ISTINYE UNIVERSITY FACULTY OF FINE ARTS, DESIGN AND ARCHITECTURE DEPARTMENT OF ARCHITECTURE COURSE DESCRIPTIONS

1st SEMESTER

ARCH101 Architectural Project 1

Architectural Project I studio aims to introduce the necessary knowledge and skills to think in abstract terms, together with the basic architectural design concepts and principles, to deal with architectural design in 2 and 3 dimensions, to get acquainted with the basic architectural elements (carrier system, wall, flooring, etc.). It aims to establish the body-space relationship by summarizing the scale, atmosphere and tectonic relations. In addition, it aims to gain the ability to observe and critical thinking, while students are expected to be able to use the necessary visual and verbal expression tools and methods.

In this context, the applications to be made within the scope of the course is designed to facilitate;

- To convey the architectural design culture and the basic and current concepts that make up this culture through the practice and theoretical narratives.
- To make the student comprehend the thinking-representation relationship, to associate the design idea indirectly/directly with different media and techniques.
- To introduce the student to the basic architectural terminology
- Developing an understanding of spatial perception by considering the scale, atmosphere and tectonic relations of the student.

The course will be held with productions such as in-class drawing and model applications, homework, theoretical lectures, outdoor trips, portfolio and blog productions.

ARCH103 Representation Techniques

Representation Techniques is a course designed to teach technical drawing and visual expression in architecture using both analogue and digital methods. This course aims to establish the necessary skills and technical know-how for creating formal architectural representation, over the course of 14 weeks, students will be introduced to various techniques, shown multiple examples and presentations, and will be expected to complete a challenging set of assignments spread over multiple projects.

The Course includes, how to transform the ideas of design in 2 and 3 dimensional drawing techniques.

• In-class discussion & meeting, list of things to buy, rules, questions.

Group work

• Layering, object hierarchies, drawing plane

Start drawing your table

• Basics of orthographic drawing

Complete the missing drawings in the assignment sheets

• Space, context, event(Time Travel)

Collage work

• Space, context, event(Time Travel)

Collage work

• Presentation: Chronophotography; understanding spatiality of movement(Daily Life) Sketch work

 Movement, body, scale (Daily Life) Sketch work Drawing in a digital medium(Daily Life) Cad work Publishing in a digital medium(Daily Life) Cad work Converting a drawing into a physical object(The Pavilion) Model making • Presentation: a brief history of technical drawing(The Pavilion) Cad work Sections, hatches(The Pavilion) Cad work Linetypes, hierarchies, dimesions(The Pavilion) Cad work • Final Assignment Submission Preparations (The Pavilion) Cad work

ARCH105 Introduction to Architecture 1

The aim of the course is to introduce the basic concepts of architecture as an intellectual practice.

The course, aims to discuss the necessary background knowledge and basic theoretical issues to start teaching architecture. It aims to re-establish the intellectual background of the student. The topics to be covered will enable the candidate architect to introduce himself/herself to topics that he/she does not encounter during a normal high school education. The aim is to develop the ability to think and discuss architecture on the basis of its sociality. The aim is not to convince existing theoretical explanations, but to teach them to approach them critically.

ARCH109 Mathematics

The aim of the course is to firm a foundation for Descriptive Geometry lectures and enhance problemsolving skills, acquisition of a powerful spatial perception by using matrices, vectors, metric problems and mathematical background for computer graphics.

ARCH311 Occupational Health and Safety 1

It is aimed to teach the concepts of occupational safety, danger and risk, to realize the risk factors, to develop the sensitivity to the concept of danger, to create an occupational safety culture, to learn preventive actions in order to reduce the causes of occupational accidents by examining them.

DIL101 English I

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TRK101 Turkish Language I

It is aimed to create awareness of language, to encourage students to read, to introduce the richness, rules and features of Turkish language; to broaden the interests of the students and to develop their comprehension (listening comprehension, reading comprehension), speaking (speaking) skills, and directing them to critical thinking and research.

2nd SEMESTER

ARCH102 Architectural Project 2

Architectural Project II studio aims to introduce the necessary knowledge and skills to think in abstract terms, together with the basic architectural design concepts and principles, to deal with architectural design in 2 and 3 dimensions, to get acquainted with the basic architectural elements (carrier system, wall, flooring, etc.). It aims to establish the body-space relationship by summarizing the scale, atmosphere and tectonic relations. In addition, it aims to gain the ability to observe and critical thinking, while students are expected to be able to use the necessary visual and verbal expression tools and methods.

