1. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisite
MATH101	Calculus I	3	2	0	6	C	1	
ELIT100	Academic English and Effective Communication	2	1	0	6	C	1	
ARCH100	Introduction to Architectural Design	1	2	0	6	C	1	
ARCH216-6	Introduction to CAD	1	3	0	6	C	1	
ARCH101	Basic Design Communication	1	2	0	6	C	1	
					30			

2. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisite
ELIT 200	Critical Reading and Writing	2	1	0	6	C	2	
ARCH109	Basic Design Communication II	1	1	0	3	C	2	ARCH101
ARCH106	Introduction to Building Technology	1	2	0	6	C	2	
ARCH108	Introduction to Architectural Design II	1	2	0	6	C	2	ARCH100
ARCH102	History of Architecture I	1	2	0	6	C	2	
ARCH208	Architectural Communication	1	2	0	6	C	2	
					33			

3. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisite
ARCH217	History of Architecture II	2	1	0	6	C	3	ARCH102
ARCH201-8	Architectural Design Studio I	1	5	0	8	C	3	ARCH108
ARCH204-6	Structural Design I	1	2	0	6	C	3	ARCH106
ARCH203	Building Services I	1	1	0	4	C	3	ARCH106
ARCH313-6	Building Construction I	1	3	0	6	C	3	ARCH106
xxx	Foreign Language Elective I	0	2	0	3	C	3	
					33			

4. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisite
ARCH202-8	Architectural Design Studio II	1	5	0	8	C	4	ARCH201-8
ARCH210-6	Structural Design II	1	2	0	6	C	4	ARCH204-6
ARCH211	Building Services II	1	1	0	4	C	4	ARCH203
ARCH358-6	Building Construction II	1	2	0	6	C	4	ARCH313-6
xxx	Foreign Language Elective II	0	2	0	3	C	4	
ARCHxxx	Program Elective	1	2	0	4	C	4	
					31			

5. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisites
EKO 201E	Economics	3	0	0	4	C	5	
MIM 351E	Architectural Design V	2	6	0	10	C	5	ARCH202
TUR 111	Turkish Language for Foreigners I	2	0	0	2	C	5	
MIM 333E	Building Production Systems	2	0	0	3	C	5	ARCH207
MIM 306E	Urbanism and Planning Law	1	3	0	4	C	5	
MIM 322E	Conserv.of Hist. Build.&Sites	2	0	0	4	C	5	
MIM 304E	History of Architecture III	3	0	0	4	C	5	
					31			

6. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisites
MIM 312E	Architectural Design VI	2	6	0	10	C	6	MIM351E
MIM 361E	Archtctrl Survey & Restrtn Std	2	2	0	5	C	6	
MIM 359E	Construction Mngmnt & Economy	3	2	0	6	C	6	MIM322E
TUR 112	Turkish Language for Foreigners II	2	0	0	2	C	6	TUR111
	6th Term Elective Course (MT)				4	C	6	
	6th Term Elective Course (MT)				4	E	6	
					31			

7. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisites
MIM 411E	Architectural Design VII	2	6	0	10	C	7	MIM312E
MIM 484E	Construction Project	2	6	0	12	C	7	ARCH311 ARCH312 ARCH211
ATA 121	Turkish History I	2	0	0	2	C	7	
	7th Term Elective Course (MT)				4	E	7	
	7th Term Elective Course (MT)				4	E	7	
					32			

8. Semester

Course Code	Course Title	Theoretical	Tutorial	Lab.	ECTS	Compulsory/ Elective	Semester	Prerequisites
ATA 122	Turkish History II	2	0	0	2	C	8	MIM411E MIM431E
MIM 4902E	Diploma Project	1	8	0	18	C	8	ATA101
	8th Term Elective Course (MT)				4	E	8	
					24			

