5
			23		22,5	30

#### 6th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
SOCIOLOGY	Required	Cr.	3	45	3	5
PUBLIC FINANCE	Required	Cr.	3	45	3	5
OBLIGATION LAW	Required	Cr.	3	45	3	5
CRIMINAL LAW THE GENERAL PART	Required	Cr.	3	45	3	5
SOCIAL POLICY	Required	Cr.	3	45	3	5
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 6	Required	Cr.	3	45	2,5	5
			22		21,5	30



### 7th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
LAW OF ARMED CONFLICT	Required	Cr.	2	30	2	3
RESEARCH METHODS	Required	Cr.	2	30	2	3
LOCAL GOVERNMENTS	Required	Cr.	3	45	3	4
CRIMINAL LAW(SPECIAL PROVISIONS)	Required	Cr.	3	45	3	5
TURKISH POLITICAL HISTORY	Required	Cr.	3	45	3	5
ELECTIVE COURSE INTERNATIONAL ECONOMICS	Optional	Cr.	3	45	3	4
MILITARY HISTORY-3	Required		2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required	Cr.	2	30	2	
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE - 7	Required	Cr.	3	45	2,5	5
			25		24,5	32

### 8th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
CONTEMPORARY PUBLIC ADMINISTRATION TECHNICALS	Required	Cr.	3	45	3	4
LABOR LAW	Required	Cr.	3	45	3	4
ADMINISTRATIVE JURISDICTION LAW	Required	Cr.	3	45	3	5
URBANIZATION AND ENVIRONMENT	Required	Cr.	4	60	4	5
ELECTIVE COURSE TURKISH ECONOMY	Optional	Cr.	3	45	3	5
PROJECT	Required	Cr.			1	2
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
FOREIGN LANGUAGE - 8	Required	Cr.	3	45	2,5	5
			25		25,5	30
TOTAL			190		184,5	240

## **Introduction To Economics**

This course aims to teach fundamental economic concepts such as supply, demand, inflation; economic matters and systematic relationships between them and the perspectives of economic thoughts that source and shape today's economic and political relations.

## **Micro Economy**

This course aims to introduce economic concepts that have been used in every discipline of social sciences to cadets, to make them enable to analyze by using these concepts and to build academic infrastructure that they need in the future courses related to resource management.

## **Macro Economics**

The aim of this course to examine the economy and to reveal the economic structure. Within the scope of the macroeconomics economic indicators (for example, total production, total revenues, total expenditures, the general level of prices or on the level of employment) can be given. This course aims to teach the following issues: national income, growth, inflation, unemployment, public budget and also international economic concepts such as balance of payments, international capital movements and globalization.

## **Public Finance**

The main purpose of this course is to examine the functions and reason of state, the economic reasons of the government intervention, differences between public and private sector, public expenditures, public revenues, budget, and public debts in the light of theoretical and ongoing debates. Besides, using statistical data sets, the following topics will be examined: the institutional structure of public sector in Turkey, the size of the public sector, the composition of the public expenditures and revenues and the structure of public debts

## **Turkish Economy**

The main objective of the course is to examine the general characteristics of the Turkish economy within the macro and micro analysis throughout the history. Sector analysis will be covered within the micro level analysis. The structure of Turkey's population, employment opportunities, inflation, public finance, balance of payments and external issues such as EU accession process will be covered within the macro level analysis. Using official data, this course aims to compare and analyze Turkish and global economy.

## **International Economics**

The main aim of this course is to provide the basic knowledge and skills about the approaches and applications that the resource managers can take advantage in understanding of international economic relations, events and developments in order to make healthy decisions.

## **Criminal Law (Special Provisions)**

This course aims to teach all cadets, perpetrator, victim, material element, reasons of legality, moral elements, privity, conseil and attempt of the following legal crimes: crimes

against life, crimes against bodily integrity, crimes against sexual inviolability, crimes against honour, crimes against property, forgery of document crimes, crimes against public peace, crimes against reliability and functioning of the public administration, crimes against judiciary, crimes related to economy, industry and trade and cyber crimes.

### **General Laws of Criminal**

This course aims to give the notion of criminal law to the cadets by teaching the basic concepts relating to general provisions of criminal law within the frame of a particular system. This course analyzes following legal issues: First, the fundamental principles of crime and sanction law, and the implementation of Turkish Criminal Law in terms of time and place will be explained. Second, general explanations made about theory of crime and legal element of the crime will be explained. Lastly the specific appearing forms of crime, criminals and security measures will be explained.

