I. Semester

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
ATİ101	Atatürk's Principles and Revolution History-I	2	0	0	2	2	2	Compulsory

Concepts and Ottoman modernization. European developments, Industrial Revolution and French Revolution. New Ottomans, Constitutional Monarchy and Union and Progress Society. II. Constitutional Monarchy Period, Tripoli and Balkan Wars. Causes of World War I. World War I: Sharing the Ottoman Empire. National Struggle preparatory period. Congress. Sivas Congress, the last Ottoman Parliament and the National Pact. TBMM Period: Formation of fronts. Treaty of Lausanne.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP103	Vocational Trigonometry	3	0	0	4	3	3	Compulsory

Length measurement units and conversions. Angle units and conversions. Area units, trigonometric functions of acute angles. Angle function transformations. Small angle relation, three-sided shapes, basic relations in triangles. Triangle solutions. Four-sided shapes. Trapezoid solutions. Circle solutions. Spherical triangle concept. Spherical triangle solutions.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP115	Professional Mathematics	4	0	0	4	4	4	Compulsory

Numbers. Number systems. Algebra. Polynomials. Solution of equation systems. Matrix. Solution of systems of linear equations. Derivative. Derivative applications. Integral. Integral applications.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP117	Land Surveying-I	3	0	0	4	3	3	Compulsory

Cartography issues, the subject of the cadastre. Map, cadastre and title deed relationship. Simple measuring tools. Length measure with steel tape measure. Prismatic measure. Tachymeters and theodolite instruments. Horizontal angle measure. Land surveying methods. Error calculations.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP119	Land Surveying Practice-I	0	3	0	3	2	3	Compulsory

Course planning. Simple measurement tools application. Length measurement with steel tape measure. Prismatic measurement application. Introduction of tachymeters and theodolite instruments. Tachymeter and theodolite instruments. Horizontal angle measurement application. Vertical angle measurement. Application of land surveying methods. Error calculation applications.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP121	Basic Law	2	0	0	3	2	2	Compulsory

The basic concepts of law. System of law. Definition and types of rights. Real people. Legal personality. Family law. Law of obligations. Public officers. Protection of human rights.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
TDİ101	Turkish Language-I	2	0	0	2	2	2	Compulsory

Definition of language. The relationship between nation and language. The relationship between language and culture. Family of languages, the place of Turkish language among other languages. Historical development of Turkish language. The current situation of Turkish language, its history and current examples, vernacular, accent, dialect. Definition of grammar and its sections, features of Turkish language. Phonetic, phonetic of Turkish, its features and classification of phonemes. Grammatical rules of Turkish. Punctuations. Word structure of Turkish and particles, derivational affix, inflexional suffix.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
YDİ101	Foreign Language-I	2	0	0	2	2	2	Compulsory

Greetings. Brainstorming about the mutual expectations. Ice breakers. To be. Possessive adjectives. Countries. Describing jobs. Simple present tense. Word order. WH questions. Expressing likes/dislikes. Foods and drinks. Ordering. Speaking about food from all over the World. Writing and speaking about free time activities. Making dialogues using frequency adverbs. Reading passage about basketball and vocabulary practice. Talking and writing about what people are doing. Using present progressive. Understanding the polite rules of talking on the phone and acting. Talking about past events using simple past tense. Was/were. Understand an article about past and present.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP109	Information and Communication Technology	2	1	0	3	3	3	Elective

Document Processing, Forming Processes. Document Controller, Print, Table Operations. Object Operations, Advanced Features. Macros, Customization. Workspace, Data Entry, Formatting Operations.