Elective Courses from IUS	
ARCH308	Urban History
ARCH353	Self-Study Design Project
ARCH354	New Design in Old Settings
ARCH356	Landscape Design
ARCH357	Bosnian Architecture
ARCH360	Digital Architecture and Fabrication
ARCH372	Compositions in Architecture
ARCH373	Interior Design
Foreign Language Elective Courses from IUS	
TURK 111	Spoken Turkish I
TURK112	Spoken Turkish II
BOS111	Spoken Bosnian I
BOS112	Spoken Bosnian II

Elective Courses from ITU	
MIM 320E	Roof Systems
MIM 330E	Vertical Circulation Systems
MIM 378E	Tall Building Structures
MIM 433E	Infill Problems in Urban Historic Sites
MIM 315E	Acoustical Problems in Architecture
MIM 325E	Acoustical Design of Halls for Speech and Music
MIM 335E	Energy Efficient Housing
MIM 356E	Photography
MIM 415E	Housing Design Philosophy of Contemporary Architects
MIM 425E	Architecture Today
MIM 427E	Restoration of Cultural Property
MIM 429E	Topographical Practices: Architecture, Art and the City
MIM 435E	Modern Concepts of Architectural Conservation
MIM 437E	Analyses and Critics on Contemporary World Architecture
MIM 440E	Generating Liveable Environments
MIM 461E	Environmental Design for the Disabled and Elderly
MIM 465E	Building Sub-Structure and Ground
MIM 471E	Earthquake Resistant Building Design
MIM 494E	Special Topics of Construction Project Management
MIM 370E	Internal Sub-Division Systems
MIM 432E	Entrepreneurship in Construction Industry

JOINT PROGRAM IN ARCHITECTURE between ISTANBUL TECHNICAL UNIVERSITY, TURKEY and INTERNATIONAL UNIVERSITY OF SARAJEVO, BOSNIA AND HERZEGOVINA

COURSE DESCRIPTIONS

MATH101 Calculus I **ECTS 6 (3+2)**

This course covers the following topics: Functions of one real variable including polynomial, rational, trigonometric and other functions. Limits and continuity. Derivatives. Rules of derivatives. Derivatives of basic functions. Properties of differentiable functions. Derivatives of higher degrees. Graphing, tangents and normal, asymptotes, local and global extrema. Antiderivatives, substitution of variables. Antiderivatives of rational functions, trigonometric functions. Finite sums, algebra rules. The Riemann sums and integral. The Fundamental Theorem of Calculus.

ELIT100 Academic English and Effective Communication (UNI) **ECTS 6 (2+1)**

This course is designed to help students achieve success in their academic and professional lives by developing fundamental skills necessary for effective communication. The course deals with organizing academic presentations, writing essays, incorporating different types of sources into speeches and writings, and utilizing various communication strategies in formal and informal settings. Students will develop their skills and techniques through frequent assignments and class activities.

ELIT200 Critical Reading and Writing (UNI) **ECTS 6 (2+1)**

This course is designed to endow students with the skills essential to critically approach, analyse, and evaluate an array of real-world and literary texts across different genres, styles, and registers. The course focuses on critically reading and analysing texts on contemporary issues, such as artificial intelligence, satire, social media, and discrimination, using a plethora of both academic and critical thinking skills such as skimming, scanning, analysing, summarizing, inferring, inducing, deducing, reasoning, etc. Furthermore, the course aims at building students' argumentation skills in speech and writing - the former through students' presentations/speeches and the latter through writing argumentative essays.

ARCH100 Introduction to Architectural Design **ECTS 6 (1+2)**

To develop the students' capability to design different functional units in one individual house by using architectural standards, regulations and architectural language (functional units for living and working, sleeping and kitchen).

ARCH101 Basic Design Communication **ECTS 6 (2+4)**

This course aims to develop and demonstrate essential communication skills and to teach students how to present their design ideas graphically and in the form of the simple model. Principles of sketching, 2D orthographic projection and perspective drawings, simple model making of building proposals, written and verbal communication and information literacy will be integrated within the design process and communication.

