

**FACULTY OF ARCHITECTURE / DEPARTMENT OF ARCHITECTURE
UNDERGRADUATE CURRICULUM**

FIRST YEAR

First Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH101	BASIC DESIGN	6	4	4	8.0
ARCH103	BASIC GRAPHIC COMMUNICATION	3	2	2	4.0
ARCH121	INTRODUCTION TO ARCHITECTURE	3	2	2	4.0
MATH141	GEOMETRY FOR ARCHITECTS	4	4	0	5.0
LENG101	FRESHMAN ENGLISH I	4	4	0	5.0
TURK101	TURKISH I	2	2	0	2.0
GOS	COMMON ELECTIVE COURSE	0	1	1	1.0
TDP101	SOCIAL AWARENESS PROJECTS I	1	1	0	1.0

Second Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH102	INTRODUCTION TO ARCHITECTURAL DESIGN	6	4	4	8.0
ARCH112	ARCHITECTURAL HISTORY I	3	3	0	3.0
ARCH122	BUILDING CONSTRUCTION I	3	2	2	4.0
MATH142	CALCULUS FOR ARCHITECTS	4	4	0	5.0
LENG102	FRESHMAN ENGLISH II	4	4	0	5.0
TURK102	TURKISH II	2	2	0	2.0
TDP102	SOCIAL AWARENESS PROJECTS II	2	1	2	2.0
KRY100	CAREER PLANNING	1	0	2	1.0

SECOND YEAR

Third Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH201	ARCHITECTURAL DESIGN I	6	4	4	8.0
ARCH211	ARCHITECTURAL HISTORY II	3	3	0	3.0
ARCH221	BUILDING CONSTRUCTION II	3	2	2	5.0
ARCH231	STATICS AND STRENGTH OF MATERIALS	3	3	0	5.0
GME100	GENERAL AND PROFESSIONAL ETHICS	2	2	0	2.0
ARCH253	DIGITAL MEDIA IN ARCHITECTURE I	3	2	2	5.0
HIST201	ATATURK'S PRINCIPLES	2	2	0	2.0

Fourth Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH202	ARCHITECTURAL DESIGN II	6	4	4	8.0
ARCH212	ARCHITECTURAL HISTORY III	3	3	0	3.0
ARCH222	BUILDING CONSTRUCTION PROJECT	4	2	4	6.0
ARCH232	BEHAVIOR AND ANALYSIS OF STRUCTURES	4	4	0	4.0
ARCH254	DIGITAL MEDIA IN ARCHITECTURE II	3	2	2	4.0
HIST202	ATATURK'S PRINCIPLES	2	2	0	2.0
ARCH290	SUMMER PRACTICE	0	0	0	3.0

THIRD YEAR

Fifth Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH301	ARCHITECTURAL DESIGN III	6	4	4	8.0
ARCH311	ARCHITECTURAL HISTORY IV	3	3	0	3.0
ARCH331	STRUCTURAL DESIGN IN ARCHITECTURE	3	2	2	7.0
ARCH353	BUILDING MATERIALS TECHNOLOGIES	3	2	2	6.0
ARCH393	PRINCIPLES OF CULTURAL HERITAGE CONSERVATION	3	3	0	6.0

Sixth Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH302	ARCHITECTURAL DESIGN IV	6	4	4	8.0
ARCH312	PRINCIPLES OF CITY PLANNING	3	3	0	4.0
ARCH354	BUILDING CONSTRUCTION TECHNOLOGIES	3	2	2	5.0
ARCH382	ENVIRONMENTAL DESIGN I	3	3	0	4.0
ARCH394	ARCHITECTURAL SURVEY PROJECT	3	2	2	6.0
ARCH390	SUMMER PRACTICE	0	0	0	3.0

FOURTH YEAR

Seventh Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH401	ARCHITECTURAL DESIGN V	6	4	4	15.0
ARCH483	ENVIRONMENTAL DESIGN II	3	3	0	5.0
	TECHNICAL ELECTIVE	3	3	0	5.0
	TECHNICAL ELECTIVE	3	3	0	5.0

Eighth Semester

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH402	ARCHITECTURAL DESIGN VI	6	4	4	15.0
ARCH412	CONSTRUCTION MANAGEMENT AND ECONOMICS	3	3	0	5.0
	TECHNICAL ELECTIVE	3	3	0	5.0
	TECHNICAL ELECTIVE or NON TECHNICAL ELECTIVE *	3	3	0	5.0

