

Code	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
RES2102	Workshop of Timber (Timber)	1	4	0	3	4
Objective	Teaching characteristics and construction methods of the building elements such as window, door, shutter and floor, used in traditional buildings. During this course, material characteristics and deterioration the timber works at Department of National Palaces will be diagnosed and essential conservation process for them will be realised in order to train skilled and well-informed staff.					
Content	Students learn and apply conservation and restoration process on timber works at timber workshop at Department of National Palaces under the control of craftsmen and instructors. They learn to produce new architectural elements such as parquets, guillotine windows, shutters, doors and window frames, found in the kiosks and pavilions owned by the Department of National Palaces.					
Learning Outcomes	1.Students get information about the characteristics and construction techniques of traditional building wooden elements such as floor, window, door and shutter. 2.Students recognize the problems occurred at timber, understand its reasons and diagnose it visually. 3.Students remove the endamaged layers like paint and varnish; apply them again. 4.Students complete the missing parts of timber elements with appropriate new additions which are also produced by them.					
RES2201	Wooden Ornamentation Techniques (Timber)	1	2	0	2	4
Objective	Teaching students wood decoration techniques in practice and increasing their knowledge and skills in this area.					
Content	Decoration Motif on Wood and Arrangement Rules / Decoration Techniques Through the Use of Wood / Techniques of Decoration Made with Additional Processes on Surfaces and Construction Elements Created Following the Construction Process / Decoration Techniques Made with Imitation Materials / Eaves, Mouldings, Cornices, Other Profiled Elements.					
Learning Outcomes	1.Students get information about the implementation of wood decoration techniques and methods, 2.Students identify repairs carried out previously on decorations, 3.Students carry out maintenance, repair and preservation processes of decorated construction elements 4.Students are able to implement pattern techniques and motif compositions, 5.Students get information about the materials, equipment and forms used.					
RES2101	Timber and Building Technology (Timber)		2	0	0	2 3
Objective	Introducing the material wood, traditional wooden building and wooden structural elements.					
Content	Examining the overall structure of the wood As an organic Material, chemical structure and physical properties, Impairments of the wood, Wood Destroying Pests-plant and animal diseases of Wood, water and Moisture Relationship they create, introduce the tree species Used In Macroscopic Properties with examples, wood and Wood construction techniques, Traditional Woodworking techniques, Adding Plug-Connection-Techniques of building elements, Metal Elements, marking and cutting Techniques used for connections.					
Learning Outcomes	1.Students recognize the wood material and get knowledge of the implementation and use of the material in the production of wood. 2.Students recognize the provision of traditional wooden construction techniques and learning. 3.Students get knowledge of wooden structural elements, their use and implementation and production. 4.Students understand and evaluate traditional wooden construction systems of industrial structures.					
RES2111	Degradation Reasons and Conservation Methods on Wooden Buildings (Timber)	1	2	0	2	3
Objective	The aims of Degradation Causes and Conservation Methods on Wooden Buildings are to teach					

	material properties, causes of deterioration and types of degradation of wood, how to identify types and deterioration of wood, to train staff who have professional skills and knowledge to take part in the preparation and implementation of conservation-restoration project.					
Content	Macroscopic structure and properties of tree species / Wood types and their appearance after processed / Wood defects, diseases and protection methods/ /General protection methods / Principles of the use of wood / Causes of deterioration of wood / Diagnostic methods of degradation of wooden material / Protection and repair of wood / Preventive conservation of wooden material					
Learning Outcomes	1.Students know the general properties of the wooden material 2.Students know the general protection methods of the wooden material 3.Students know the causes and types of deterioration. Able to diagnose with visual and scientific methods. 4.Students know the methods of conservation and restoration of wood.					
RES1011	Computer 1	3	0	0	3	3
Objective	Students to meet the deficiencies in the field of information technology. Computer-aided drawing and design skills develop. Increases of the capabilities of the digital environment, two-and three-dimensional thinking. The obtained data, the digital environment aims to increase transfer rates.					
Content	Special topics related into the field, two-and three-dimensional drawing and modelling techniques. Introduction of different software interfaces. Auxiliary tools and methods of use of programs. Create layouts and posters for the print. Settings and resolution values for print.					
Learning Outcomes	1.Students can use CAD applications for building survey. 2. Students can apply 2 dimensional digital drawing techniques. 3.Students can make 3-dimensional numerical modelling, solid models and manufacturing.					
RES1012	Computer 2	3	0	0	3	3
Objective	To Teach the use of Information technology of Documentation methods, presentation techniques and methods . Accelerating the digital documentation with three-dimensional digital soft wares.					
Content	Soft wares for the digital presentations. Current soft wares for design, analysis, and presentations. Digital media products design of different environments. In the preparation of Colour, Resolution and similar matters. Digital Sketches, Types of theoretical knowledge and the creation of design visuals. Imitated for digital Presentation with Image soft wares. (photomontage, image processing, such as a variety of effects)					
Learning Outcomes	1.Students can design presentation layouts. 2. Students can work on digital presentation environment. 3.Students can apply plot Sizes, resolutions, fonts, colours, textures associations. 4.Students can make 3-D facade modelling and organize area and sun relationship on digital environment.					