ARCH102 History of Architecture I **ECTS 6 (1+2)**

To strengthen the capacity for developing creative and responsible solutions to the professional challenges based on the appropriate level of knowledge of the ideas and practices of architecture from pre-history to the late fifteenth century in the diverse regional and historical contexts.

ARCH106 Introduction to Building Technology **ECTS 6 (1+2)**

The course aims to introduce students to fundamental concepts and principles of building construction, materials and techniques, to get students acquainted with elements of construction technologies, and to introduce students to technical presentation of small buildings.

ARCH108 Introduction to Architectural Design II **ECTS 6 (1+2)**

To learn students to the fundamentals of a design of an individual house. To understand design of houses by applying architectural standards, regulations, and architectural language. To design semi-detached dwelling on the defined site for the chosen project that fits the needs of contemporary life.

ARCH109 Basic Design Communication II **ECTS 3 (1+1)**

Within this course, students shall increase awareness of the creative process and present realizations of conceptual ideas using appropriate tools, applications and techniques, such as drawing, painting, collage, photography, and model.

ARCH201-8 Architectural Studio I **ECTS 8 (1+5)**

The course establishes foundation for architectural design of individual and collective housing engaging issues of space, organization, use, structure and material.

ARCH202-8 Architectural Studio II **ECTS 8 (1+6)**

To introduce students with the fundamentals of collective housing design and to develop the students' capability to design residential building using architectural standards, regulations and architectural language.

ARCH203 Building Services I **ECTS 4 (1+5)**

This course aims to have knowledge and understanding of principal services in domestic and commercial buildings. The course looks closely at the applications of some common elements of building services practice, technique and procedure with illustrations, design examples, tables and charts and theory.

ARCH204-6 Structural Design I **ECTS 6 (1+2)**

This course aims to provide students with a basic concepts and principles of structural design of buildings. Students will be exposed to the basic structural elements, their shapes, behaviour, and common structural systems. Regular assignments experience and skills will be gained and learned through problem sets and a simple design project.

ARCH208 Architectural Communication **ECTS 6 (1+3)**

This unit of study introduces experimental analogue and digital technology into modes of architectural communication. It re-considers imagery, modelling, and verbal and written communication through computer aided operations, interfaces and projective techniques.

ARCH210-6 Structural Design II **ECTS 6 (1+2)**

This course aims to provide students with fundamental concepts of basic design of building structures and the use of major construction materials. Students will be exposed to concepts of both concrete and steel design at the element and system levels. An understanding of practical design issues will be developed. Design skills will be learned through problem sets and a comprehensive design project.

ARCH211 Building Services II **ECTS 4 (1+2)**

This course aims to introduce students the basic knowledge and understanding of principal services in domestic and commercial buildings.

ARCH216-6 Introduction to CAD **ECTS 6 (0+3)**

This course will introduce knowledge and skills required for computer aided design and presentation of 3D modelling. The students will learn the visualizations of design objects; develop computing skills in the use of AutoCAD and demonstrate visual skills in the use of 3D modelling tools in SketchUP, to produce and display accurate models of domestic scale buildings and structures. With the use of these design software, the students will be able to apply their knowledge and develop computer generated, multi-layered 2D design, and construction drawings, completed with: dimensions, notations and conventional drawing graphics, 3D parallel and perspective representations, with shaded, coloured or rendered surfaces as well as static and dynamic presentations that enhance and extend design communications.

ARCH217 History of Architecture II **ECTS 6 (2+1)**

To strengthen the capacity for developing creative and responsible solutions to the professional challenges based on the appropriate level of knowledge of the ideas and practices of architecture from 15th century to the Modern Time (19th century) in the diverse regional and historical contexts.

ARCH313-6 Building Construction I **ECTS 6 (1+3)**

To introduce students in principles of building systems, construction methods and techniques, to get students familiarized with structural as well as finish works to be implemented in construction process.

ARCH358-6 Building Construction II **ECTS 6 (1+2)**

To introduce students in principles and application of various contemporary materials in building construction, and especially in finishing level. Students will be familiar with the proper use of main construction and finish work materials in construction process.