Formulas, Functions. Data Analysis. Print, Macros, Customization. Slide Objects, Display Settings. Print, Privatization. Internet Concepts. Access Database.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP111	Environmental Protection	2	0	0	3	2	2	Elective

Introduction. Environmental protection concept. Legal development in nature and environmental protection, role of administrations and non-governmental organizations. Environmental impacts of urbanization. Causes, effects and mechanisms of air pollution. Certain types of water and air pollutants and their ways of damaging the environment and / or human health. Greenhouse effect of atmosphere. Global warming; Climate change. Soil pollution problem. Legal and environmental framework for waste management; problems associated with recycling and development. Use of fossil fuels, environmental discussions on nuclear power plants, development of sustainable energy resources including hydropower, wind power and sea wave. Nature protection and conservation of natural resources. Development of sustainable energy resources including hydropower, wind, power and sea wave.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP113	Communication	2	0	0	3	2	2	Elective

Communication Description. Communication Process and Models Explaining the Communication Process. Communication Types. Culture and Communication- Interpersonal Communication. Mass Communication, Media, Media Literacy. Organizational Communication, Corporate Communication. Communication in Business Life, In-Group Communication. Communication in Social Life, Etiquette. Frame of Reference, Acquisition Codes, Stereotype. Conflict and Communication, Persuasive Communication. Elements Hinder Communication and Ways of Transcendence. Communication Accidents.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP123	Geographic Information Systems	2	0	0	3	2	2	Elective

Information System Concept. Geographical Information System Concept and Definition. Geographical Information System History. Geographical objects and GIS. Geographical Information System Applications. Geographical Information System Components. Geographical Information System Softwares. Data, Data Models and Spatial Data Concept. Data Collection Techniques in GIS. Map Projections and Coordinat Systems. Urban Information Systems. Land Information Systems. Decision Support Systems.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP125	Risk Management	2	0	0	3	2	2	Elective

Definition of Disaster. Disaster Management. Disaster Management and GIS. Flood and GIS Disaster Management and GIS Applications I: Flood Risk Analysis. Earthquake and GIS. Disaster Management and GIS Applications II: Earthquake Risk Analysis. Landslide and GIS. Disaster Management and GIS Applications III: Landslide Risk Analysis.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP127	Billiards	1	1	0	3	2	2	Elective

Basic billiards term expression, history and billiards in Turkey. Technical of kicks in biliards. Spin, back, pike kicks exercises. 5 game systems. Game technics of American Billiards. Aplication exercises of American Billiards. Aplication exercises of 3 balls. Correlative game systems exercises. Exercises of students. General systems with billiards. Technical and Tactical general billiards exercises.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP129	Occupational Health and Safety	2	0	0	3	2	2	Elective

Occupational Health and safety overview. Security Culture. Occupational health and safety law No 6331. Occupational accident and occupational illness. Risk Assessment. Fire. Emergency Plan and exercise. Emergency Plan and Risk Factors for Exercise Health and safety. Working with Screen tools-manual lifting-Health and safety signs. Occupational Safety in ship, Shipyard and Industry, Safety in indoor areas. Safety studies in welding and electricity. Safe Use Of Work Equipment, Working High. Case study.

II. Semester

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
ATİ102	Atatürk's Principles and Revolution History-II	2	0	0	2	2	2	Compulsory

Political revolutions: Abolition of the Sultanate, Declaration of the Republic, Abolition of the Caliphate. Political parties and political events established in the period of Atatürk and represented in the Turkish Grand National Assembly. Legal reform and legal order. Revolutions in education. Revolutions in culture and social area. Revolutions in economic area. Turkish foreign policy in Atatürk period (1923-1930). Turkish foreign policy in Atatürk period (1930-1938). Principles of Atatürk and complementary principles. After Atatürk's Turkey.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP102	Vocational Calculations	4	0	0	4	4	4	Compulsory

Map coordinate system. Basic assignments. Basic homework applications. Calculation of detail points. Area calculations. Area applications. Parcel compartments. Border corrections.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP104	Mapping-I	1	2	0	3	2	3	Compulsory

Drawing tools. Map drawing custom signs. Map stands. Drawing of terrain parts. Inking Drawing detail points. Drawing of height curves. Scale changes in maps and plans, duplication of maps.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP114	Land Surveying-II	3	0	0	4	3	3	Compulsory