In this context, the applications to be made within the scope of the course is designed to facilitate;

- To convey the architectural design culture and the basic and current concepts that make up this culture through the practice and theoretical narratives.
- To make the student comprehend the thinking-representation relationship, to associate the design idea indirectly/directly with different media and techniques.
- To introduce the student to the basic architectural terminology
- Developing an understanding of spatial perception by considering the scale, atmosphere and tectonic relations of the student.

The course will be held with productions such as in-class drawing and model applications, homework, theoretical lectures, outdoor trips, portfolio and blog productions.

ARCH106 Introduction to Architecture 2

The aim of the course is to introduce the basic concepts of architecture as an intellectual practice. The course, as the introduction of basic architectural concepts and theories, is a continuation of Introduction to Architecture 1 course. The primary academic aim is to raise the awareness that architecture is an intellectual practice, rather than a discipline of contstruction.

ARCH110 Descriptive Geometry and Perspective

The aim of the course is to design objects in 3D-space using descriptive methods applying the principles of solid geometry and projection, and express the geometrical aspects of concieved objects through methods of description.

Lectures are carried out live through step by step drawings either free-hand or using drawing tools, on a chalk board or on an epidiascope.

ARCH116 Digital Design 1

Digital design is a course designed to teach visual media creation and visuo-spatial and graphical animation in architecture using professional content creation tools. This course aims to introduce the students to digital workflows for visual content creation and architectural presentation.

ARCH411 Occupational Health and Safety 2

It is aimed to teach labor law, occupational safety concepts, hazard and risk concepts, to recognize the risk factors, to develop an occupational safety culture by improving the sensitivity to the concept of danger, to examine the accident theories of the causes of work accidents and to learn preventive actions to reduce them.

TRK102 Turkish Language II

It is aimed to create awareness of language, to encourage students to read, to introduce the richness, rules and features of Turkish language; to broaden the interests of the students and to develop their comprehension (listening comprehension, reading comprehension), speaking (speaking) skills, and directing them to critical thinking and research.

DIL102 English II

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SEG001 Manifest Of Istinye I

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3rd SEMESTER

ARCH201 Architectural Project-III

Architectural Design Project aims the following; a. During the training phase; the ability to achieve methodical thinking, programming, development of creativity, synthesis by evaluating and projecting options,

b. In the stage of continuing its profession; aims to provide the student with the ability to evaluate and use his knowledge, methods and skills acquired in all disciplines he participated in the educational process.

It is an architectural design study developed together with its structure considering a subject with limited program and a site plan of the close environment.

ARCH203 Building Technologies and Materials 1

The aim of the course is to to enable the students to :

1. Acquire the understanding of concept & nature of the building,

2.Apply building construction techniques in a manner that confirms to standards, and principles for masonry buildings.

ARCH205 History of Architecture-I

This survey type of course examines the history of architecture from the prehistoric period to the age of enlightenment with a chronological approach focusing on the monuments and the built enviroment of different cultures and regions.

ARCH207 Theory of Structures-I

The aim of the course is to,

1. Learn the concept of forces and the methods of using forces in engineering calculations.

2. Calculate the necessary section properties for the design of frame systems.

3. Learn the concept of static equilibrium and can use necessary tools for analysis and design of nondeformable systems.

4. Understand the analysis and design problems regarding various real life structural components such as trusses, beams, frames, and simple machines.

5. Learn the concepts of stress and strain, and can make simple design considerations of structural components.

ARCH209 Digital Design 2

Digital design is a course designed to teach visual media creation and visuo-spatial and graphical animation in architecture using professional content creation tools. this course aims to introduce the students to digital workflows for visual content creation and architectural presentation. over the course of 14 weeks, in addition to providing the necessary technical skills for using various software, this course will also provide a beginner level introduction to the methods of modern motion graphic design.

SEG002 Manifest Of Istinye II

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4th SEMESTER

ARCH202 Architectural Project-IV

It is an architectural design study developed together with its structure considering a subject with limited program and a site plan of the close environment.

Architectural Design Project aims the following;

a. During the training phase; the ability to achieve methodical thinking, programming, development of creativity, synthesis by evaluating and projecting options,

b. In the stage of continuing its profession; aims to provide the student with the ability to evaluate and use his knowledge, methods and skills acquired in all disciplines he participated in the educational process.

ARCH204 Theory of Structures-II

This course provides students with a basic knowledge of structural analysis and design for buildings, bridges and other structures.

The aim of the course is to,

- 1. Learn the concept of forces and the methods of using forces in engineering calculations.
- 2. Calculate internal forces for the design of frame systems.
- 3. Learn the concept of hyperstatic systems and displacement.