MIM 321E Contemporary Architecture **ECTS 3 (2+0)**

The social and cultural bases of Modernity founded in the periods of Renaissance and Enlightenment. An elitist answer to the project of Modernity: Art Nouneau. Modernity and Avantgardism: De Stijl, Expressionism, Futurism and Constructivism. The idealism and realism of Bauhaus. Discussion on the concepts of form and function. The pioneers of modern architecture. The congress of CIAM. Architecture and social responsibility. The application of modernity to the urban scale. The moderate modernity of Art Deco. The dark side of modernity: Totalitarian architecture. Modernism during the 1950's and 1960's: The International Style. The sensibility on the historic environment and the primary reactions against modernism. Postmodernism: Meaning and form richness. From Pop Art to the commercial kitsch. New Historicism. The European Postmodernism. Philosophy, which has been built: Deconstructivism.

MIM 322 E Conservation of Historic Buildings and Sites **ECTS 4 (2+0)**

History and theory of conservation, evaluation of historic buildings and sites. Historic building survey, inspection and recording. Diagnosis of building failures. Restoration techniques (consolidation of materials and structures, reintegration, renovation, reconstruction, etc). Introduction to urban conservation methodology. Listing buildings and spaces of architectural and historic importance, urban conservation plans, and integrated conservation. National legislation concerning conservation. Administrative aspects of conservation in Turkey. Conservation education.

MIM 331E Building Production Systems **ECTS 3 (2+0)**

Definition of Building Production System (BPS). Elements of BPS: resources, process and product. Constraints of BPS: environment, aims, criteria. Development of BPS from standpoints of resources, process, product and organisation in parallel with social and technological changes. Characteristics of building sector. The product characteristics and demand characteristics in the building production. Evaluation of building systems in terms of resource utilization/speed/quality. Principals in building system selection.

MIM 341 E Urbanism and Planning Law **ECTS 4 (2+2)**

Historyofurbanplanningprocess.UrbanComponents:Residential, commercial,recreationalareasandtransportation.Populationandlandusedensities.Developmentplans,theirpurposesandimplementationtechnics.Planninglaw,regulationsandarchitecture.Urbandesignprinciples.Urbanspatialpatterns.Termpaper:Analysisofurbanelementsandspatialpatternsinanhistoric urbanarea.Definitionofproblemsandproposalofsolutions.

MIM 351 E Architectural Design V **ECTS 8 (2+6)**

Development of personalized processes of data collection, analysis and building programming which reflect the nature and interests of designers; discussions and definition on design aspects including topos, program, space, identity, representation in reference to the particular design situation; development of ability of applying the knowledge about structures, construction and detailing through the design process; control of the ability of developing complicated programs for complex urban tissues and integrating relevant design solutions.

MIM 305E Statistics **ECTS 3 (1+2)**

Data collection, probability, probability distributions, correlation, regression, hypothesis testing, data visualisation.

EKO 201E Economics **ECTS 3 (3+0)**

Introduction to the principles of micro and macroeconomics; the fundamental problems of economies; the modelling of household and firm behaviours; market structures; the principles of public finance; the modelling of macroeconomics in an international context.

MIM 312 E Architectural Design VI **ECTS 8 (2+6)**

Development of personalized processes of data collection, analysis and building programming which reflect the nature and interests of designers; discussions and definition on design aspects including topos, program, space, identity, representation in reference to the particular design situation; development of ability of applying the knowledge about structures, construction and detailing through the design process; control of the ability of developing complicated programs for complex urban tissues and integrating relevant design solutions.

MIM 332 E Construction Management and Economics **ECTS 5 (3+2)**

Basic concepts. Participants of the building production. Managerial and Economic decisions at different levels (sector, firm, project, operational) of building production process. Design and construction firms; functions, organisational patterns. Evaluation of building investments; feasibility studies. Project delivery systems, organisational structures and, type of contracts. Cost management; cost estimation, cost planning and control, factors affecting building costs. Time and resource management; time and resource estimation, planning and control; site management, site planning. Risk management; risk planning and control. Quality management; quality planning and control, specifications. Information management; information systems in construction management. Productivity in building production. The role of architects in different stages of building production process. Construction laws and regulations. Progress control, changes, claims and disputes, progress measurement, progress payments, closeout. Practices on building cost estimation, project planning/programming and feasibility studies.