RES2112	Workshop of Painting (Masonry)	1	4	0	3	4
Objective	Teaching to make the classical and Baroque style engraving applications / Teaching to the used materials and the methods of the paint preparation in the engraving restoration / Teaching to make the application of the gold leaf and the printing / Teaching to the physical and the chemical cleaning methods which should apply in the engraving restoration					
Content	The classical style engraving and its properties / Baroque style engraving and its properties / The application of the gold leaf / The application of the printing / The methods of the paint preparation / The used material in the engraving applications / The physical and the chemical cleaning methods which should apply in the engraving restoration					
Learning Outcomes	1.The students can make the classical and Baroque style engraving applications, 2.The students know the used materials and the methods of the paint preparation in the engraving restoration 3.The students make the application of the gold leaf and the printing, 4.The students know the physical and the chemical cleaning methods which should apply in the engraving restoration.					
RES2181	Degradation Reasons and Conservation Methods of Wall Surfaces (Interior)	1	2	0	2	3
Objective	The aim of degradation reasons and conservation methods of wall surfaces course: To teach types,					

	properties, causes of deterioration mechanisms of materials used in walls, floors and ceilings of traditional structures. To teach how to identify materials and deterioration types. To train staff who have professional skills and knowledge to take part in preparation and application of conservation, restoration projects.				
Content	Causes of problems of coatings and decorations on wall surfaces, and their conservation and restoration methods / Problems of wooden ceilings, their deterioration causes, conservation and restoration methods / The problems of ceilings made of stone, their deterioration, conservation and restoration methods / The problems of wood floors , causes of their deterioration, their conservation and restoration methods / The problems of floors made of stone, their deterioration, conservation and restoration methods				
Learning Outcomes	1.Students know the properties of the materials used in walls, ceilings and floorings of traditional buildings interiors. 2.Students know the causes and types of deterioration of walls, ceilings and floorings of traditional buildings interiors. 3.Students can make visual and laboratory investigations for determining deterioration type and material characterization. 4.Students can decide appropriate methods of conservation and restoration in terms of investigations.				
RES1022	Documentation with Photography	2	0	0	2
Objective	Teaching photographic documentation for restoration projects and studying architectural photography with digital camera.				
Content	Photography: History of photography/Light, colour and filter/Structure of black and white film and formation of photographic image/Structure of colour film and formation of photographic image/Photographic camera information: Typologies, lenses, diaphragm and snapshot, measuring and exposure/Composition/Photographic thinking/Its situation in Fine Arts and application areas/ Types of camera and introducing their features/General information about use of camera/relation between diaphragm and snapshot/Reversal film/Usage area of photography/Case studies from history of photography/The importance of photography as a documentation method/General principles of architectural photography/Photographic methods in measuring and taking inventory of traditional buildings/Documentary photograph applications/Student works on architectural photography.				
Learning Outcomes	1.Students can use digital camera. 2.Students can obtain photographs in right technical aspects 3.Students can take photography for documentation 4.Students can use photography as a base for architectural drawings 5.Students can prepare photographic documentation in conservation and restoration field.				
RES1112	Traditional Pattern Techniques (Interior)	2	2	0	3
Objective	Providing theoretical and applied information of traditional patterns, enabling students to learn, be able to analyse and implement patterns, different types of compositions and techniques used in traditional structures.				
Content	Presentation in an Atelier with Examples of Turkish Motifs in Wall Paintings, Painted Decorations, Frescoes, Calligraphy and Tiles in Traditional Structures / General Information on Turkish Motifs' Structure, Method and Equipment / Short History of the Turkish Art of Decoration / Main Styles Used in Turkish Decorations / The Design and Application of Main Motifs in Decorations / Drawing Simple Pattern Compositions / Drawing and Painting Floral and Geometric Motifs / Drawing and Implementing patterns on Stone, Wood, Tiles and Ceramics /Production of New Objects With the Traditional Techniques Learned to Develop Professional Knowledge and Skills / Explanation and Implementation of Methods.				
Learning Outcomes	1.Students recognize and distinguish between traditional patterns and types of compositions, 2.Students interpret period and form characteristics, 3.Students analyse motifs on the basis of existing examples, 4.Students get knowledgeable of the methods of measuring and obtaining motifs from existing patterns, 5.Students are able to correct and draw ruined and incomplete motifs, 6.Students interpret and implement original colours.				
RES1031	Materials of Traditional Buildings 1	2	0	0	2
Objective	The purpose of this lecture is to teach functions, equipments and components of the materials of traditional buildings.				
Content	The definition and classification of traditional buildings and materials of buildings / Introduction of all the carrier or not carrier materials and components used in traditional buildings from the beginning to the end of the building, starting of the Ancient / Classification by their functions, equipments and the formal characteristics.				

Learning Outcomes	1.Students know the traditional building and can define the materials. 2.Students know the functions of the materials of traditional buildings. 3.Students know the components of materials. 4.Students know the characters of the material, form and period. 5.Students can classify the materials of traditional buildings.					
RES1132	Materials of Traditional Buildings 2 (Masonry+Timber)	2	2	0	3	4
Objective	Providing students with the ability to recognize weight bearing and non-bearing construction elements and components in traditional buildings, drawing them and producing them.					
Content	Examination in an Atelier of all Weight Bearing and Non-Bearing Elements and Components Used in Traditional Buildings.					
Learning Outcomes	1.To be knowledgeable of the components. materials, equipment, form and period characteristics of traditional buildings, 2.To be knowledgeable and be able to implement traditional production techniques, 3.To be able to measure construction elements and draw them, 4.To be able to reproduce a construction element or a part of it that is destroyed.					
RES2031	Metal Material on Traditional Buildings	2	0	0	2	2
Objective	The course aims to present the historical change and development of metal materials in traditional buildings that are used as decorative, auxiliary and load-bearing elements. It is aimed to teach types of architectural metal materials, production methods, chemical structure, physical and mechanical properties, causes of deterioration and methods of preservation. It is aimed to introduce metal materials in traditional buildings and their types of usage, to teach reasons of deterioration of architectural metal elements and methods of preservation through assignments based on-site observations and studies.					