4. Understand the analysis and design problems regarding various real life structural components such as trusses, beams.

5. Learn moment distribution concept and analysis method.

ARCH206 Building Technologies and Materials-II

This course is detailed planning of a reinforced concrete structure, assisted by lectures on structural concepts and details of relevant examples.

ARCH208 History of Architecture-II

This is a survey course to examine the architecture of the Islamic world from the beginnings to the 21st century with a chronological approach. The establishment and spread of Islam from the Arabian Peninsula to Europe, Asia and Africa and the cultural and regional changes will be reviewed with a focus on architecture through religious, public, palatial and other monuments.

ARCH216 Urbanism and Architecture

An compulsory course which provides architecture students with an introductory knowledge about urbanism and planning in relation to architectural design.

This course aims to give introductory knowledge for architecture students about how cities are formed, shaped and imagined, providing further understanding about the social and spatial context of the architectural design works.

SEG003 Manifest Of Istinye III

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5th SEMESTER

ARCH301 Architectural Project-V

It is an architectural design study developed together with its structure considering a subject with limited program and a site plan of the close environment.

Architectural Design Project aims the following;

a. During the training phase; the ability to achieve methodical thinking, programming, development of creativity, synthesis by evaluating and projecting options,

b. In the stage of continuing its profession; aims to provide the student with the ability to evaluate and use his/her knowledge, methods and skills acquired in all disciplines she/he participated in the educational process.

ARCH303 Urban Design

The student will learn how current urban design theories and practice are now focused on creating a lively and safe public realm of streets, squares, parks and other public spaces. The student will understand the concept of "frontages" and how building façades create walls to "urban rooms." To meet these criteria, façade composition needs to take fully into account external contextual responsibilities as well as internally generated programmatic and tectonic concerns.

ARCH305 Conservation and Restoration in Historical Environment 1

The course consists of Theory and Practice sections.

In the theory section, fundamental information about the concept of protection is given and evaluations are made through examples of applications. Analysis of the current state of a monumental cultural heritage with drawings and photographs (measured drawings) are expected.

1) It is aimed to inform the students about the problems, reasons and conservation solutions encountered by the immovable cultural heritage that need to be protected.

2) It is aimed to inform the students about to understand the values and problems of cultural heritage.

3) It is aimed the students to acquire the knowledge and ability to make architectural analyzes for the preservation of a tangible cultural heritage.

4) It is aimed to make students realize that the conservation projects developed for the cultural heritage that needs to be protected are also a design problem.

ARCH309 History of Architecture 3

The aim of the course is to provide students with knowledge and perspectives of modernity in a parallel reading of architectural and intellectual history.

ARCH381 Internship-I

Compulsory internship, which must be completed during the education period, is 30 working days. Internship can be completed in various application areas such as offices, construction sites, municipalities, archaeological excavation sites, etc. A report and evaluation form prepared at the end of the internship, which includes the internship activities, are received from the students during the semester. It is aimed that the student gain experience in professional life.

SEG004 Manifest Of Istinye IV

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6th SEMESTER

ARCH302 Architectural Project-VI

It is an architectural design study developed together with its structure considering a subject with limited program and a site plan of the close environment.

Architectural Design Project aims the following;

a. During the training phase; the ability to achieve methodical thinking, programming, development of creativity, synthesis by evaluating and projecting options,

b. In the stage of continuing its profession; aims to provide the student with the ability to evaluate and use his/her knowledge, methods and skills acquired in all disciplines she/he participated in the educational process.

ARCH304 Urban Design 2

The student will learn how current urban design theories and practice are now focused on creating a lively and safe public realm of streets, squares, parks and other public spaces. The student will understand the concept of "frontages" and how building façades create walls to "urban rooms." To meet these criteria, façade composition needs to take fully into account external contextual responsibilities as well as internally generated programmatic and tectonic concerns.

ARCH306 Conservation and Restoration in Historical Environment 2

The course consists of Theory and Practice sections.

In the theory section, fundamental information about the concept of protection is given and evaluations are made through examples of applications. Analysis studies of the current state of a monumental cultural heritage building which was started in the fall semester will be continued and finished as a progression of the class of 'Historic Environmental Protection and Restoration 1'.

1) It is aimed to inform the students about the problems, reasons and conservation solutions encountered by the immovable cultural heritage that need to be protected.

2) It is aimed to inform the students about to understand the values and problems of cultural heritage.

3) It is aimed the students to acquire the knowledge and ability to make architectural analyzes for the preservation of a tangible cultural heritage.