MIM 421 E Architectural Survey and Restoration Studio **ECTS 5 (2+2)**

Use of traditional and optical methods for surveying historic structures: research and documentation before and intervention, degrees and methods of intervention. Measuring and producing measured drawings of historic building in the historic part of the town. Damage assessment. Proposal for restitution and restoration.

MIM 411 E Architectural Design VII **ECTS 8 (2+6)**

Development of personalized processes of data collection, analysis and building programming which reflect the nature and interests of designers; development of ability of applying the knowledge about structures, construction and detailing all through the design process by design problems; control of the ability of developing complicated programs for buildings - building groups in complicated environments and finding relevant design solutions.

MIM 431 E Construction Project **ECTS 12 (2+6)**

Building construction, environmental control systems and project management within the scope of detailed project. Preparation of detailed project. Preparation of detailed project according to building codes and regulations such as earthquake. Integration of building sub-systems such as load bearing, installation, mechanical, electrical systems. Preparing documents and detail drawings according to municipal drawing principles.

MIM 492 E Diploma Project **ECTS 12 (1+8)**

Analysis and investigation of the constraints, possibilities and requirements of the building program, the site and its environment and other design factors such as psychological, social, technological and aesthetic, within this context, providing interactive seminars to the students by the group leaders and / or by the experts they would recommend. Transformation of design information into design knowledge, Concept development, Definition of design criteria and priorities related to design proposal, Transformation of the outcome of analysis studies into ideas for spatial relations. Synthesis of design knowledge and experience gained throughout the design education. Development of solution alternatives and the proposal of a final solution.

ATA 101 Atatürk's Principles and History of Turkish Revolution I **ECTS 2 (2+2)**

A definition of Revolution/Renovation. The aim and the importance of the Turkish history of renovation.General state of the Ottoman Empire, the reason for the decline. Efforts to save the Ottoman Empire. Thecurrent ideals. The First World War. Societies. Mustafa Kemal in Anatolia and the Congresses. Theopening of the Great Turkish National Assembly. Reactions to the National Government. National andInternational policy. The Mudanya treaty. Lausanne conference.

ATA 102Atatürk's Principles and History of Turkish Revolution II **ECTS 2 (2+2)**

The declaration of the Republic. The importance of the leader and the staff in the revolution. Constitutional solutions to the problems related to the Lausanne Conference.The participation of Turkey in pacts and in international organizations. Reactions to the new governmental structure. Trials in the multi party system. The Home and foreign policy of the Republic of Turkey. Atatürk's foreign policy to inspire confidence in the future of Turkey. Kemalism the Principles of Atatürk.

TUR 101 Turkish I **ECTS 2 (2+2)**

Definition of Language, Language and Thought,Language and Culture, World languages (In Point ofOrigin and Structure), The Significance of Turkish Language among World Languages, The HistoricalDevelopment of Turkish Language, The Structure of Turkish Language, Turkish Phonetics, Todays TurkishLanguage, The Act of Writing and the Rules of Writing (Orthography), Spelling Rules, The RightExpression of Thought, Scientific Language and Turkish as a Scientific Language, Turkish Poetry andPoetry Language.

TUR 101 Turkish II **ECTS 2 (2+2)**

Written Expression, Method and Planning of Written Expression, Writing Exercise, Scientific Texts(Article – Report – Critic), Official Texts (Petition – Resume), Genres of Literature, Essay, Column, TravelWriting, Biography, Story, Novel, Verbal Literature, Verbal Expression and Communication.

Elective Courses from IUS:

ARCH308 Urban History **ECTS 4 (3+0)**

The course will introduce students to certain historical developments within urban development from prehistory up to and including the twentieth century. In order to satisfy the assessment criteria students will be expected to be able to identify key aspects of historical urbanism and styles and understand the reasons for urban development.