ELECTIVE COURSES

Course Code	Course Name	Credit	Contact (h/w)	Lab (h/w)	ECTS
ARCH421	DEVELOPMENTS IN MODERN ART	3	3	0	5.0
ARCH423	PERSPECTIVE DRAWING	3	3	0	5.0
ARCH425	NATURAL LIGHTING IN ARCHITECTURE	3	3	0	5.0
ARCH427	ACOUSTIC IN ARCHITECTURE	3	3	0	5.0
ARCH429	HOUSING IN DEVELOPING COUNTRIES	3	3	0	5.0
ARCH431	SPATIAL AND CULTURAL DIMENSIONS OF HOUSING	3	3	0	5.0
ARCH433	ARCHITECTURAL ACCESSIBILITY FOR DISABLED PEOPLE	3	3	0	5.0
ARCH435	AUTOCLAVED AERATED CONCRETE (AAC) APPLICATIONS IN BUILDINGS	3	3	0	5.0
ARCH437	LANDSCAPE DESIGN IN ARCHITECTURE	3	3	0	5.0
ARCH439	SPATIAL DESIGN	3	3	0	5.0
ARCH441	CULTURE OF ARCHITECTURE	3	3	0	5.0
ARCH443	COMPONENTS IN TRADITIONAL HOUSES	3	3	0	5.0
ARCH445	ANALYSIS OF HISTORICAL ENVIRONMENT	3	3	0	5.0
ARCH447	ARCHITECTURE, PLANNING AND SUSTAINABILITY	3	3	0	5.0
ARCH449	BUILDING CONSTRUCTION AND SURVEYING	3	3	0	5.0
ARCH422	ARCHITECTURAL THEORY AND MODERNISM	3	3	0	5.0
ARCH424	TRADITIONAL TURKISH HOUSE	3	3	0	5.0
ARCH426	URBAN DESIGN	3	3	0	5.0
ARCH428	URBAN CONSERVATION	3	3	0	5.0
ARCH430	ARCHITECTURAL READING	3	3	0	5.0
ARCH432	UNDERSTANDING IN LOCAL ARCHITECTURE	3	3	0	5.0
ARCH434	URBAN TRAFFIC DESIGN	3	3	0	5.0
ARCH436	DESIGN IN HISTORICAL AREA	3	3	0	5.0
ARCH438	INTERIOR SPACE ORGANIZATION	3	3	0	5.0
ARCH440*	URBAN SOCIOLOGY	3	3	0	5.0
ARCH442	ARCHITECTURAL LANDMARKS IN CITIES	3	3	0	5.0
ARCH444	PUBLIC SPACE IN ARCHITECTURAL DESIGN	3	3	0	5.0
ARCH446	COMPUTER MODELLING FOR ARCHITECTS	3	3	0	5.0
ARCH448	PERIOD OF TURKISH REPUBLIC OF ARCHITECTURE	3	3	0	5.0
ARCH450	ANALYSIS OF THE TURKISH CITY	3	3	0	5.0
ARCH451	PLASTIC ARTS	3	3	0	5.0
ARCH452	ARCHITECTURAL PHOTOGRAPHY	3	3	0	5.0
ARCH453	VISUAL COMMUNICATION IN ARCHITECTURE	3	3	0	5.0
ARCH454	STEEL CONSTRUCTION DESIGN	3	3	0	5.0

ARCH101 BASIC DESIGN

Course Code:	ARCH101
Credit (Theoretical-Laboratory hours/week):	6(4-4)
ECTS Credit:	8.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	First Semester

Course Content:

Basic design makes an introduction to designing by starting with small scale tasks and continuing with longer term design projects. The first part of the course, the small scale projects, aims to familiarize students with basic visual values by working with 2D compositions. Main aims of this part are to nourish abstract thinking and the ability to put it on a 2D media, and to help the students to develop their individual design styles. The second part of the course focuses on developing 3D thinking and realizing concepts and ideas in 3D forms. Students, at the end of the year, are expected to have matured an approach to 2D compositions and to have started with 3D thinking, as well as an eye for detail and hand eye coordination crucial to the art of designing.