### **Human Rights Law**

The aim of this course is to teach the subject of definition of the human rights concept, its scope, historical origins, regulatory texts about protection of rights and freedoms in international field and organizations working for protection of human rights and their working procedures.

### **Law Of Armed Conflict**

Armed conflict law defines methods and means of warfare in armed conflicts and establishes various forms of protection for civilians, other non-combatants as well as combatants. The rules seek to balance military necessity against fundamental principles of humanity. The principles of proportionality, the principle of distinction between military objectives and civilian objects, as well as the principle on unnecessary suffering and superfluous injury form the basis for this body of law. The subject armed conflict law is a part of public international law, but does not go in detail into the rules on the legality of warfare (jus ad bellum). The main focus is on which rules apply when there is an armed conflict going on (jus in bello), irrespective of the status of the conflict. International Humanitarian Law has certain contact points with two other subjects under public international law; international criminal law and international armed conflict law

### **Constitutional Law**

This course aims to teach subjects of constitution and the concept of state, constitutional developments, constitution types, constitutional jurisdiction, constitutional conformity check, theory of state, legislation, executive power and jurisdiction organs in general and in regard to 1982 Constitution. It is also aimed to give information about forms of state and regimes, democracy, elections and fundamental rights and liberties.

### **Law of Real Property**

This course aims to teach the definition, the place among general law system, relations with other law branches, subject and the covering of law of property, term of right in rem, right of property, limited real rights. It is also aimed to give information about land registry, rules of ownership of right and the determination of its limits and registration.

## **Law of Obligations**

This course aims to teach subject, sources and sanctions of obligation, discharge of debt, place and time of performance under general provisions, and types of contracts, such as aspiring the passage of title, right of use under special provisions.

## **Administrative Law-1**

This course aims to teach subject of administration both in organic and functional meanings, field of application and main principles of administrative law, administrative organisation and Turkish administrative organisation. It is also aimed to make cadets able to know the sources of administrative law, types of administrative decisions, elements of administrative acts, sanctions of administrative decisions and termination of administrative acts.

## **Administrative Law-2**

This course aims to teach definitions and types of regulatory acts, private law-administrative contracts allocation, forms of administrative contracts. It is also aimed to make cadets able to understand the concept of Public order and the public service regard to concept, definition and operation methods, action devices of administration, such as public officials, public property and public revenue in terms of concept, definition and types. Also this course aims to teach the types, conditions of administrative responsibility, cases which decreases and also terminates the administrative responsibility, judicial and non-judicial review of administration.

## **Administrative Jurisdiction Law**

This course aims to teach judicial and non-judicial review of administration, jurisdiction of administrative judgment organisation, administrative disputes, administrative suits and the types of administrative suits. It is also aimed to make cadets able to know the results of suit of nullity in regard of preconditions and merits; the results of full remedy actions in regard of preconditions and merits. Also this course aims to teach the form of bringing action, procedure and clauses of administrative suits, also durations and legal remedies in administrative procedure.

## **Civil Law**

Giving basic information on the determination of the area of civil law, its definition and related concepts and institutions the cadets. The course aims is to equip the cadets with knowledge on the Law of Persons, Family Law, Inheritance Law and Property Law by comparing the new Civil Law No. 4721 with the old Civil Law No. 743; to extrapolate changes and developments in modernization and codification in the Turkish legal system by examining them in details within the framework of rights and law.

## **Labor Law**

This course aims to teach the subject, sources, fundamental terms, origin and development of labor law, also give basic information about individual and collective labor law. It is also aimed to make cadets able to define labour contract also know the obligations of contractors, types of termination of the labor contracts, conditions which are accounted of working hours, overtime work, union membership, strike and lock-out and aim of the Code of Collective Labor Agreement.

## **Introduction to Law**

This course aims to teach sources of law, implementation and interpretation, fundamental definitions, public law and private law allocations, legal system and the judicial organization, the concept of rights, legal acts and legal events. It is also aimed to give information about creation of law by judge and discretion.

## **International Law**

In International Law course, at first, the international law system and the sources of the international law will be focused on. Then the law of treaties and relationship between international law- national law will be explained. Finally, description of international law system concepts of authority and country will be explained.

## **History Of Political**

The main objectives of this course are to explain history of political thought and approach affects state and social life and make cadets equipped with all the current contention about political developments and its problems. All of these objectives are intended to teach to the cadets.