ARCH353 Self-Study Design Project **ECTS 4 (3+0).**

To introduce students with the fundamentals of design and to develop the students' capability to design different purpose buildings using architectural standards, regulations and architectural language in the demanding environment.

ARCH354 New Design in Old Settings **ECTS 4 (3+0)**

This course introduces students to new designs in existing urban or natural context on the given site. By the end of the unit the student will successfully demonstrate knowledge about architectural context of some space and understanding of appropriate approaches to the design of new buildings in old settings and the conservation issues that arise from such design proposals.

ARCH356 Landscape Design **ECTS 4 (3+0)**

This course will introduce the students to the fundamentals of landscape architecture and main principles of landscape design. The students will learn the history of landscape architecture, landscape perception and studies of landscape types in diversified contexts, represented on the work of various landscape architects. Through

class discussions and interactions, the students will develop skills in critical thinking. They will demonstrate their skills in using the main concepts and methods that enhance the landscape design process; analysis of the visual characteristics, spatial structure and organization of landscape and planting design, to be able to design a conceptual design project.

ARCH60 Digital Architecture and Fabrication **ECTS 4 (3+0)**

Students will be instructed in the principles of 3-D modelling using Rhinoceros NURBS modelling software. In a laboratory setting, students will have an opportunity to practice the strategies and methods commonly used in creating and solving 2-D and 3-D geometric problems. Information given in lectures and demonstrations will address aspects of modelling free-form curves, surfaces, and solids. Students will be introduced to a variety of 3-D model applications as they are used in illustration, engineering, design, documentation drawing, entertainment, and animation.

ARCH372 Compositions in Architecture **ECTS 4 (3+0)**

The course aims are to introduce students to architectural composition. Students should understand basic relations between forms and their impact in surroundings. The second aim is to introduce them to critical thinking in design, as well as decision making in the field of architectural form.

ARCH373 Interior Design **ECTS 4 (3+0)**

This course will give an introduction to the theories and practices of contemporary interior design. Students will acquire an understanding of the theories, concepts and techniques employed by interior designers, allowing them to utilize the same skills and knowledge in their own designs.

Elective Courses from ITU:

MIM 320E Roof Systems **ECTS 4 (3+0)**

Introduction to roof systems. Roof systems: classification. Roof system components: structural system, roof coverings, thermal insulation, waterproofing, air barrier, vapour retarders, etc. Assembly of components. Roof drainage systems. Integration of roof systems with external wall systems-facades. Sustainable roof systems: green roofs, cool roofs, PV roofs.

MIM 330E Vertical Circulation Systems **ECTS 4 (3+0)**

Objectives, scope of the course and related definitions. Vertical circulation systems: ramps and staircases. Performance analysis of vertical circulation systems: environmental factors, user requirements, performance requirements according to basic functions. Classification of staircases: external and internal stairs, staircase for fire escape. Physical analysis of staircase, forming, supporting, dimensioning, proportioning, and integration with building. Studio work: analysis, design, and evaluation of staircases.

MIM 378E Tall Building Structures **ECTS 4 (3+0)**

Introduction. Design criteria. Loading. Frame structures. Wall structures. Frame-Wall structures. Tubular structures. Suspended structures. Approximate analysis methods. Evaluation of some typical samples related to all system types.

MIM 433E Infill Problems in Urban Historic Sites **ECTS 4 (3+0)**

Typologies of buildings, groups of buildings and characteristics of streets, blocks, many various examples of historic centres. The main principles and data, which must be taken in consideration for the construction of new buildings in dense historic areas. International decisions related to these principles. Discussions on the European and American examples of different important approaches. New buildings in historic centres of Istanbul and other Anatolian traditional towns and their evaluation.