ARCH102 INTRODUCTION TO ARCHITECTURAL DESIGN

Course Code:	ARCH102
Credit (Theoretical-Laboratory hours/week):	6(4-4)
ECTS Credit:	8.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Second Semester
Prerequisite:	ARCH 101 must be completed before taking ARCH102

Course Content

Adding onto basic design principles, this course elaborates further on developing concepts and expressing ideas in 3D forms and compositions. Students develop their skills of designing and articulating 3D forms with a design problem in mind. In this course, the main principle is to give a sense of structural elements and space by hands on production of 3D structures. Also, during the course of the term, importance is given to introducing different techniques of producing 3D structures. This will give an insight into structures, improve both hand skills and model making skills of students, as well as supporting 3D thinking.

ARCH103 BASIC GRAPHIC COMMUNICATION

Course Code:	ARCH103
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	4.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	First Semester

Course Content

This course helps the students to enhance their free hand drawing skills and to improve their sense of colors. In addition, this course covers the use of drawing tools. It also teaches the students how to draw plans, elevation and sections for an object and for a group of objects. It then develops this teaching to cover architectural subjects. Also students will learn how to draw internal and external three dimensions' images of an object. This is covered by axonometric, Isometric, one point and two points perspectives. This is then developed to relate to architectural subjects. In addition, the students will learn how to prepare architectural working drawings.

ARCH112 ARCHITECTURAL HISTORY I

Course Code:	ARCH112
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	3.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Second Semester

Course Content

Art, the purpose of art and factors; culture, cultural environment, architecture, architecture external factors affecting the architectural phenomenon (geographical location, management, social structure, economic status, worldview, beliefs, etc.). Paleolithic and Neolithic art and the first examples of architecture. Mediterranean cultural environment, Egyptian civilization, Mesopotamia. Hittite Anatolia, Troy, Phrygian, Ionian civilization, Greek, Hellenistic, Byzantine Empire and the Roman Empire, art and architecture.

ARCH121 INTRODUCTION TO ARCHITECTURE

Course Code:	ARCH121
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	4.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate

Offered Semester: First Semester

Course Content

The aim of this course is to provide students ability to understand and evaluate architectural space, create design proposals. The course will be structured as a whole of theories, applications and case studies. In theoretical part of the course, planning principles and contemporary examples about architectural space will be given to students with visual materials. In the practical part, students are expected to draw their own houses and criticize their spatial formation.

ARCH122 BUILDING CONSTRUCTION I

Course Code: ARCH122
Credit (Theoretical-Laboratory hours/week): 3(2-2)
ECTS Credit: 4.0
Department: Architecture
Language of Instruction: English
Compulsory or Elective? Compulsory
Level of Study: Undergraduate
Offered Semester: Second Semester

Course Content

The course provides the students with the required knowledge to understand various components of the building. It starts with discussing various types of foundations. Then, it deals with walls of different materials (bricks, stones, timber, concrete etc....). Floors, ceilings and roofs are then presented. Vertical circulation elements such as staircases and elevators are also discussed.

ARCH201 ARCHITECTURAL DESIGN I

Course Code: ARCH201
Credit (Theoretical-Laboratory hours/week): 6(4-4)
ECTS Credit: 8.0
Department: Architecture
Language of Instruction: English
Compulsory or Elective? Compulsory
Level of Study: Undergraduate
Offered Semester: Third Semester
Prerequisite: ARCH102 must be completed before taking ARCH201

Course Content

Studies for the identification of the elements of architectural design and the development of a sensitivity and awareness required for valid interpretations.

ARCH202 ARCHITECTURAL DESIGN II

Course Code: ARCH202
Credit (Theoretical-Laboratory hours/week): 6(4-4)
ECTS Credit: 8.0

Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fourth Semester
Prerequisite:	ARCH201 must be completed before taking ARCH202

Course Content

Studies for the identification of the elements of architectural design and the development of a sensitivity and awareness required for valid interpretations.

ARCH211 ARCHITECTURAL HISTORY II

Course Code:	ARCH211
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	3.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Third Semester

Course Content

Reflection architecture of Islam. Starting from the period of the Umayyad, Abbasid, the first Muslim Turkish states, Karahans, Ghaznavids, Great Seljuks, Anatolian Seljuks, Principalities period and examine the structural and spatial development of the Ottoman architecture. And understanding of reflection to architecture on the impact of environmental, regional and religious.