## **Political Science**

The main objectives of this course are to learn historical and political facts affecting political systems, to understand developing political periods and make cadets equipped with commanding about current political systems and making comparison at basic concept level.

## **Public Administration**

The main objectives of this course are to explain Turkish public administration system with historical, principle, institutional, functional properties; to teach administrative organization and the principles, public bureaucracy, characteristics of public officials and supervising public administration. All of these objectives are intended to teach to the cadets.

## **Turkish Administrative History**

The main objectives of this course are to explain the creation of various administrative periods of Turkey especially the Ottoman Classical Age, which is shown as the origins of administration in Turkey, and to ensure that the cadets have the knowledge of the administrative structure of the state until the establishment of the Turkish Republic by analyzing basic, social and administrative mechanisms of these periods.

## **Social Policy**

The main objectives of this course are to explain content of social policy related with public administration science, historical development of social policy, concordantly development of Turkey, social problems which are assumed public organizations, problems of social policy and subject of current argument. All of these objectives are intended to teach to the cadets.

## **Contemporary Public Administration Technicals**

The main objectives of this course are to explain management technicals related with development of management theories practise in public administration, total quality management, strategic management, benchmarking, simple organizations, performance

management, changing engineer, benefit from external source, learning organizations, governance. All of these objectives are intended to teach to the cadets.

### **Contemporary Public Systems**

The main objectives of this course are to analyze dominant state system in the world, and state system of some certain powerful nations such as England, France, Russian, China and provide the cadets with the capacity of comporatively analyzing how the states form. All of these objectives are intended to teach to the cadets.

### **Dissertation Of Public Administration**

Determining a study subject based on theory or experiment with the investigation of course lecture for public administration undergraduate students, reviewing concerned literature and preparing a thesis resource planning.

### **Local Governments Course**

The main objectives of this course are to explain local governments which is identified special provincial administration, municipality, villages and structure of related organizations, thought of local government, legistation of local government. All of these objectives are intended to teach to the cadets.

### **Scientific Research Methods**

The main objectives of this course are to explain logic of social research methods and its types and progress, to solve and comment the methods which are use in research, how are use the statistical tecnics and how are comment analys result. All of these objectives are intended to teach to the cadets.

### **Urbanization And Environment**

The main objectives of this course are to explain urban and urbanization in history, urbanization in Turkey and the World, urban theories, urbanization policies in different economic systems, urban planning policy, zoning supervision , local planning policy, house policy, environment, coastal zone policy and calamity policy. All of these objectives are intended to teach to the cadets.

### **Turkish Political Life**

The aim of the Turkish Political Life course is to teach all military academy, to teach historical events that shape the Turkish political life together with its causes and consequences, to explain the emerging political systems and processes together with their effects, and to have the knowledge to gain the ability to make sense of current political developments.

## INTERNATIONAL RELATIONS

### 1st Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTRODUCTION TO MILITARY SCIENCES	Required	Cr.	3	45	3	
TURKISH LANGUAGE AND COMPOSITION - I	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - I	Required	Cr.	2	30	2	2
INTRODUCTION TO INTERNATIONAL RELATIONS - 1	Required	Cr.	2	30	2	4
GRAMMAR	Required	Cr.	5	75	5	6
READING AND WRITING-1	Required	Cr.	5	75	5	6
LISTENING AND SPEAKING-1	Required	Cr.	5	75	4	5
ENGLISH	Required	Cr.	3	45	2,5	5
			27		25,5	30

### 2nd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
TOPOGRAPHY	Required	Cr.	2	30	1,5	
MILITARY GEOGRAPHY	Required	Cr.	2	30	2	
TURKISH LANGUAGE AND COMPOSITION - II	Required	Cr.	2	30	2	2
ATATÜRK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION - II	Required	Cr.	2	3	2	2
INTRODUCTION TO INTERNATIONAL RELATIONS - 2	Required	Cr.	2	30	2	4
GRAMMAR-1	Required	Cr.	4	60	4	5
READING AND WRITING-1	Required	Cr.	4	60	4	5
LISTENING AND SPEAKING-1	Required		4	60	3	4
ENGLISH	Required	Cr.	3	45	2,5	5
			25		23	27