Content	Metal Technology, Chemical Composition of Metal Materials, Physical and Mechanical Properties / Historical Development of metal as a construction material / Metal materials and types used in Pre-industrial Traditional Construction Technology / Metal materials and types used in Post-industrial Traditional Construction Technology / Conservation Methods and Restoration Techniques of Metal materials					
Learning Outcomes	1.Students recognize the types of architectural metal material, the chemical composition, physical and mechanical properties, 2.Students define types of use of metal as a building material and its production technologies, 3.Students detect the causes of deterioration of metal materials and develop practical solutions and methods for preservation, 4.Students enhance the topics covered in the course with assignments that require on-site inspection and observation, gain knowledge and skills for the use of architectural metal elements in traditional buildings.					
RES1122	Traditional Buildings and Façade Analysis (Masonry+Timber)	2	2	0	3	4
Objective	The course aims to introduce principles of design criteria and façade morphologies according to spatial organizations of traditional building types from Byzantine, Anatolian Seljuk, Principalities and Ottoman periods. It is also aimed to teach how the reflections of different periods on functional and decorative architectural façade elements influence the façade design and architectural impression of the building. The course aims to gain knowledge and skills for façade analysis by on-site assignments through which the students will understand the relations between architectural façade elements and buildings from different periods.					
Content	Functional classification of traditional buildings and introduction of different building types from Byzantine, Anatolian Seljuk, Principalities and Ottoman periods / Mass Properties / Spatial organization principles / criteria for design and plan morphology / properties of façade morphology / religious buildings (mosques, churches, tombs) / Education buildings (madrasas) / Water supply buildings (public baths) / Housing and Palaces (Turkish House, mansions, summer pavilions) / Commercial buildings (khans, caravanserais) / Military buildings (castles, barracks) / Public buildings / On-site examinations and studies on sample building types to analyse façade morphology / Excursions to investigate sample buildings					
Learning Outcomes	1.Students classify the types of traditional buildings from Byzantine, Anatolian Seljuk, Principalities and Ottoman periods, 2.Students recognize functional properties and differences according to periods in buildings from different periods 3.Students identify morphological properties of façades and relations between façade elements					

	according to spatial organizations and design criteria of traditional buildings, 4.Students gain knowledge and skills in recognizing and analysing traditional buildings by on-site inspection and observation.					
RES1102	Traditional Buildings and Interior Analysis (Interior)	2	2	0	3	4
Objective	The aim of this course is to give knowledge of different interior design of Byzantine, Anatolian Seljuk, Beylikler and Ottoman Periods' buildings. The interior architectural elements of different building types are also presented.					
Content	General classification of traditional building types of Byzantine, Anatolian Seljuk, Beylikler and Ottoman Periods/Religious buildings (mosque, church, madrasa)/Social buildings/Educational buildings/Commercial buildings/Military buildings/Water buildings (Turkish baths)/Cemetery buildings (tombs)/Turkish houses, palaces, kiosks/Buildings interiors analysis/Technical visit/Documentary films.					
Learning Outcomes	1.Students get knowledge of different traditional buildings types' architecture. 2.Students get knowledge of different building interiors and relations between spaces. 3.Students classify different buildings types.					
RES1021	Ornamentation on Traditional Buildings	2	0	0	2	3
Objective	Defining decoration techniques in traditional buildings and explaining their function, materials, style, formal characteristics and techniques.					
Content	Concepts Related to Decorations, The Historical Development of Decorations in Architecture, Relationship Between Architectural Formal Approach and Decorations, Relationship Between Construction System and Decorations, Decoration Motifs and Arrangement Rules, Decoration Techniques for Stone and Marble, Decoration Techniques for Adobe Bricks and Earthenware Materials, Decoration Techniques for Wood, Techniques of Decorations Made with Additional Processes on Surfaces and Construction Elements Created Following the Construction Process, Techniques for Decoration Via Paint, Decorations Made by Covering Surfaces, Techniques for Decorations with Metals, Techniques for Decorations with Imitation Materials, Notched Eaves, Moldings, Cornices, Other Profiled Elements.					
Learning Outcomes	1.To be knowledgeable of decoration terminology 2.To be able identify decorative motifs on a traditional building, 3.To be knowledgeable of traditional decoration techniques, 4.To recognize materials used in decorations, 5.To be knowledgeable of historical developments related to decorations, 6.To recognize decorations from different civilizations and periods and to be able to carry out comparisons.					
RES1032	Degradation Reasons and Conservation Methods on Traditional Buildings	2	0	0	2	2
Objective	The main purpose of the course is to determine the methods of intervention for establishing the causes of deterioration in the traditional structures with analytical methods, in order to protect the original values, at the stage of restoration practices.					
Content	Characteristics of masonry materials / Physical Environments / General Causes of Damage in Masonry Structures / Humidity Problems, Damage and Protection / System Details Foundation to Roof and Analysis of Problems / Analysis of damages / Cleaning, Conservation, Reinforcement for Stones / Stone Choices / Imitations / Properties of Mortars and Plasters, Causes of Deterioration, Restoration Methods					
Learning Outcomes	1.Students shall have knowledge and consciousness about national and international basic approaches. 2.Students shall have knowledge about causes of deterioration on the historic buildings. 3.Students shall learn about the techniques and principles of conservation and restoration.					
RES2161	Wall, Floor and Ceiling Design of Traditional Buildings (Interior)	2	0	0	2	3
Objective	The aim of this course is to give knowledge about different architectural decoration techniques of walls, floors and ceilings of traditional buildings.					