ARCH212 ARCHITECTURAL HISTORY III

Course Code:	ARCH212
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	3.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fourth Semester

Course Content

Factors that affected Middle Age arts and architecture, such as, Christian thought, feudalism, social structure, cultural condition. Architectural formation in Romanesque and Gothic arts and architecture, function, structure and symbolic values. Factors that affected Renaissance arts and architecture, such as, Humanism, trade and the rise of bourgeoisie, Mannerism, religious and social effects. Baroque period, political, economical, religious factors (until Industrial Revolution and 18th century). Important concepts; rational-irrational, functional-formal, eclectic-mannerist and symbolic values.

ARCH221 BUILDING CONSTRUCTION II

Course Code:	ARCH221
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Third Semester

Course Content

In this course the students will learn how to prepare various types of working plans. They will also learn the details of the components of the building they learn in building construction 1. Here, the course discusses construction details of foundation, walls, floors, ceiling, roofs and vertical circulation.

ARCH222 BUILDING CONSTRUCTION PROJECT

Course Code:	ARCH222
Credit (Theoretical-Laboratory hours/week):	4(2-4)
ECTS Credit:	6.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fourth Semester

Through a single comprehensive architectural project, in this subject the student can practice the application of various types of knowledge on building construction, architectural details and architectural working drawing techniques.

ARCH231 STATICS AND STRENGTH OF MATERIALS

Course Code:	ARCH231
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Third Semester

Course Content

Introduction to principles of mechanics. Equivalent force systems, free body diagrams. Analysis of simple plane structures. Internal force in beams and trusses, shear force, bending moment and axial force diagrams. Centroids and moment of inertia of sections. Introduction to stress and strain concepts. Equilibrium, compatibility and constitutive relations. Bending and shear stresses. Deflection of trusses and beams.

ARCH232 BEHAVIOR AND ANALYSIS OF STRUCTURES

Course Code:	ARCH232
Credit (Theoretical-Laboratory hours/week):	4(4-0)
ECTS Credit:	4.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fourth Semester

Course Content

A survey of the elements influencing the behavior of structures. Use of appropriate approximate methods and structural models in the approximate analysis of columns, continuous beams, trusses, frames, arches, curved beams, plates and shells. Introduction to computer analysis of building structures.

GME100 GENERAL AND PROFESSIONAL ETHICS

Course Code:	GME100
Credit (Theoretical-Laboratory hours/week):	2(2-0)
ECTS Credit:	2.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Third Semester

Course Content

The purpose of the course is to acquaint the advanced student in the professional program in architecture with the ethical and practical issues which the architect faces in professional practice. The intent is to present these issues in such a way as to assist the student in understanding the ethical commitment to self, client and society at large that an architectural practice demands; to assist in planning for a student's initial employment; and to help students learn how to prepare professional practice plans for their future careers whether traditional or otherwise.

ARCH253 DIGITAL MEDIA IN ARCHITECTURE I

Course Code:	ARCH253
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Third Semester

Course Content

This course introduces modelling software as a media in architectural communication. The aim is to reach a competent level in producing technical drawings according to industry standards, by using contemporary architectural software. Accordingly, students get training in details of drawing with architectural software, managing scales and representing different elements of architectural projects.

ARCH254 DIGITAL MEDIA IN ARCHITECTURE II

Course Code:	ARCH254
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	4.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fourth Semester

Course Content

This course is conveyed in two simultaneous parts. The first part teaches 3D modelling software with the help of tutorials detailing the commands of programs. The aim is to give students necessary means to use computer software as an integral part of their design processes, in terms of developing their ideas and preparing visuals for their ideas. The second part of the course teaches graphical design software, again with the help of tutorials giving an insight into 2D programs. This part aims to utilize this knowledge in poster making and in explaining architectural projects in a visually clear and aesthetic fashion.

ARCH301 ARCHITECTURAL DESIGN III

Course Code:	ARCH301
Credit (Theoretical-Laboratory hours/week):	6(4-4)
ECTS Credit:	8.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fifth Semester
Prerequisite:	ARCH202 must be completed before taking ARCH301

Course Content

Design of buildings in relation to their particularly historical urban context is emphasized. Issues of settlement-dwelling relationships, buildings of functional complexity and spatial variety and architectonic interpretations of structural systems are analyzed and designed.