MIM 315E Acoustical Problems in Architecture **ECTS 4 (3+0)**

Sound, vibration and human perception; Noise in community and buildings; noise control criteria and standards relative to human health & comfort, principles of noise control at different phases of architectural design, insulation against air borne and structure borne sounds, noise and vibration control in HVC systems; Auditorium acoustics and architectural design: criteria and standards for multipurpose use; Applications to specific building types: residential, commercial, educational, health and public buildings, industrial buildings and functional spaces such as studios, rooms, theatres and music halls.

MIM 325E Acoustical Design of Halls for Speech and Music **ECTS 4 (3+0)**

Concepts, acoustical requirements in auditorium design (adequate loudness, diffusion of sound, control of reverberation, elimination of room acoustical defects, noise and vibration control); Determination of total room absorption choice of sound absorbing material; Acoustical design of ceiling.

MIM 335E Energy Efficient Housing **ECTS 4 (3+0)**

Energy efficient housing design concept, factors which require energy efficient housing design, factors affecting energy efficient housing design: physical environmental factors (climate, natural light), design parameters related with the building and determination of appropriate values of them (optical and thermos-physical properties of building envelope, window properties, light reflectivity of internal and external surfaces, distance between buildings, building orientation and form, natural ventilation system and solar control), passive and active systems, contemporary approaches in the energy efficient housing design.

MIM 356E Photography **ECTS 4 (3+0)**

Photography within the historical context, use of photography, contextual differences, point of view, contemporary photographic techniques and technologies, digital darkroom processing, practical and experimental studies.

MIM 415E Housing Design Philosophy of Contemporary Architects **ECTS 4 (3+0)**

Examination of various housing typologies by means of analysing housing projects of different architects; studying the housing design approaches of the contemporary architects who have been able to synthesize the architectural inheritance in housing; the discussion and interpretation of the house form regarding the unique formal properties, façade compositions, design shapes, textures and building materials chosen; examples from Botta, Wright, Corbusier, Ando, Gehry, UN Studio, New York Five and so forth.

MIM 425E Architecture Today **ECTS 4 (3+0)**

Overview of the Intellectual Environment in Architecture. The Architect and his/her Professional Environment. Modernism and Post-Modernism in Social Theory. Modernism and Post-Modernism in Architectural Theory. Contemporary Paradigms and Approaches and Their Effects on Architectural Discipline: Sustainability, Ecology, Social Architecture, Architecture and Media, New Technologies and Architecture, Representation and Identity in Architecture. Architecture of Different Geographies: the Architecture of the States, Europe, Africa, Far East and Middle East. Architectural Competitions. The State of the Architectural Domain in Turkey.

MIM 427E Restoration of Cultural Property **ECTS 4 (3+0)**

Definition and content of cultural property; presentation of international organizations and texts concerning the restoration and preservation of cultural property; UNESCO World Heritage List and World Heritage in Danger List; presentation of different techniques and approaches by exposing the restoration of some important monuments and by visiting two restoration sites in Istanbul; information on problems of architectural conservation.

MIM 429E Topographical Practices: Architecture, Art and the City ECTS 4 (3+0)

The relationships between art, architecture, and the city, spatial practices; Mapping, film-making, writing as topographical practices; Place, site and site-specificity, delineating a place; The production of public space by architectural and art practices; Criticising the roles of the architect and artist through gender issues; Performance , documentation, representation in art and architecture; Contemporary projects in architecture, art and urbanism in Istanbul and the world.

MIM 435E Modern Concepts of Architectural Conservation ECTS 4 (3+0)

Ethics of architectural conservation. Discussion on the concepts of conservation and restoration. Authenticity in architectural conservation, changing criteria, historic authenticity. Rehabilitation of old building and urban historic sites. Design principles in conservation areas. Control of redevelopment in architectural scale. Case studies of re-used buildings. Surveying historic buildings, conservation and consolidation. Conservation science in the service of architectural conservation.