4) It is aimed to make students realize that the conservation projects developed for the cultural heritage that needs to be protected are also a design problem.

ARCH308 Topics in Contemporary Architecture

It is aimed the students to discuss the historical and theoretical background and context of contemporary architectural thought.

7th SEMESTER

ARCH401 Architectural Project-VII

It is an architectural design study developed together with its structure considering a subject with limited program and a site plan of the close environment.

Architectural Design Project aims the following;

a. During the training phase; the ability to achieve methodical thinking, programming, development of creativity, synthesis by evaluating and projecting options,

b. In the stage of continuing its profession; aims to provide the student with the ability to evaluate and use his/her knowledge, methods and skills acquired in all disciplines she/he participated in the educational process.

ARCH403 Construction Project

The aim of the course is to provide the students an understanding of the connection and interaction between principles, methods, techniques of different structures and different stages of the architectural process and the design and construction process so that they become familiar with their requirements by working on a particular example.

ARCH405 Urban and Planning Law

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ARCH481 Internship-II

Compulsory internship, which must be completed during the education period, is 30 working days. Internship can be completed in various application areas such as offices, construction sites,

municipalities, archaeological excavation sites, etc. A report and evaluation form prepared at the end of the internship, which includes the internship activities, are received from the students during the semester. It is aimed that the student gain experience in professional life.

ATA101 Atatürk's Principles and History of Turkish Revolution 1

The aim of the course is,

1)Ensuring understanding of the situation before the Turkish Independence War. Revolution and Principles of Atatürk, Ataturk's ideas, and to give accurate information about the History of the Republic of Turkey.

2)To provide accurate information about threats against Turkey and Ataturk's principles and revolutions.

3)In an indivisible unity of Turkey, Atatürk Revolution and in accordance with the Principles, to unite national targets.

4)To educate and strengthen the students in line with Kemalist thought.

8th SEMESTER

ARCH402 Construction Management Principles

It is aimed to introduce the last year students to the subjects that can be encountered in the practice of the profession, which are outside and / or at the periphery of the academic and theoretical knowledge areas of architectural education. Thus, it is thought to be a preparation for the new graduates regarding the practice of architecture and professional ethical values.

Within the scope of the course, which will be conducted in the form of a series of seminars on various topics as stated below, a speaker will be invited each week on the subject to be discussed:

-Professional practices: The working process of architectural offices, Architect - client relations (corporate / Individual), Construction site experiences, Building Cost / Management, Materials, Architecture Competitions and processes;

-Relations with local / public administrations, Zoning Law, Regulations, bureaucracy relations, Civil Society and Architecture, Participation, Policy Making

-Conservation, Ecology, Nature, landscape, Humanitarianism.

ARCH491 Graduation Project

The Graduation Project aims to reveal all the achievements of the final term undergraduate students in department of architecture in a holistic way through a project study. Graduation Project provides an understanding of the development of professional maturity levels through the students ability of forming a theoretical and critical perspective in order to produce original ideas and to embody these ideas with technical, aesthetic, cultural, historical, social, ethical knowledge and skills.

ATA102 Atatürk's Principles and History of Turkish Revolution 2

This lesson aims,

-To give correct information about the Turkish War of independence, Atatürk's reforms and principles, Atatürk's thought, the history of the Turkish Republic.

-To give correct information about Atatürk's revolutions and principles, threats to Atatürk's thought. -To unite the Turkish youth in an indivisible unity with the country, nation and state around national goals in accordance with Atatürk's principles and revolutions.

- To educate and strengthen the Turkish youth in line with Atatürk's ideas.

ELECTIVE COURSES

ARCH032 Ecology and Architecture

As one of the actors who think, design and implement environments for living thingsnon-living components that make up the environment interact with each other. This course will explore ecology issues that will enable students to think about the nature-human, nature-culture relationship from the perspective of architecture.

The aim of the course is to provide students with an "ecological literacy" about the nature-human relationship. In this context, the course aims to develop an understanding of how scientific methods are used to construct ecological knowledge and, from this, to develop a deeper understanding of how culture affects ecological communities and systems.

ARCH039 Earthquake Resistant Design

The course includes the explanation of all the issues that may affect the architectural design of the behavior during the earthquake, rather than explaining the engineering design and calculation methods.

The course aims to provide detailed information on the characteristics and general principles of earthquake resistant structural systems in architectural design.

ARCH058 Architectural Criticism

The course aims to provide students with critical and linguistic tools to evaluate architecture.