ARCH302 ARCHITECTURAL DESIGN IV

Course Code:	ARCH302
Credit (Theoretical-Laboratory hours/week):	6(4-4)
ECTS Credit:	8.0
Department:	Architecture

Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Sixth Semester
Prerequisite:	ARCH301 must be completed before taking ARCH302

Course Content

Function, structure and details of the construction are the main context for this project. Different materials, their connection and structural design of the construction are also expected to be solved.

ARCH311 ARCHITECTURAL HISTORY IV

Course Code:	ARCH311
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	3.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fifth Semester

Course Content

The first half of 20th century architecture and the theories; their sampling. Located in the social background of the theory and practice of architecture, politics, aware of technological developments. Second half of the 20th century to the present and examine the theory and practice of contemporary architecture to achieve cultural awareness.

ARCH312 PRINCIPLES OF CITY PLANNING

Course Code:	ARCH312
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	4.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Sixth Semester

Course Content

The course develops along two lines: 1. Definition of the city, its development and analysis of components-activities, functions, movement channels and corresponding physical form. 2. Introduction to city planning: historical background, land-use plan, transportation plan, planning and different scales, visual analysis of the city, administrative aspects.

ARCH331 STRUCTURAL DESIGN IN ARCHITECTURE

Course Code:	ARCH331
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	7.0

Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fifth Semester

Course Content

General principles of reinforced concrete and steel. Behavior of reinforced concrete structural elements subjected to loading effects. Analysis and design of reinforced concrete structural elements. Approximate methods of structural analysis according to unfavorable loading. Reinforced concrete element details. Introduction to earthquake resistant building design. Reinforced concrete slab systems. Theory of steel design. Large span and high rise buildings.

ARCH353 BUILDING MATERIALS TECHNOLOGIES

Course Code:	ARCH353
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	6.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fifth Semester

Course Content

Intrinsic and extrinsic factors that govern the making of buildings: what/who does which, where, when, why and how. The substance of buildings: materials, products and components; why we need them and what they are; what they look like; where they come from and where they go; what we can and cannot do to/with them and what they can cannot do to/for us.

ARCH354 BUILDING CONSTRUCTION TECHNOLOGIES

Course Code:	ARCH354
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Sixth Semester

Course Content

What makes up a building? Its parts and why we need them; how these fit together; why. What makes them stay and work the way they do and how to keep them doing so. Where to start and how to go about it. What and what not to do; how, where and when. Intrinsic and extrinsic factors that govern their making.

ARCH382 ENVIRONMENTAL DESIGN I

Course Code:	ARCH382
Credit (Theoretical-Laboratory hours/week):	3(3-0)

ECTS Credit:	4.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Sixth Semester

Course Content

Thermal Performance: Heat transfer, thermal insulation regulations and application in Turkey, thermal properties of building materials and their effects on thermal performance of buildings, humidity and condensation prediction, thermal comfort and its parameters, wind movement in and around buildings; Climate: Climate and climatic elements in different climatic regions as environmental factors influencing architectural design.

ARCH393 PRINCIPLES OF CULTURAL HERITAGE CONSERVATION

Course Code:	ARCH393
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	6.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Fifth Semester

Course Content

The course aims to provide the students of architecture with the basic knowledge and understanding of the cultural heritage and its conservation.

ARCH394 ARCHITECTURAL SURVEY PROJECT

Course Code:	ARCH394
Credit (Theoretical-Laboratory hours/week):	3(2-2)
ECTS Credit:	6.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Sixth Semester

Course Content

The course aims to provide the students of architecture with the basic surveying techniques. Identification traditional and contemporary survey techniques related to historical buildings. Preparation an architectural survey project and a simple restitution proposal on a selected historical building or group of buildings by students of architecture.

ARCH401 ARCHITECTURAL DESIGN V

Course Code:	ARCH401
Credit (Theoretical-Laboratory hours/week):	6(4-4)
ECTS Credit:	15.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester
Prerequisite:	ARCH302 must be completed before taking ARCH401

Course Content

Advanced architectural design and planning of buildings involving considerations of structural and functional complexity.