General structure of levels. Height systems, geometric leveling. Geometric leveling measurement and calculation. Trigonometric height measurement calculation. Tachymetric height measurement calculation. Section size and calculations. Polygon points, site selection, plant and repertoire, making polygon measurements. Open polygon routes. Based polygon routes. Closed polygon routes.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP116	Land Surveying Practice -II	0	3	0	3	2	3	Compulsory

Formation of field work groups, determination of homework places. Geometric leveling application. Trigonometric height measurement application. Section size application. Selection of polygonal points. Making polygon measurements. Submission of assignments.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP118	Real Estate Valuation	2	0	0	4	2	2	Compulsory

Real estate, real estate valuation concepts. The importance of real estate valuation. Applications that require real estate valuation in our country. Factors affecting the real estate value. Real estate valuation methods: Comparison direction. Real estate valuation methods: Cost direction. Real estate valuation methods: Incoming direction. Real estate valuation methods: Statistical direction. Rural area valuation. Real estate valuation expertise. Production and interpretation of value maps. Practices related to real estate valuation (Homework control).

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
STJ102	Internship	0	0	0	10	0	0	Compulsory

To do the work given by the authorized personnel in the selected working area.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
TDİ102	Turkish Language II	2	0	0	2	2	2	Compulsory

Definition of language. The relationship between nation and language. The relationship between language and culture. Family of languages, the place of Turkish language among other languages. Historical development of Turkish language. The current situation of Turkish language, its history and current examples, vernacular, accent, dialect. Definition of grammar and its sections, features of Turkish language. Phonetic, phonetic of Turkish, its features and classification of phonemes. Grammatical rules of Turkish. Punctuations. Word structure of Turkish and particles, derivational affix, inflexional suffix.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
YDİ102	Foreign Language II	2	0	0	2	2	2	Compulsory

Talking about clothes. Using comparative adjectives. Making dialogues about shopping. Speaking activity about fashion. Describing appearances and personalities of people, Using "be like" and "look like". Speaking and writing activity about describing our friends. Talking about tourist sites. Using can/can't. Listening and comprehending a passage about city attractions. Talking about places around town. Using "There is" and "There are". Reading a text about favourite places around town and vocabulary gain. Talking about vacation activities. Using past tense. Reading text about describing a hotel. Talking about future plans. Using future tense. Listening activity about travel plans and follow-up activities. Reading text about travel activities.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP108	Professional Ethics	2	0	0	3	2	2	Elective

Examine the concepts of ethics and morality. Examine the ethical systems. Investigate the factors that play o role in the formation of morality. Examine the ethics of profession. Analyzing the results of corruption and unethical behavior in professional life. Examine the concept of social responsibility.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP110	Algorithm and Programming	2	1	0	3	3	3	Elective

Introduction to Basic Programming Basic Programming Components Algorithm and Flow Charts. Variables Control expressions Loops Arrays. Math based algorithms. Linear programming. Chemical bonds. Basic data structures Stacks and queues. Lists Trees. Sorting and Selection Algorithms. Computational Intractability. Approximating algorithms. Randomized algorithms. Graph Algorithms. Algorithm analysis. Algorithm design and applications.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP112	First Aid	2	0	0	3	2	2	Elective

General first aid information. Teaching the signs and symptoms used in patient-injured and crime scene evaluation. Basic life support. First aid in bleeding. First aid in burns, freezing and heatstroke. First aid in consciousness disorders. First aid in injuries. First aid in animal bites. First aid in escaping foreign bodies

to the ear and nose. First aid in strangulation. First aid in fractures, dislocations and sprains. Poisoning. Patient / injured transport techniques. Emotional stress in emergency caregivers.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP120	Geographic Information Systems Applications	0	2	0	3	1	2	Elective