Content	Construction techniques of walls, ceilings and floors in masonry and timber structure/ Different architectural decoration techniques of walls (15 techniques)/ Different architectural decoration techniques of ceilings (19 techniques)/ Different architectural decoration techniques of floors(13 techniques)/					

	Technical visits to the ateliers.				
Learning Outcomes	1.Students get knowledge of different architectural decoration techniques and materials. 2.Students get knowledge of different periods techniques, local and imported materials. 3.Students can do atelier visits and technical observations.				
RES2171	Doors and Windows on Traditional Buildings (Interior)	2	0	0	2 3
Objective	To give information about the historical development and the architectural properties of the doors and the windows in the historical structures. / To examine the material properties and the components of the doors and the windows in the historical structures / Teaching the causes of the deterioration of the materials and the conservation methods of the materials				
Content	The wall openings in the traditional structures / The windows in the historical buildings / The doors in the historical buildings / The material properties, the components and the formats of the windows and the doors in the historical structures / The causes of the deterioration and the conservation methods of the windows and the doors in the historical structures				
Learning Outcomes	1.The students know the design principles of the wall openings in the historical structures 2.The students know the material properties of the doors and the windows in the traditional structures and the students analyse the system details of the doors and the windows in the traditional structures 3.The students know the architectural properties of the doors and the windows in the historical monuments 4.The students know the causes of the deterioration of the doors and the windows in the historical structures and the students take precautions to conserve the doors and the windows in the historical structures during the restoration.				
RES2211	Masonry Ornamentation Techniques (Masonry)	1	2	0	2 4
Objective	Teaching students applied techniques for masonry decorations and developing their knowledge and skills in this area.				
Content	Decoration Patterns on Masonry Buildings and Arrangement Rules / Techniques for Decorations Made on Stone and Marble / Techniques for Decorations Made on Adobe Bricks and Earthenware Materials / Techniques for Decorations Made with Imitation Materials / Notched Eaves / Moldings / Cornices / Other Profiled Elements.				
Learning Outcomes	1.To be knowledgeable of the techniques and methods of decorations on masonry and be able to implement them, 2.To be able to identify repairs made previously on decorations, 3.To be able to carry out the maintenance, repair and preservation of decorated construction elements, 4.To be knowledgeable of pattern techniques and motif compositions and be able to implement them, 5.To be knowledgeable of materials and equipment used and formal characteristics.				
RES2131	Masonry and Building Technology (Masonry)	2	0	0	2 3
Objective	It is aimed to introduce natural stones, soil-based materials and binding materials, as well as production management, physical, chemical and mechanical properties of these materials which are used in masonry buildings of Anatolian civilizations. It is aimed to teach construction technologies of building elements that are constructed with masonry units that have load-bearing and load-transferring properties; as well as the changes that result from the production types of different periods and regions. With assignments based on-site observations and assessments, it is aimed to define masonry materials and gain knowledge and skills to understand construction techniques of architectural elements and the relations between them.				
Content	The concept of masonry construction and the basic elements of masonry / types of masonry construction units (natural stones, soil-based materials and binders) and their presentation / Physical, chemical and mechanical properties / production methods of bricks and mortars / masonry construction techniques / horizontal load-bearing units (foundations and floors), their materials, construction techniques and components / vertical load-bearing units (walls, piers, pillars and columns), their materials, construction techniques and components / tools and materials used for the construction of walls / mortar, plaster and joints in Ottoman architecture / Load transferring elements (consoles, lintel, arches, vaults, domes), their materials, construction techniques and components / Transition elements (Turkish triangles, pendentives, squinches), their materials, construction techniques and components / Reinforcing and supporting elements in traditional masonry structures / integration of new systems / Samples from masonry structures according to historical continuity and regional differences.				

Learning Outcomes	1.Students recognize masonry units, its chemical structure, physical and mechanical properties, 2.Students define in detail masonry construction techniques, usage of masonry construction elements and production technologies, 3.Students analyse the masonry building materials and changes in its construction technology within the framework of historical continuity and regional differences, 4.Students gain knowledge and skills for usage of masonry material and building elements as well as production technologies in traditional buildings with assignments that require on-site inspection and observation.					
RES2141	Degradation Reasons and Conservation Methods on Masonry Buildings (Masonry)	1	2	0	2	3
Objective	The aim of degradation reasons and conservation methods on masonry buildings course: To teach types, properties, causes of deterioration mechanisms of natural stones that are often used in historical buildings. To teach how to identify types of deterioration on materials. To train staff who have professional skills and knowledge to take part in preparation and application of conservation, restoration projects.					
Content	The formation of natural stones / Causes of deterioration of natural stones / Experimental studies for the identification of materials and determination of deterioration / Preparation of building inventory / Preparation of analytical scaled drawing / Methods of conservation and restoration of natural stones / Preparation of conservation and restoration project / Evaluation of national and international projects for the protection of natural stones.					
Learning Outcomes	1.Students can recognize the natural stones often used in historic buildings. 2.Students can make visual and chemical investigations for determining deterioration and material characterization. 3.Students can take part in the preparation of inventory, analytical survey and conservation-restoration project of historic structures, 4.Students can determine the methods of conservation and restoration in accordance with determinations. 5.Students can perform proposed methods of conservation and restoration.					