ARCH402 ARCHITECTURAL DESIGN VI

Course Code:	ARCH402
Credit (Theoretical-Laboratory hours/week):	6(4-4)
ECTS Credit:	15.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester
Prerequisite:	ARCH401 must be completed before taking ARCH402

Course Content

It is a total design in terms of application of the all the knowledge learnt during the study. It is a solution of a complex design problem.

ARCH412 CONSTRUCTION MANAGEMENT AND ECONOMICS

Course Code:	ARCH412
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

The definition and terminology, cash-flow diagrams, time value concepts, interest, nominal and effective interest rates, inflation and impact on cash flow, activity measurement methods, comparison of alternatives, depreciation methods, replacement analysis, break-even analysis, economical feasibility report.

ARCH483 ENVIRONMENTAL DESIGN II

Course Code:	ARCH483
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Compulsory
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Solar: Solar systems, sun patch diagrams, shadowing effects, passive solar heating and cooling buildings; Lighting: Day lighting and artificial lighting, color in architecture; Acoustics: Architectural acoustics, behavior of sound in rooms, noise through buildings; Fire: Fire prevention in buildings: passive approaches in design. "Turkey's Regulation on Fire Protection". Sanitary services: water supply, building layout and equipment, pressure requirements and zoning, active firefighting, waste water disposal, building piping, vertical transportation, equipment, active heating and cooling systems, water heating.

CONTENT OF ELECTIVE COURSES

ARCH421 DEVELOPMENTS IN MODERN ART

Course Code:	ARCH421
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

A discussion of twentieth century modern art. Discussion of significant movements like; Impressionism, Expressionism, Kinetic Art, Pop Art, Happening, Land Art etc... and outstanding artists of 20th century.

ARCH423 PERSPECTIVE DRAWING

Course Code:	ARCH423
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Introduction to perspective drawings. Drawing of one, two, and three point perspectives. Rendering in perspective drawings.

ARCH425 NATURAL LIGHTING IN ARCHITECTURE

Course Code:	ARCH425
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Control of direct sun light in buildings. Openings facades in the building. Climate conditions and lighting in buildings. Level of illuminations in various buildings. Design rule of natural illuminations related to geographical situations.

ARCH427 ACOUSTIC IN ARCHITECTURE

Course Code:	ARCH427
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Basic measurement in architectural acoustics. Noise and its sources in buildings. Noise control and details in structures. Design principles of noise control in buildings.

ARCH429 HOUSING IN DEVELOPING COUNTRIES

Course Code:	ARCH429
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Phenomenon of migration from rural-to-urban; causes, positive and negative consequences; inquiring into housing issue of the industrialized and industrializing countries, and comparing the two types of countries with respect to their approaches to housing; housing typology of the big cities in developing countries; the cultural characteristics of low-income urban settlers, and the characteristics of their houses.

ARCH431 SPATIAL AND CULTURAL DIMENSIONS OF HOUSING

Course Code:	ARCH431
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Clarification of the concepts of dwelling, home and space. Reasons and various aspects of the housing problem. Cultural dimensions of housing; interaction between environment, dwelling and residents. Social determinants of housing and examination of the profiles of residents. Social, physical and functional changes in housing areas. Utilization of dwellings in different cultural settings; alternative usage of space

ARCH433 ARCHITECTURAL ACCESSIBILITY FOR DISABLED PEOPLE

Course Code:	ARCH433
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Course focused on persons with disabilities to identify and design solutions to the problems facing the environment and examine the use of space.

ARCH435 AUTOCLAVED AERATED CONCRETE (AAC) APPLICATIONS IN BUILDINGS

Course Code:	ARCH435
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Production technique of AAC building materials and components, application techniques, facade processes, benefits in terms of earthquake safety, AAC's position in "Energy Efficiency Regulations", advantages in terms of building physics, advantages it provides in Project stage and façade analysis. Thermal insulation, condensation and sound insulation study in buildings and sample project. Facade solutions in buildings. Projects for massive construction.

ARCH437 LANDSCAPE DESIGN IN ARCHITECTURE

Course Code:	ARCH437
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

A basic knowledge of the scope of landscape design in a historical perspective; the concepts of landscape planning, landscape architecture and landscape urbanism; principles and elements of landscape design; the basic landscape concepts; natural and human-made elements; the tools and techniques of landscape design.