GIS, Basic Concepts, Basic Map Information. ArcGIS Technology Overview. Analysis of Geographical Data in ArcMap Environment. Data Display Functions. Symbology, Labeling and Cartographic Production in ArcMap. Questioning and Reporting of Geographical Data. Data Entry in ArcMap. Other Tools for Feature Creation. ArcCatalog Applications. Data Conversion Functions. Geodatabase Functions. ArcToolbox and ModelBuilder.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP122	Public Measurements	2	0	0	3	2	2	Elective

Introduction: The definition of land consolidation, the purpose and the agricultural structure in Turkey. Benefits and methods of land consolidation. Mandatory land consolidation according to the law numbered 3083. Pre-surveys: Pre-interview with land owners (optional consolidation) Cadastral procedures, Determination of the project area boundaries, Preparation of AT-1 and AT-2 lists, Obtaining the consent of the land owners, Preparing the preliminary study report, Decision of the Council of Ministers. Pre-surveys: Pre-interview with land owners (optional consolidation), Cadastral procedures, Project a Determination of fixed facilities, determination of participation share in common facilities, preparation of planning report, determination of area boundaries, Preparation of AT-1 and AT-2 lists, Obtaining consent from land owners, Pre-study report Taking the Decision of the Council of Ministers. Soil surveys and grading of the land, preparation of conversion coefficients chart. Planning: Announcement of the regulation area and annotation to the hill, Determination of the current status of the project area, Conducting ownership studies. Collecting project data. Project work. Reporting the project results.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP124	Web Programming	1	1	0	3	2	2	Elective

Running scripts in Python. Describing data. Automating scripts with lists. Working with selections. Working with cursors. Working with geometry objects. Sharing scripts. Debugging scripts and handling runtime errors. Automating map production. Add-in logic with ArcGIS for Desktop. Program development, desktop add-in, program development climate, desktop add-in creation. ArcObject API and Using Visual Studio. Interactive interaction with maps, image exchange, data queries, combo box, add-in deployment, add-in security, code integrity.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP126	Community Service Practices -I	1	1	0	3	2	2	Elective

Introducing the content of the course, reviewing the society and related concepts. The importance of community service practices. Determining the current problems of the society. Discussing in which areas the community can work in this course. Preparing new projects to find solutions for the current problems of the society. Community service practices today: Public institutions and non-governmental organizations (NGOs). The Importance of Participating in Scientific Activities such as Panel, Conference, Congress, Symposium as Audience, Speaker or Organizer. Volunteering in Various Projects within the Framework of Social Responsibility. To gain basic knowledge and skills for the implementation of community service studies in schools. Students take part in a social project using their knowledge and knowledge. Project information: General information about reporting.

III. Semester

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP203	Cadastre-I	3	0	0	4	3	3	Compulsory

General description of cadastral. Cadastre technical operations. Limiting process. Fixing. Renovation cadastre. Measurement procedures. Block report. Forest cadastre. Disaster cadastre. Pasture legislation. Underground cadastre.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP205	Mapping-II	1	2	0	4	2	3	Compulsory

Data Formats and Layer Operations in Professional Software. Basic Drawing Formats Slice Conversions. Digitization Operations of Raster Transforms. Drawing Operations in Standard Format. Calculating Using CAD. Drawing a Map Using CAD. Calculations. Creating Layouts in CAD Software. Contouring Curves in CAD Software. Drawing Longitudinal Section And Cross Section Drawing.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP219	Photogrammetry	2	0	0	3	2	2	Compulsory

Definition of photogrammetry, its history, application fields and classification of photogrammetry. Projective and perspective projection geometry. Intrinsic and extrinsic parameters of images. Scale in images. Projective projection of points, lines and planes. Coordinate systems in photogrammetry. Photogrammetric cameras. Analog and digital images. Distortions of the optical system of a camera and their mathematical expressions. Colinearity and co-planarity relations and their detailed analyses. Perspective distortions of images. Restoration of perspective effects in mono images. The relief displacement and its correction.