RES2132	Workshop of Engraving (Timber+Interior)	1	4	0	3	4
Objective	Teaching to make the classical and Baroque style engraving applications / Teaching to the used materials and the methods of the paint preparation in the engraving restoration / Teaching to make the application of the gold leaf and the printing / Teaching to the physical and the chemical cleaning methods which should apply in the engraving restoration					
Content	The classical style engraving and its properties / Baroque style engraving and its properties / The application of the gold leaf / The application of the printing / The methods of the paint preparation / The used material in the engraving applications / The physical and the chemical cleaning methods which should apply in the engraving restoration					
Learning Outcomes	1.The students can make the classical and Baroque style engraving applications, 2.The students know the used materials and the methods of the paint preparation in the engraving restoration, 3.The students make the application of the gold leaf and the printing, 4.The student know the physical and the chemical cleaning methods which should apply in the engraving restoration.					
RES2221	Degradation Reasons and Conservation Methods of Doors and Windows (Interior)	1	2	0	2	4
Objective	The aims of Degradation Reasons and Conservation Methods of Doors and Windows course are to teach properties of wooden materials and causes and types of their deterioration, to identify types of deterioration using scientific methods, to train staff who have professional skills and the level of knowledge to take part in the preparation and implementation of conservation-restoration project.					
Content	Examination of the overall structure of the wood as an organic material / Macroscopic structure and properties of tree species / Wood defects, diseases and protection methods / Principles of the use of the wood, the timbers used in the structure and their appropriate sizes / General protection methods, the materials used in impregnation and their application methods / Causes of deterioration of wood / Diagnostic methods of degradation of wooden material / Methods of protection and repair of wood /					

Learning Outcomes	1.Students know the general properties of the wooden material and able to detect visually tree types and their appearance after processed 2.Students know the general protection methods of the wooden material 3.Students know the causes and types of degradation and able to diagnose with visual and scientific methods 4.Students know the methods of conservation and restoration of wood					
RES2041	Research, Measuring and Documentation	2	0	0	2	2
Objective	Teaching to the types of the unit price and the unit price accounts / Teaching to measure about the restoration project / Teaching to prepare the bill of the quantities / Teaching to the types of the auction which used to the restoration applications / Teaching to prepare the progress payment with the computer about the historical structures / Teaching to make the temporary acceptance and the final acceptance procedures about the restoration applications					
Content	The general information and the definitions / The preparation of the tender dossiers about the restoration projects / Measuring about the restoration project / The preparation of the attachment in the building site of the restoration / The removal works in the building site of the restoration / The measures to be taken in the removal works / The unit price analysis in the traditional structures / The bill of the quantities in the restoration applications / The comparative bill of the quantities / The preparation of the progress payment / The explanation of the legal issues					
Learning Outcomes	1.The students know the types of the unit price and the unit price accounts, 2.The students can measure about the restoration project and the students can prepare the bill of the quantities, 3.The students know the types of the auction which used to the restoration applications, 4.The students can prepare the progress payment with the computer about the historical structures, 5.The students know making the temporary acceptance and the final acceptance procedures about the restoration applications.					
RES2011	Conservation 1	2	2	0	3	3
Objective	Teaching the aim, principles and methods of conservation science. Giving brief information about Anatolian archaeology and emphasizing the importance of archaeology. Teaching historical development, production technics, deterioration factors and processes of cultural property such as terra cotta, glass, çini, etc. Educating technicians who have skills and enough knowledge to diagnose the deterioration type and apply the necessary conservation-restoration treatments.					
Content	General information and history of conservation / Principles and methods of conservation and restoration of cultural property / Importance of documentation in conservation and restoration works and preparing inventory charts / Historical overview and production technics of terra cotta / Factors and types of deterioration of terra cotta and their investigation methods / Conservation and restoration applications for terra cotta / Historical overview and production technics of çini / Factors and types of deterioration of çini and their investigation methods / Conservation and restoration applications for çini / General information about archaeology and Anatolian archaeology / Historical overview and production technics of glassware / Factors and types of deterioration of glassware and their investigation methods / Conservation and restoration applications for glassware.					
Learning Outcomes	1.Students get knowledge in preservation concept and its principals and methods. 2.Students are able to take part in documentation work of cultural property. 3.Students get knowledge about properties, production technics and history of terra cotta, çini and glass artifacts. 4.Students are able to identify deterioration factors and types of terra cotta, çini and glass. 5.Students are able to realize conservation and restoration treatments for terra cotta, çini and glass.					
RES2012	Conservation 2	2	2	0	3	3
Objective	The aims of conservation II course are teaching historical development, production techniques, deterioration factors and processes of wall paintings and mosaics, diagnostic methods of deterioration type, how to identify material type and apply the necessary conservation-restoration treatments, and educating technicians who have enough skills and knowledge to work in archaeological excavations.					
Content	Historical development and construction techniques of wall paintings / Deterioration of wall painting and its causes / Wall painting conservation and restoration / Methods of removal and display of wall paintings / Historical development and construction techniques of mosaics / Deterioration of mosaics and its causes / Mosaic conservation and restoration / Methods of removal and display of mosaics / Removal and storage methods of artefacts at archaeological site / Preventive conservation at archaeological sites.					
Learning	1.Students get knowledge about properties, production techniques and history of wall paintings and					

Outcomes	mosaics. 2.Students are able to identify deterioration factors and types of wall paintings and mosaics 3.Students are able to realize conservation and restoration treatments for wall paintings and mosaics 4.Students can take part in the conservation practices at the archaeological site.					