ARCH439 SPATIAL DESIGN

Course Code:	ARCH439
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

This course aims to work on the concepts: space and user. Spatial elements are seen as the forms humans interact within the built environment. Concepts of space are integrated in spatial forms by working with users and envisioning interactions by producing design proposals.

ARCH441 CULTURE OF ARCHITECTURE

Course Code:	ARCH441
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

The importance of architecture in the description of culture, importance of architectural history and the way it's handled in the planning stage. Studying the concept of form, function, style, aesthetic and beauty independent from architectural theories, and their exemplification in the history. Studying the importance of knowledge of art and communication in architecture. The interaction and connection between architecture and other disciplines is emphasized and discussed all through the course.

ARCH443 COMPONENTS IN TRADITIONAL HOUSES

Course Code:	ARCH443
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Investigate the construction techniques and structural elements of traditional houses in different regions of Turkey. By typology studies on the structural elements, to prepare a database infrastructure protection process in these works.

ARCH445 ANALYSIS OF HISTORICAL ENVIRONMENT

Course Code:	ARCH445
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

History of environmental awareness and protection, environmental protection and the only building scale and evaluation methods, a single building scale analysis of historical settlements, evaluation and synthesis. Experimental studies on the evaluation samples of protection in determining the extent of protection and use. Historic environment and reveal potential problems and protection in a single building scale in the sample. To criticize the positive and negative aspects of the protection methods and applications.

ARCH447 ARCHITECTURE, PLANNING AND SUSTAINABILITY

Course Code:	ARCH447
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

This subject supports architecture students with knowledge necessary to them from the field of planning and designing the built environment and from the field of sustainability. It covers various themes relevant to sustainable architecture, principles of designing the built environment, various aspects of designing a neighborhood and land use planning.

ARCH449 BUILDING CONSTRUCTION AND SURVEYING

Course Code:	ARCH449
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Seventh Semester

Course Content

Introduction to construction site, construction techniques and application works of the project. Introduction to use of surveying equipment, topographic readings, measurement techniques and their applications.

ARCH422 ARCHITECTURAL THEORY AND MODERNISM

Course Code:	ARCH422
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

A discussion of twentieth century architectural theory. Discussion of modernist theories and simultaneous counter-theories, investigation of philosophical origins of modernism dating back to eighteenth century, understanding of the reflections of modern theories in related fields such as theater, film, visual arts and literature.

ARCH424 TRADITIONAL TURKISH HOUSE

Course Code:	ARCH424
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

The aim of the course is to investigate the architectural properties of the Turkish House. It is mainly focused on the investigation of their being's effect on architectural development. The characteristics of the Turkish House, in what kind of geography it takes place, its relation with other vernacular house types, its effects on the modern and contemporary architecture, its conservation by reviewing the development of the conservation philosophy, its relation with contemporary concepts such as space, time, transparency, lightness, sustainability and monumentality are the main subjects of the course.

ARCH426 URBAN DESIGN

Course Code:	ARCH426
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Urban design theories. Urban design elements; streets, squares, mass and voids. Urban design guides. Urban architecture.

ARCH428 URBAN CONSERVATION

Course Code:	ARCH428
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Why is it conservation? Urban architectural structures. Meaning of traditional urban architecture. How to conserve? Design principles of urban conservation.

ARCH430 ARCHITECTURAL READING

Course Code:	ARCH430
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

History of architecture. Architectural design theories in history. How to read traditional buildings. Beginning of the architectural works in history. Predictions for future architectural design.

ARCH432 UNDERSTANDING IN LOCAL ARCHITECTURE

Course Code:	ARCH432
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Local climate, local culture and socio-economic characteristics. Local houses, public buildings and urban areas. Traditional urban fabric. Local materials of construction.

ARCH434 URBAN TRAFFIC DESIGN

Course Code:	ARCH434
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Urban traffic elements. Traffic control devices. Design of at grade and grade separated junctions. Architecture of urban traffic structure.

ARCH436 DESIGN IN HISTORICAL AREA

Course Code:	ARCH436
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Design rules and regulations about historical area. Determination of the physical cultural and sociological properties, of the historical sites.

ARCH438 INTERIOR SPACE ORGANIZATION

Course Code:	ARCH438
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

This course aimed that, elements involved in the establishment of architectural space and their interactions with each other at the scale of interior space researching and providing informed those elements (shapes, sizes, openness/closedness, light, color, sound, materials, equipment and components, etc.). Structural, cultural, social and psychological aspects of the environment by defining the physical and behavioral ability of the equipment to the formation.