### 3rd Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
DIPLOMATIC HISTORY	Required	Cr.	3	45	3	5
THEORY OF INTERNATIONAL RELATIONS - 1	Required	Cr.	3	45	3	5
INTERNATIONAL SECURITY	Required	Cr.	3	45	3	5
REGIONAL LANGUAGES-1	Required	Cr.	5	75	5	10
POLITICAL HISTORY - I	Required	Cr.	2	30	2	2
MANAGEMENT OF MILITARY OPERATION - I	Required	Cr.	2	30	2	
COMMUNICATION	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE-3	Required	Cr.	3	45,0	3,0	3
SECOND FOREIGN LANGUAGE-3	Required	Cr.	2	30	2	2
			25		25	35

#### 4th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
THEORY OF INTERNATIONAL RELATIONS - 2	Required	Cr.	2	30	2	4
POLITICAL SCIENCE	Required	Cr.	3	45	3	5
SOCIOLOGY	Required	Cr.	2	30	2	2
REGIONAL LANGUAGES-2	Required	Cr.	5	75	5	10
MANAGEMENT OF MILITARY OPERATION - II	Required	Cr.	2	30	2	
POLITICAL HISTORY - II	Required	Cr.	2	30	2	2
MILITARY CRIMINAL LAW	Required	Cr.	2	30	2	
FOREIGN LANGUAGE-4	Required	Cr.	3	45,0	3,0	3
SECOND FOREIGN LANGUAGE-4	Required	Cr.	2	30	2	2
			23		23	28

#### 5th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTERNATIONAL LAW-1	Required	Cr.	3	45	3	5
FOREIGN POLICY ANALYSIS	Required	Cr.	3	45	3	5
DIPLOMACY	Required	Cr.	4	60	4	6
REGIONAL LANGUAGES-3	Required	Cr.	4	60	4	8
MANAGEMENT OF MILITARY OPERATION - III	Required	Cr.	2	30	2	
MILITARY HISTORY - I	Required	Cr.	2	30	2	
FOREIGN LANGUAGE-5	Required	Cr.	3	45,0	3,0	3
SECOND FOREIGN LANGUAGE-5	Required	Cr.	2	30	2	2
			23		23	29

#### 6th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
INTERNATIONAL LAW-2	Required	Cr.	2	30	2	4
SECURITY	Required	Cr.	3	45	3	5
USE OF FORCE IN INTERNATIONAL RELATIONS	Required	Cr.	2	30	2	4
REGIONAL LANGUAGE-4	Required	Cr.	4	60	4	8
LAW OF ARMED CONFLICT	Optional	Cr.	2	30	2	4
MANAGEMENT OF MILITARY OPERATION - IV	Required	Cr.	2	30	2	
MILITARY HISTORY - II	Required	Cr.	2	30	2	
FOREIGN LANGUAGE-6	Required		3	45,0	3,0	3
SECOND FOREIGN LANGUAGE-6	Required	Cr.	2	30	2	2
			22		22	30



### 7th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
FOREIGN POLICY	Required	Cr.	2	30	2	4
HISTORY OF THE MIDDLE EASTERN CIVILISATION	Required	Cr.	2	30	2	3
TURKISH FOREIGN POLICY	Required	Cr.	3	45	3	5
REGIONAL LANGUAGES-5	Required	Cr.	4	60	4	8
STATE, INSTITUTIONS AND INTERNATIONAL ORGANISATIONS	Required	Cr.	3	45	3	5
MILITARY LEADERSHIP	Required	Cr.	2	30	2	
MANAGEMENT OF MILITARY OPERATION - V	Required		2	30	2	
MILITARY HISTORY-3	Required	Cr.	2	30,0	2,0	
FOREIGN LANGUAGE-7	Required		3	45,0	3,0	3
SECOND FOREIGN LANGUAGE-7	Required	Cr.	2	30	2	2
			25		25	30

### 8th Term

Course Name	Course Category	Cr./Co.	Time(D/S)		National Credit	ECTS
			Week	Total		
CURRENT ISSUES IN INTERNATIONAL RELATIONS	Required	Cr.	3	45	3	5
INTERNATIONAL POLITICAL ECONOMY	Required	Cr.	3	45	3	5
CRISIS MANAGEMENT AND DECISION MAKING	Required	Cr.	3	45	3	5
REGINAL LANGUAGES-6	Required	Cr.	4	60	4	8
MANAGEMENT OF MILITARY OPERATION - VI	Required	Cr.	2	30	2	
MILITARY HISTORY-4	Required	Cr.	2	30	2	
WEAPON SYSTEMS AND BALLISTICS	Required	Cr.	2	30	2	3
FOREIGN LANGUAGE-8	Required	Cr.	3	45,0	3,0	3
SECOND FOREIGN LANGUAGE-8	Required	Cr.	2	30	2	2
Total (9 Lesson)			24		24	31
TOTAL			194		190,5	240

## **Introduction to International Relations I, II**

This course provides a broad introduction to the study of international relations. As a field of study, international relations focuses on the political, military, economic, and cultural interaction of state and non-state actors at the global level.