RES1041	Theory of Conservation	2	0	0	2	5
Objective	To define the conservation as a concept / To inform about the spiritual size of conservation / To inform about the historical process of relating to the conservation approaches / To create the culture and the awareness of the conservation					
Content	The definition and the purpose of the concept of conservation / The values that requiring the conservation / The basic principles of determination of the conservation values / The Opinions against the conservation / The evolution of the conservation approach of the first applications until Renaissance / The evolution of the conservation approach of 19th century until 1964 / The classification of the cultural and the natural values to be protected / The application terminology of Restoration and Conservation / The Application methods of Restoration and Conservation / The project types used in Restoration and Conservation / The concept of monument / The groups of monuments and buildings /The restoration methods that threatening the monuments / The importance of research in Conservation and Restoration / The methods for the gathering information (The libraries, the archives of the historical newspapers and maps) / The evolution of the conservation approach in Turkey / The international organizations with Conservation /The organization with the single structure and the urban heritage conservation in Turkey / The critical approaches.					
Learning Outcomes	1.The students have the culture and the awareness of the conservation, 2.The students know the cultural and the natural values that requiring the conservation, 3.The students know the concept of monument and the causes of deterioration that threatening the monuments, 4.The students know the importance of research in conservation and restoration and the methods for the gathering information, 5.The students know the organizations about the conservation in the world and in Turkey.					
RES2172	Workshop of Textile (Interior)	1	4	0	3	4
Objective	The aims of Textile Workshop course are to teach material properties, construction and design techniques, the dyes used to manufacture historical textiles, how to identify types of deterioration, and to train staff who have professional skills and knowledge to perform conservation and restoration of historical textile.					
Content	History of Textiles / The Ottoman art of weaving and its trends / Textile fibres and their properties / Introduction to conservation and restoration of textile / The factors that cause deterioration of textiles / The works need to be done before conservation and repair of textile / Conservation and repair of textiles / Methods to support the textile works / Issues must be considered during packaging and transportation of textile artefacts / Display of textiles					
Learning Outcomes	1.Students know the material properties, construction and design techniques of historical textile 2.Students can identify the deterioration types of historical textile 3.Students can clean historical textiles and restore their deformations 4.Students are able to pack and store the historical textiles					
RES1002	Internship 1	0	0	0	0	3
Objective	Summer Training courses are for students to do applications of theoretical knowledge gained from courses, to increase the professional experiences, job security, find out the working conditions and work life after graduation to make good career plan for themselves.					
Content	Students are supposed to spend 30 work days (in architectural offices, construction sites, archaeological excavations or restoration workshops) on architectural restoration. At the end of the summer practice, students should write a technical report and submit it to the department.					
Learning Outcomes	1.Students do measuring and drawing in architectural offices, archaeological excavations and construction sites. 2.Students adapt their theoretical knowledge in restoration and conservation field to the implementations of their professional life. 3.Students get information about health and safety at work.					
RES2002	Internship 2	0	0	0	0	3
Objective	Summer Training courses are for students to do applications of theoretical knowledge gained from courses, to increase the professional experiences, job security, find out the working conditions and work					

	life after graduation to make good career plan for themselves.					
Content	Students are supposed to spend 30 work days (in architectural offices, construction sites, archaeological excavations or restoration workshops) on architectural restoration. At the end of the summer practice, students should write a technical report and submit it to the department.					
Learning Outcomes	1.Students do measuring and drawing in architectural offices, archaeological excavations and construction sites. 2.Students adapt their theoretical knowledge in restoration and conservation field to the implementations of their professional life. 3.Students get information about health and safety at work.					
RES2122	Workshop of Metal (Masonry+Timber+Interior)	1	4	0	3	4
Objective	It is aimed to present traditional and contemporary production methods of architectural metal materials, gain knowledge and skills for using metal materials in traditional architecture. In this context, it is aimed for students to investigate reasons of deterioration of architectural metal elements on samples and learn restoration techniques and methods by working on these materials.					
Content	Architectural metal materials (types, characteristics, causes of deterioration and preservation methods) / technical applications for production and re-using of metal materials / mechanical cleaning applications in architectural metal materials /chemical cleaning applications architectural metal materials / lead sheet production with traditional methods / lead sheet production with modern methods / Application of lead sheets on roofs / production of copper and tin spouts and gutters.					
Learning Outcomes	1.Technical applications for reproduction and re-use of metal materials, 2.Clean architectural metal materials using mechanical and chemical methods, 3.Production of new architectural elements by using iron, copper, bronze, brass, lead, tin, silver and gold materials, 4.Produce lead sheet with traditional and modern methods, can perform lead sheeting and finishing of eaves.					
RES1062	History of Architecture 1	2	0	0	2	2
Objective	Starting from Pre-Islamism until the end of Classic Ottoman period, developments in architecture field are going to be explained with the help of building materials, construction techniques, building types and architectural styles; and the effects of these developments on Anatolian Turkish Architecture are going to be analysed.					
Content	Pre-Islamism Turkish Art/First period of Islamic Architecture/Architecture of Asian Turkish Islamic States (Karahanli, Ghaznevid and Great Seljuk)/Building materials/Construction techniques/Building types/Architectural styles and their reflections on Anatolian Turkish Architecture/Anatolian Seljuk Architecture/Building materials and construction techniques/Building types/Features of architectural style/Architecture of Beyliks/Features of architectural style/Contribution of Beyliks Architecture to Ottoman Architecture and introduction to Ottoman Architecture/Early period of Ottoman Architecture/Building types/Case studies of İznik, Bursa, Edirne, İstanbul/the growth of the Ottoman Empire and preparing factors of Classic Ottoman Architecture/Classic Ottoman Architecture/Architect Sinan, his art, style and works/Buildings of Sinan Period/Late Classic Ottoman Architecture					
Learning Outcomes	1.Students get information about building types, construction techniques and building materials related to Anatolian Turkish Architecture. 2.Students can distinguish the similarities and differences between styles of different civilizations. 3.Students can comment on architectural styles of traditional buildings while analysing their plan schemas, construction techniques, building materials and decoration styles.					