ARCH440 URBAN SOCIOLOGY

Course Code:	ARCH440
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Non-Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Cities and their development in history. Organization of urban life in the contemporary world with regard to industrial restructuring as well as the post-industrial global city. Division of labor, division of space. Contemporary issues including segregation, gated-communities, gentrification and urban renewal.

ARCH442 ARCHITECTURAL LANDMARKS IN CITIES

Course Code:	ARCH442
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

The major works of world architectural landmarks which have changed the idea - as well as the appearance - of the modern cities. The unique aesthetic, cultural, and historical issues that frame architectural landmarks. The significant impacts of architectural landmarks on cities from planning perspective. Relation between city's image and citizen satisfaction.

ARCH444 PUBLIC SPACE IN ARCHITECTURAL DESIGN

Course Code:	ARCH444
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Definition of different types of public space. What are the benefits and opportunities of public spaces to people? Public places as a design criteria for architecture from past to present. The effect of public spaces on property values. Difficulties in the provision of the public spaces in urban areas. Distinctions between, public, private and semi-public spaces. Privatization of urban public areas and effects of this transformation to architecture.

ARCH446 COMPUTER MODELLING FOR ARCHITECTS

Course Code:	ARCH446
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

This course aims to provide students with further skills in 3D modelling and visualization of architectural projects. Adding onto a basic level of digital media in 2D and 3D, the aim is to support students who are especially interested in modelling and rendering.

ARCH448 PERIOD OF TURKISH REPUBLIC OF ARCHITECTURE

Course Code:	ARCH448
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Establishment of the Republic of Turkey, political, economic, cultural and environmental factors and their effects on architecture. Before the Second World War, and the after-effects continue on architecture in Turkey and in Europe. The post-war development and Turkey influence on architecture. The architecture is made in Turkey; modernism, postmodernism, national, regional, and global discussions on architectural concepts.

ARCH450 ANALYSIS OF THE TURKISH CITY

Course Code:	ARCH450
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Starting from the previous settlement before the Turks in Anatolia, examination of the phases of the Turkish city until today. The concept of place in the city. The city's components: districts, public structures, examples of civil architecture. Social, political and administrative structure of the effects of the city's remodeling.

ARCH451 PLASTIC ARTS

Course Code:	ARCH451
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

This course is aimed to develop student's artistic creativity and drawing ability. It is mainly focused on to discover the creative ability of the students providing technical knowledge about free hand drawing and basic perspective techniques.

ARCH452 ARCHITECTURAL PHOTOGRAPHY

Course Code:	ARCH451
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Since photographs increasingly influence the way in which buildings are perceived around the world, this course aims to make an introduction to architectural photography through theory and practice. This course will mainly focus on photo shooting techniques and the equipment necessary for creating architectural photographs of interiors and exteriors.

ARCH453 VISUAL COMMUNICATION IN ARCHITECTURE

Course Code:	ARCH453
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Develops architectural communication skills including perspective and presentation techniques. Freehand and drafted drawing techniques, plus model making, rendering, and projections combine to form a skill base for successful 2D and 3D communication of architectural ideas. Free hand perspectives of simple geometrical shapes, Axonometric, isometric and dimetric perspectives, Rules of the one, two and three vanishing point perspectives. Standing point, variations of the vertical and horizontal viewing angles. Showing object perspectives in the objects in its environment. Shading in perspective. Examples and applications to scattered perspective of a product and perspectives of details. Explanation of the perspectives used in design presentation.

ARCH454 STEEL CONSTRUCTION IN ARCHITECTURE

Course Code:	ARCH454
Credit (Theoretical-Laboratory hours/week):	3(3-0)
ECTS Credit:	5.0
Department:	Architecture
Language of Instruction:	English
Compulsory or Elective?	Technical Elective
Level of Study:	Undergraduate
Offered Semester:	Eighth Semester

Course Content

Design of steel structural members under tension, compression and bending effects, Connection (Hinged and moment resisting connections) design, Design of steel trusses, Frames, Steel Slab systems, Arrangement of bracings in vertical and horizontal planes, Composite Structures, Tall Steel Buildings.