MIM 437E Analyses and Critics on Contemporary World Architecture ECTS 4 (3+0)

Louis I. Kahn and the 'Monumentalization' of Modern Architecture in the late ‘50s; Robert Venturi and the Post-Modern Architecture in the U.S.A. in the ‘60s, ‘70s and its evolution in the ‘80s; Aldo Rossi and the Italian “Tendenza” movement; Globalism and Localism; Trend, Fashion and Architecture: Bruce Mau and Rem Koolhaas; Architecture in the Age of Globalization, Frank Gehry, Peter Eisenman and Zaha Hadid; Critical Regionalism: experiences in Europe, Asia and America and Carlo Scarpa in north Italy as case-study; Hi-tech, new languages and Utopia in architecture: Reyner Banham, Archigram and the tendencies after the 60s; Renzo Piano, Sir Norman Foster and the tendencies at the turn of the century; Architecture of the new millennium in the world cities; Green architecture, Sustainability and new directions in contemporary world architecture practice.

MIM 440E Generating Liveable Environments ECTS 4 (3+0)

A discussion of theoretical approaches and opinions on human-culture and environment relations. Discussion of theories and researches on Environmental Psychology related to the field of Architecture. Developments on generating liveable environments and their effects on principles of Architectural/Environmental Design. Impacts of buildings and cities on the environment. Environmental problems and environmental stress. Principles of creating defensible space.

MIM 461E Environmental Design for the Disabled and Elderly ECTS 4 (3+0)

Basic knowledge on disability and elderly people; social, psychological and demographic situation; the kinds of disability, accessories, equipment and building elements for the disabled and elderly; building and home design for the disabled and elderly; contemporary standards; new standards and design criteria of the urban environment for the disabled and elderly.

MIM 465E Building Sub-Structure and Ground ECTS 4 (3+0)

Terminology, concepts, relationship between ground and building. Site survey, ground investigation and improvement, soil types. Setting out of building, excavation and machines for excavation, temporary supports for trench walls. Building components in contact with ground: foundations, foundation and basement walls and ground and basement floors. Building movement in ground. Damp proofing, water proofing and thermal insulation in floors on ground, and basement floors and walls.

MIM 471E Earthquake Resistant Building Design ECTS 4 (3+0)

Earthquake engineering terminology. Design earthquakes. Earthquake resistant design philosophy. Choice of forms and materials. Effect of soil properties. Reinforced concrete buildings. Precast concrete buildings. Steel buildings. Masonry buildings. Timber buildings. Related codes and standards. Special topics in earthquake engineering.

MIM 494ESpecial Topics of Construction Project Management ECTS 4 (3+0)

The course covers the following topics: scope of the construction project management; sustainability in the construction project management; fundamentals of resource management in construction project management; fundamentals of human resources management in construction project management; construction contracts and fundamentals of contract administration in construction projects; dispute areas in construction projects and fundamentals of dispute management; fundamentals of subcontracting and supply chain management; fundamentals of facilities management.

MIM 370E Internal Sub-Division Systems ECTS 4 (3+0)

Objectives, scope of the course and related definitions. Internal sub-divisions in building: division and separation walls, floors and ceilings. Performance analysis of these elements: environmental factors, performance requirements determined with regard to their basic functions, and their performance in place. Physical analysis of division and separation walls, floors, and ceilings. Forming, dimensioning, jointing and integration of these elements. Studio work: design and/or evaluation of alternative solutions, selection, and detailing.

MIM 432E Entrepreneurship in Construction Industry ECTS 4 (3+0)

Description of concepts related with entrepreneurship and entrepreneur; entrepreneurial thinking; characteristics of entrepreneurs; fundamentals of human resources management from entrepreneurship perspective; analysis of human resources management in the construction industry with respect to the entrepreneurship; fundamentals of financial topics from entrepreneurship perspective; analysis of financial topics in the construction industry from entrepreneurship perspective; fundamentals of marketing and sales topics from entrepreneurship perspective; analysis of marketing and sales in the construction industry from entrepreneurship perspective; adaptation to changes and new trends (e-business, changes in the business environment; internet related technologies, customer expectations, live standards, sustainability); effects of new trends and changes to the construction industry.