RES2071	History of Architecture 2	2	0	0	2	2
Objective	Researching the effects of architectural styles (like Baroque, Rokoko, Art Nouveau) on Ottoman Architecture during Westernization period.					
Content	Westernization period in Ottoman Architecture/Western Architecture and its effects on Ottoman Architecture, Turkish Baroque Architecture/Turkish Empirical Architecture/Eclectic movement in Turkish Architecture/Art Nouveau movement in Turkish Architecture/Development process of Ottoman palace architecture in westernization period/Formation and development process of Aynalıkavak, Beykoz, Küçüksu, İhlamur Maslak Kiosks,and Beylerbeyi,Dolmabahçe Palaces/Neoclassic style in Turkish Architecture/First National Style of Turkish Architecture/Modern Movement and Second National Style of Turkish Architecture.					
Learning Outcomes	1.Students get information about the architectural styles of Europe and Ottoman Empire, starting from westernization period in Ottoman Empire.					

	2.Students can comment on architectural styles of traditional buildings while analysing their plan schemas, construction techniques, building materials and decoration styles. 3.Students can distinguish the similarities and differences between different architectural styles while analysing the facade and interior schemas of these period buildings.					
RES2162	Workshop of Furniture (Interior)	1	4	0	3	4
Objective	The target of this course is teaching the features, making process and decoration of historical furniture. During this course, the material characteristics and deterioration of art pieces of the Department of National Palaces will be diagnosed and essential conservation process for them will be realised in order to train skilled and well-informed staff.					
Content	the historical development of timber/structure and general features of timber/timber works and furniture restoration techniques/the joint elements and glues of timber furnitures/emery and polishing/veneering techniques/decoration, nacre and boule techniques on furniture/furniture colorization and french polish techniques/furnishing/the deterioration reasons of timber and the effects of temperature and humidity on timber/diagnosis of biological threats/struggling methods of biological threats/exhibiting and storing of timber furnitures					
Learning Outcomes	1.Students learn the features of the joint elements and glues for timber furnitures. 2.Students learn to do the colorization and french polishing on furnitures. 3.Students learn to do emery and finishing on furnitures. 4.Students learn to do decoration, nacre and boule on furnitures. 5.Students learn to struggle with biological threats; how to exhibit and store the furnitures.					
RES2021	Restoration Chemistry 1	2	2	0	3	3
Objective	Giving basic knowledge in general chemistry, teaching the properties of chemicals used in conservation and restoration of historical buildings, bridging the knowledge gap between chemistry and conservation practice.					
Content	Matter and its properties / The structure of the atom and period table / Elements, ions and compounds / Chemical bonds / The mole concept and Avogadro's Number / Balancing chemical reactions / Solutions / Chemical calculations / Acids and bases.					
Learning Outcomes	1.Students get basic knowledge in general chemistry. 2.Students establish relation between conservation science and chemistry. 3.Students gain knowledge about properties of inorganic materials used in architectural conservation and restoration. 4.Students are able to prepare the solutions and mixtures used in architectural conservation and restoration in proper concentration and use them properly.					
RES2022	Chemistry of Restoration 2	2	2	0	3	3
Objective	Giving basic knowledge in inorganic and organic chemistry, teaching physical and chemical properties of traditional building materials and of materials used in conservation and restoration practice, chemical deterioration processes caused by their interaction with the environment, field examinations and simple tests to investigate deterioration types and factors, and introducing sophisticated analysis and test methods used in conservation.					
Content	Introduction to organic chemistry / Functional groups: Aliphatic and aromatic hydrocarbons, alcohols, esters, aldehydes, ketones, carboxylic acids, amines / Viscosity, surface tension, surface active agent and capillarity / Salts, their sources and actions / Simple salt, oil and protein analysis / Physical and chemical properties of traditional building materials / Mortar-plaster and stone analysis / Chemicals used in conservation and restoration.					
Learning Outcomes	1.Students get knowledge in organic chemistry. 2.Students gain knowledge about chemical properties of organic and inorganic materials used in architectural conservation and restoration. 3.Students gain knowledge about physical and chemical properties of traditional building materials. 4.Students are able to make field investigations on deterioration types and factors. 5.Students are able to work as a technician in architectural conservation laboratories.					
RES2061	Workshop of Restoration Project 1	2	4	0	4	8
Objective	Teaching to the deteriorations and the causes of the deterioration in the part of a wooden traditional building or a traditional masonry building after the preparation of the analytical survey / Teaching to the determination of the restoration methods / Teaching to preparation of the restitution and the restoration projects					
Content	Preparing the analytical survey of the traditional buildings and the building components / The					

	deteriorations and the determination of the causes of the deterioration / Preparing the restitution project of the traditional buildings and the building components / The investigation of the methods of restoration in the traditional buildings and the building components / Preparing the restoration project of the traditional buildings and the building components / The determination of the methods of the conservation – improvements					
Learning Outcomes	1.The students can define the phases , the changes, the destructions and the material properties of a traditional structure in the historical process, 2.The students can determine the deteriorations and the causes of the deterioration in a traditional structure, 3.The students can prepare the restitution project and the restoration project about a part of the traditional structure or a structural element, 4.The students can determine the restoration methods which should be applied about the deterioration in the traditional structures.					
RES2042	Workshop of Restoration Project 2	4	4	0	6	9
Objective	Teaching the necessary knowledge and skills to make measured drawings of a traditional structure, part of a structure or construction element made of mixed materials (stone, wood, brick, metal, tiles, etc.) and to be subject to restoration, to establish causes of degeneration, to research restoration methods and to prepare restoration or restitution projects.					