Error theory of the normal case: planimetric and height precision and accuracy. Preparation of image acquisition plans. Vanishing plane Practical examples of mono image evaluation.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP221	Real Estate Law	2	0	0	3	2	2	Compulsory

Property law. Real estate ownership. Legal heirs. Distribution in inheritance. Deed information system. Transactions in the land registry. Property ownership transactions. Floor easement operations. Pre-expropriation procedures. Expropriation technical procedures. Preparation of expropriation technical file.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP223	Land Surveying -III	3	0	0	4	3	3	Compulsory

Country basic networks. Establishment, classification, numbering of network points. Creating height nets. Calculation of cut-off points. Eccentric angle measure. Centering elements. Lowering to the floor. Map projections. Projection reductions. Two-dimensional transformations. Three dimensional coordinate systems.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP225	Land Surveying Practice -III	0	3	0	3	2	3	Compulsory

Country basic networks. Establishment, classification, numbering of network points. Creating height nets. Calculation of cut-off points. Eccentric angle measure. Centering elements. Lowering to the floor. Map projections. Projection reductions. Two-dimensional transformations. Three dimensional coordinate systems.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP227	Road Information	2	1	0	3	3	3	Compulsory

Introduction: importance and history of roads, transportation systems and roads classification, definitions related to the highway. Road crossing survey. Study of the road crossing: altarnative with the help of zero Polygon and zero Polygon investigation of routes. Determination and confirmation of the exact route. Coordinate accounts of the exact route, horizontal frog accounts, road route drawing of plans. Longitudinal section and vertical curve calculations. Longitudinal section drawing. Control and approval of the red line on the longitudinal section. Determination of vertical curve lengths. Calculation of vertical curve project elevation. Superelevation calculations and approval of the drawing. Cross section calculations and cross-sectional area calculations control. Volume calculations: calculation of filling and splitting volumes.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP215	Cartography Activities	3	0	0	3	3	3	Elective

Introduction of the cartography profession. Promotion of the institutions in which cartographers work. Cartography activities in municipalities. Mapping activities in KBS. Mapping activities in TRGM. Presentation of the institutions that cartographers work. Turkish cartography history. Cartography activities in the valuation industry. Problems and solutions of the cartography profession. GIS and Mapping activities. HKMO and Mapping. The task areas of cartographers.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP217	Business Administration-I	3	0	0	3	3	3	Elective

Basic economic concepts. Basic business concepts. Business responsibilities. Business objectives. Business types. Establishment of the business. Business establishment location and its importance. Establishment stages of the business. Planning in business. Quality Concept and Definition. Types of Quality. Total Quality Management and Definition.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP229	Spatial Analysis in Geographic Information Systems -I	1	2	0	3	2	3	Elective

GIS and Spatial Analysis. ArcGIS 3D Analysis Extension and Capabilities. Digital Elevation Models. Surface Analysis and Data Conversion. Working with LIDAR and Terrain Data. 3D Modeling (ArcScene-ArcGlobe). ArcGIS Spatial Analysis Extension and Capabilities. Distance and Density Analysis. Interpolation. Statistical Analysis. Reclassification and Superposition of Raster Data.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP231	Remote Sensing	2	0	0	3	2	2	Elective

Introduction to Remote Sensing. Electromagnetic Energy and Its Properties. Passive Sensors. Active Sensors. Platforms. Image and Features. Image Correction. Image Enhancement and Interpretation. Image Classification and Accuracy Determination. GIS and Remote Sensing Relationship. Satellites and Properties. Remote Sensing Softwares. Remote Sensing Applications.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP233	Professional Foreign Language-I	2	0	0	3	2	2	Elective

Updating and repetition of general English knowledge that will form the basis of professional foreign language proficiency. Professional terms, concepts and terminology. Inheritance law, property law, expropriation law. Land consolidation. Zoning plan application. Land and land arrangement transactions. Map, scale, plan, custom maps, sketch. Cadastre, parcel, island, land, title, property, land, land registry. Photogrammetry. Aerial photogrammetry. Digital photogrammetry. Orthophoto. Close-up photogrammetry. Terrestrial photogrammetry. Image processing. Photogrammetric maps. Computer. Computer aided map drawing, base, CAD software. Engineering measurements, deformation,

underground measurements, industrial measurements. Height, height measurements, elevation, leveling. Measurement information, polygon, triangulation.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP235	Research Methods and Techniques	2	0	0	3	2	2	Elective