The course will introduce the students to critical thinking in architecture. The first part of the course will provide the students with a language to discuss and evaluate architecture. The second part of the course will cover readings on different approaches to role and function of architecture. A third part

will present students with critical thinking in architecture, both through projects and texts. The students are then expected to develop critical approaches to their chosen architectural project, on which they will produce presentations and a final paper.

ARCH070 Digital Fabrication

This course is aimed to act as an introduction to digital fabrication. Grasshopper, a Rhino plug-in, will be used as a primary digital modeling tool. Students will learn how to use the tools and software to execute their architectural design projects. The course will also explore qualities of basic materials such as paper, wood, concrete, and plastics in the context of computational design and digital fabrication thinking and techniques.

ARCH077 Visionary Architecture

This course examines examples of visionary and utopian architecture, which existed only on paper; yet their imaginative production shaped the architectural vision of their time. The course explores the role of the "unbuilt" in architectural history and practice through discussions on examples of visionary architecture in relation to the social, political and architectural developments of their period.

ARCH082 Vocabulary of Modern Architecture

The course aims to provide students with conceptual, historical and linguistic tools, with which they can read modern architecture.

The course will cover theoretical background to the emergence of modern architectural notions within 19th and 20th century discourses. The course will undertake discussion of these notions through examples of modern architecture and trace the history of their uses through the course of 20th and 21st centuries. The course covers readings of texts on modern architecture.

ARCH085 High Performance Green Buildings and LEED Cerftification

This course includes,

- -Examining the importance of high performance green buildings.
- -Definition of the sustainability discipline.
- -Description of high performance green buildings.
- -Introduction to LEED certification.
- -Learning green design techniques, methodology, and process.

ARCH087 Architecture and Art

The course aims to provide students with transdisciplinary approaches to theoretical and visual tools of architectural thought.

The course opens perspectives into the in-between theoretical spaces of architecture and other arts, including visual, literary and performance arts.

ARCH090 Exploring Space Through Visual Narratives

From interior space to city scale, this course focuses on the narratives about space using photography and video. As well as visual narratives in art, documentation of place is also the subject of this course. How architectural narratives are shaped through visual arts and literature and the

relationship of these disciplines will be examined. One of the aims of this course is to provide a critical understanding of perception of space in visual arts.

Having a practice of "seeing", students will have a sense of visual culture through contemporary examples. Through experimentation and exploration of visual semiotics, they will investigate the techniques and approaches in photography and videography related narratives. Readings, exhibition visit, screenings and guest lecturer will contribute to the course. Students are expected to create a narrative about the place they choose and present it at the end of the semester.

ARCH091 Video/Architecture

Video/ architecture is a course designed to teach critical thinking of the filmic medium and its relationship with the profession of architecture, architects and the architectural culture. This course aims to introduce the students to motion picture history and culture, and establish basic critical writing skills for visual media.

Over the course of 14 weeks, students will be watching architecture- related movies, shown multiple examples and presentations, and will be expected to write short essays about the movies they watch during class or as part of their viewing assignments, as well as a final essay about a movie from a predetermined list, and pertaining to a particular topic in relation to the movie of their choice.

ARCH092 Landcapes and Landmarks

The course aims to increase awareness on the rapidly changing concepts of "outstanding", historic, everyday, urban, peri-urban, rural, cultural landscapes around us. Several examples of landscapes and the built environment from the early settlements of the prehistoric age to the monumental structures of the modern and contemporary era will be discussed.

The introductory level course will provide students with an understanding of cultural landscape theory and practice for observing, documenting, researching and contextualizing landscapes and landmarks through preparation of landscape biographies and basic assessment reports. The theoretical framework of the course aims to encourage critical thinking on cultural and natural landscapes and landmarks starting from the definitions and discourses to field observation of contemporary landscapes.

ARCH093 Parametric Design

This elective course is structured to introduce and develop an understanding of computational methods and parametric modelling through various tutorials and design tasks. Through this process, students will acquire diverse computational skills covering basics of parametric tools and computational geometry. In addition to this, students will be introduced physics simulations tools to generate form through mesh relaxation. Finally, students will experiment with digital fabrication techniques that will equip students with modelling and fabrication protocols to create physical models generated by parametric workflows. The main idea behind the structure of the class is to engage students with diverse computational workflows that can have a cumulative input towards couple of design tasks.

ARCH094 Sections of İstanbul

The course aims to examine the traces of infrastructure and upper structures and settlements of Istanbul with a geographical perspective that includes history, culture and economy.

This course is organized to introduce the built environment of Istanbul, within a geographical perspective supported site trips and readings.