## **Theory of International Relations I, II**

This course offers a systematic and comprehensive survey of contending classical and contemporary, traditional and behavioral theories of international relations.

## **International Security**

This course examines the range of security threats that the international community faces at the beginning of the new millennium and discusses, both at the level of discourse and the level of practice, how the international community is responding to the persistence of such threats as nuclear proliferation and terrorism and the emergence of new ones such as chemical and biological warfare, pandemics and mass migration.

## **Diplomacy**

The objective of this independent study is to enable student to deepen his/her understanding of diplomacy and international relations. The course first aims to provide students detailed knowledge on diplomacy and international relations starting from 19th century up to today, and second to enhance students' skill to analyze past and current diplomacies.

## **Sociology**

This course will attempt to develop an interdisciplinary framework to understand the causes and consequences of globalization. It will provide a framework to understand the process whereby the Global and the Local interact.

## **Foreign Policy Analysis**

This course aims to provide a profound examination of foreign policy phenomenon. The nature scope, actors and determinants of foreign policy; main theories and methods of Foreign Policy Analysis and their relationship with international relations and `change` in foreign policy are the main topics to be analyzed. In this framework, the actors and the structures of foreign policy; domestic and external sources of foreign policy; foreign policy decision and policy making, decisional bodies and processes (individuals/leadership, groups, organizational and bureaucratic politics) and the issue of rationality in foreign policy are discussed through case stories in the seminars.

## **Diplomacy**

The basic purpose of these undergraduate courses is to give the students a general understanding of diplomacy in the regions, geographically/historically/culturally neighboring countries, of Turkey.

## **Security**

The basic purpose of these undergraduate courses is to give the students a general understanding of security in the regions, geographically/historically/culturally neighboring countries of Turkey.

## **Use of Force in International Relations**

This course offers an exploration of general theories of the origins of warfare; the impact of the state on war in the modern world; and the micro-foundations of combat and compliance in the context of the costs of war and military mobilization.

## **The Law of Armed Conflict (LOAC)**

This course aims to prevent unnecessary suffering and destruction among non-combatants while not impeding the effective waging of war. LOAC regulates the conduct of armed hostilities. It also aims to protect civilians, prisoners of war, the wounded, sick, and shipwrecked. LOAC applies to international armed conflicts and in the conduct of military operations and related activities in armed conflict, however such conflicts are characterized.

## **Foreign Policy of Middle Eastern Countries**

This course examines the history, national interests, policy objectives, and outcomes of Great Powers' engagement in the Middle East from World War I to the present. And reactions of

## **Russian Foreign Policy**

The aims of this course are to give the student an understanding of the motives of Russian foreign policy, the forces that shape it, the instruments it uses and its impact on the world.

## **Civilization History of Middle East**

The purpose of this course is to teach cultural and historical background of the countries in Middle East. It also aims introducing the students to the history of civilizations through a comparative perspective.

## **Civilization History of Caucasus**

The purpose of this course is to teach cultural and historical background of the countries in the Caucasus. It also aims introducing the students to the history of civilizations through a comparative perspective.

## **Turkish Foreign Policy**

The course aims to identify and analyze various factors contributing to Turkey's foreign policy orientation. While the main focus of this course is the political dynamics and issues of Turkish foreign policy after World War II, the problems and determinants of Turkish foreign policy, with reference to past experiences and geopolitical imperatives placing certain constraints on the state's decision makers, will also be briefly discussed.

## **International Organizations**

This course analyzes the evolution of international organizations. It also examines the potentials and limitations of these organizations in the modern international system specifically NATO, UN.

### **Current Issues in International Relations**

The course provides students with a comprehensive overview of current issues in world politics. After the examination of the main features of the international system, the course will focus on current issues in international politics within an analytical framework.

### **International Political Economy**

The objectives of this course are to enable the students to know the nature, scope and main issues in the field of international political economy, and to understand the main theories and approaches to the International Political Economy.

### **Crisis Management and Decision Making**

The objective of this course is to enable the students to understand the actors and processes of decision making and implementation in foreign policy during crises through analyzing a number of case studies.