Science, research, scientific research concepts. Science and science ethics. Research ethics and research ethics violations, basic principles of research ethics. Scientific misconceptions, violations of publication ethics, problems of authorship rights. Types of scientific research, problem statement, hypothesis, theory. Scientific research report content, the formal structure of the research report and the use of language in scientific text. Interpretation and report writing. Scientific publication ethics principles Scientific works and their types. How to use the Internet, library and documentation centers. Ethical standards, legal limitations and software. Presentation and evaluation of research reports prepared by student groups.

IV. Semester

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP208	Cadastre-II	3	0	0	3	3	3	Compulsory

Example of one map plan. Show at Parcel. Merge operations. Type change operations. Establishment of Easement. Cadastre correction procedures. Separation processes. Acquisition of out of the way, leaving the road. Parceling. Restriction of maps. Expropriation maps. Expropriation mapping control.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP210	Map Making	2	2	0	4	3	4	Compulsory

Preparation and planning. Point to plant operations. Measuring make operations. To make the calculation process. Drawing to operations. To Filing. Create Archive.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP220	Land Surveying-IV	3	0	0	5	3	3	Compulsory

GNSS measurement methods. Coordinate with two GNSS measurements. GNSS applications. Land surveyors. Hydrographic measurements. Deformation measurements. Industrial Measurements. Use of the maps. Interpretation of the maps. The concept of direction and navigation.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP222	Application	2	1	0	4	3	3	Compulsory

Application concept, horizontal point application. Line application. Horizontal angle application. Height application. Three dimensional application. Block and parcel of land application. Practising the block and parcel of land application. Application of horizontal curve Practising the application of horizontal curve. Vertical curve application. Building and TUS application. Application of infrastructure projects, Application of infrastructure project application.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP224	Land Management	2	0	0	4	2	2	Compulsory

Zoning regulations. Definitions related to zoning. Optionally zoning applications. Core zoning applications. Reconstruction Act legislation and land management. Merit zoning regulations, application. Land consolidation application. Coastal Code applications. Licensed map bureaus and TUS applications.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP226	Land Management Application	0	3	0	4	2	3	Compulsory

Zoning legislation. Definitions related to zoning. Article 18 application. Project control and delivery.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP216	Business Administration-II	3	0	0	3	3	3	Elective

The basic concepts related to management and managers, the qualifications and the abilities of contemporary managers. Classical management theory Neo-classical management theory. Modern management theory. Environmental adaptation approaches. Time management. Planning function. Organization function. Directing function. Coordination function. Control function. Management education function. New management techniques.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP218	Quality Assurance and Standards	3	0	0	3	3	3	Elective

Concept of Quality. Standard and Standardization. The importance of the standard in the production and service sector. Management quality and standards. Environmental standards. Quality management system models. Strategic management. Participating in management. Process management system. Resource management system. Quality control in production. Inspection and sampling. Total quality control. Control Diagrams.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP228	Professional Foreign Language-II	2	0	0	3	2	2	Elective

Written and verbal communication on professional matters. GPS, GIS, TUTGA, TUSAGA – Active. Cartography, latitude, longitude, sheet index. Coordinate, coordinate systems. UTM, Gauss Kruger

projection. Astronomy, celestial sphere, earth. Remote sensing, satellite, orbit, satellite imagery. Tool information, pole, plumb, level, electronic distancemeter, GPS, leveling rod. Road, cross section, length section, volume calculation, surface area, calculations, profile. Contour curve, level curve, isohips curves. Forest, disaster, pasture, soil protection, parcellation. Hydrographic, shorelines, coastal strip.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP230	Spatial Analysis in Geographic Information Systems-II	1	2	0	3	2	3	Elective