Content	Preparing the measured drawings of a small traditional structure, part of a structure or construction element made of at least two materials such as stone, wood, metal, stucco, tiles, etc., that may be subject to restoration, establishing causes of degeneration, researching methods of restitution and restoration, preparing a restoration project, identifying methods of preservation and improvement.					
Learning Outcomes	1.To be able to prepare the measured drawings of traditional structures and construction elements, 2.To learn how to use measuring knowledge for the detailed measuring of traditional buildings, 3.To acquire the necessary knowledge and skills for the preparation of restoration-restitution projects, 4.To learn preservation and renovation methods in line with materials and type of degeneration, 5.To be knowledgeable of restoration theories and techniques, 6.To acquire the skill to take part in interdisciplinary collaborations, 7.To acquire professional and ethical responsibility and awareness.					
RES1072	Survey	2	2	0	3	4
Objective	Teaching to prepare the analytical survey of the part of a wooden traditional building or a traditional masonry building / Teaching to prepare the analytical survey of a traditional structural elements from the wooden or the masonry / Teaching to methods of the obtaining information for the restoration of the historical structures / The explanation of the methods of the measurement and the documentation in a traditional structure or a structure element from the wood or the masonry / Doing the application about the theoretic information					
Content	Preparation of surveying of traditional buildings and building components that enables the design and analysis of the structural aspects / The determination of the current situation of the traditional buildings and the structural elements / The environmental relations of the traditional buildings / The phases, the changes and the destructions of the traditional buildings / The used methods for obtaining all information that form the basis the restoration of the historical buildings / The measurement techniques / The certification by the photograph, the video, the photogrammetry, making the copy, the interviewing, the macroscopic analysis of observational / The methods for preparing the analytical survey / Preparing the analytical survey of a masonry or a masonry structural element / The determination of the relationship between the building and the environmental					
Learning Outcomes	1.The students know preparing the analytical survey, 2.While the students are preparing the analytical survey, they know the measuring and the recording techniques that should be used, 3.The students define the phases, the changes, the destructions and the material properties of the traditional buildings along the historical process, 4.The students determine the deterioration and the causes of deterioration in the traditional buildings.					
RES2142	Workshop of Stone (Masonry)	1	4	0	3	4
Objective	The aim of Stone Workshop: Introduction of the stones used in historical buildings, teaching their properties and carving techniques, training staff who have professional skills and level of knowledge to make investigations for determining deterioration type, material properties of stone artifacts and to perform adequate conservation and repair.					
Content	Within a semester, students perform conservation and restoration applications such as cleaning, consolidation, repair and renovation of architectural stone elements and stone cladding facades of					

	monuments under supervision of a stone mason. Moreover, they learn how to carve limestone and marble through forming geometric or floral patterns.				
Learning Outcomes	1.Students can recognize the natural stones which are often used in historic buildings. 2.Students are able to clean stone materials using conventional methods. 3.Students can produce new pieces which are adaptable to original stone elements of traditional buildings.				
RES1051	Technical Drawing	2	4	0	4
Objective	Teaching the principles and techniques of technical drawings which are common language for building elements, giving information for doing every technical drawings about traditional buildings.				
Content	Introducing the technical drawing instruments, standard layout dimensions and page format, text and numbers, line types and weights, exercises with pencil and drawing ink pen, scaling, geometrical drawings, the principles of descriptive geometry and its applications, projection and plan, section, elevation, exercises on plan, section, elevation, dimensioning techniques and dimensioning survey projects, various exercises, schematic drawings and symbols, simple perspective rules, representation techniques with simple perspective principles, representation of various building and decorative elements and doing exercises in different scales (1/50, 1/20, 1/10, 1/5, 1/2, 1/1), drawing door and window, drawing staircase, drawing roof, drawing column, drawing molding, drawing arch, drawing fountain, drawing mihrab, drawing techniques of dome, drawing minaret, drawing porch, perspectives of curvilinear figures,drawing monofocal and bifocal perspectives.				
Learning Outcomes	1.Students know principles and technics of technical drawing 2.Students become skilful at drawing technical drawings and projects 3.Students express traditional buildings on paper(layout) by using technical drawings, CAD and various computer programmes.				
RES1061	History of Art and Civilization	2	0	0	2
Objective	Providing to understand the civilization and art history with the social, the cultural and the architectural dimension /Providing to grasp the basic evolutionary process of the history of civilization				
Content	What is art? /What is the purpose of art? / The style, the perception and the representation /The prehistoric archaeological finds /The development of the abstract and the concrete thinking / The separation periods of the history of the civilization /The transition to a settled of the human communities / The political and religious thought in the settled civilizations /The art of Mesopotamia / Egyptian art / The art of Cretan and Mycenaean civilizations / Greek thought (mitos-logos) /The concept of the slavery and citizenship in Greek civilization / Greek art / Etruscan art / Roman civilization /The rule of law in Roman civilization / Roman art / The prehistoric ages in Anatolia /The development process of the restructuring actions in the first settlements / Hatti, Hittite, Phrygian, Urartian Arts / The structures of the first settlements in Anatolia (The construction materials / The construction systems / The construction types / The style properties)/ Greek, Roman and Byzantine Structures (The construction materials / The construction systems / The construction types / The style properties /The development process of the restructuring actions)				
Learning Outcomes	1.Students know the basic concepts of the civilization and art history, 2.Students are able to use that information in the restoration applications, 3.Students are able to understand the contributions to world civilization of the different cultures, 4.Students develop the critical perspective and the thinking skills, 5.Students are able to analyze as the comparative.				