ArcGIS Network Analysis Extension and Capabilities. Creating Network Dataset. Creating a Multimodal Network Dataset. Optimal Route Analysis Using Network Dataset. Nearest Facility Analysis. Service Area Determination and Cost Matrix Generation. Designing a Model for Route Analysis. Customer Demands and Fleet Management. Finding the Best Way for Health Care and Managing Vehicles. Optimum Store Locating. Live Traffic Data Arrangements and Usage on Network Dataset. Some Restriction Rules and Network Analysis. ArcGIS Geostatistical Analysis Extension and Capabilities.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP232	Computer Aided Mapping	1	1	0	3	2	2	Elective

Map and map production techniques, basic concepts. Definition and basic principles of Computer Aided Cartography and Basic Concepts of Geographical Information Systems. BDH stakeholders: software (common CAD software), hardware (commonly used hardware). Digitization Concept and Manual Digitization. Semi-Automatic and Fully Automatic Digitization, Laboratory Application- Manual Digitization. Raster / Vector Data Structures, Raster-Vector Comparison, Raster-Vector Transformations. Raster data and ctorization, georeferencing. Laboratory Application- Application development in national common BDH software (Point generation coordinate system definition, transformation. Laboratory Application- Application development in national common BDH software (Creating a field). Laboratory Application- Application development in national common BDH software (Cartographic output design and symbolization). Laboratory Application- Application development in national widespread BDH software (Parcel application). Laboratory Application- Application development in national common BDH software (Creating equi-height curve).

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP234	Web Geographical Information Systems	1	2	0	3	2	3	Elective

Cloud Computing. Cloud Computing and Geographic Information Systems (GIS). GIS Resources Online Sharing. Ready-to-Use Content Management. Create Web Applications Using ArcGIS Online. Layers, Maps and Applications in Web GIS. Hosted Feature Layers and Voluntary Geographical Information. Story Maps and Configurable Applications. Web AppBuilder for ArcGIS. Publishing Map Services with ArcGIS for Server. Spatial Analysis and Geoprocessing Services. Mobile GIS and Real Time GIS. 3D (3 Dimensional) Web Scenes.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP236	Hydrographic Measurements	2	0	0	3	2	2	Elective

INTRODUCTION: Subject, history and general definitions of hydrographic measurements. UNDERWATER MAPS: Classification of underwater maps. HYDROGRAPHIC MAPS: Hydrographic maps and general features. COASTAL MEASUREMENTS: Site selection for vertical datum, maregraphs, mareographers. Tide gauges on the tide gauge stations and vertical datum determination process in Turkey. DEPTH MEASUREMENTS (sounding): Classification of depth measurement methods. DEPTH MEASUREMENTS (sounding): Depth measurement and evaluation with batten and string sounding methods. DEPTH MEASUREMENTS (sounding): Depth measurements and evaluation with hydrostatic and thermometric methods. DEPTH MEASUREMENTS (sounding): Depth measurements and evaluation with acoustic and lidar methods. GEODESIC POINTS: Geodetic points on land and on water. LOCATION MEASUREMENTS: Classification of location measurements, Measuring instruments. LOCATION MEASUREMENTS: Classical methods applied in location measurements. Measurement with Lidar and Side Scan Sonar techniques, Current applications.

Course Code	Course Name	T	P	L	ECTS	C	Hours	Type
HKP238	Community Service Practices II	2	0	0	3	2	2	Elective

Introducing the content of the course, reviewing the society and related concepts. The importance of community service practices. Determining the current problems of the society. Discussing in which areas the community can work in this course. Preparing new projects to find solutions for the current problems of the society. Community service practices today: Public institutions and non-governmental organizations (NGOs). The Importance of Participating in Scientific Activities such as Panel, Conference, Congress, Symposium as Audience, Speaker or Organizer. Volunteering in Various Projects within the Framework of Social Responsibility. To gain basic knowledge and skills for the implementation of community service studies in schools. Students take part in a social project using their knowledge and knowledge. Project information: General information about reporting.