T.C.
İSTANBUL TİCARET UNIVERSITY
FACULTY OF ARCHITECTURE AND DESIGN
INDUSTRIAL DESIGN DEPARTMENT

2025/2026 ACADEMIC YEAR INDUSTRIAL DESIGN BACHELOR'S DEGREE PROGRAM COURSE CONTENTS

Course Code and Name

(Theory- Application- Credit- ECTS)

1. TERM

ENT101 Industrial Basic Design 1
(4-4-6-8)
Design education ensures that students learn the methods and techniques necessary to solve design problems. It encompasses the activation of the phenomenon of seeing works that bring out creativity, the mass analysis of forms, and the two- and three-dimensional expression applications of basic design elements such as point, line, spot, texture, and colour using different materials.

ENT103 Technical Drawing for Product Design 1
(2-4-4-6)
In sequence during the term, drawing exploded views using parallel perspective rules, drawing the projected views of objects with angles, drawing the projections of prisms intersecting at various angles, dimensioned drawings based on the projected views multiple objects, drawing the sectional views of odifferentus objects, and drawing the single and double vanishing point views of multiple objects using the conical perspective drawing method.

ENT107 Visual Expression Techniques 1
(2-2-3-4)
The drawing techniques that support the product design process are explained, along with visualisation techniques. The goal is to transfer an image created in the mind to a 3D coordinate system. The course progresses by teaching basic skills such as pencil grip, line thickness management, marker use, and the observation of vanishing points. Ultimately, it enables students to draw all the details of a project and transfer them to a 2D surface in a way that conveys the 3D form.

ENT109 History of Design
(2- 0- 2- 3)

The Industrial Revolution, the historical development of product design, and art and design movements are examined by period.

ENT115 Design Process and Principles
(3- 0- 3- 3)
The course aims to teach design processes and the fundamental principles required to execute these processes, thereby enabling students to carry out project processes in industrial product design. Additionally, it involves examining key design concepts and conducting relevant practical work.

GNL101 Atatürk Prin. and Hist. of Rev. 1
(2- 0- 2- 2)
A comprehensive overview of the emergence, rise, stagnation, dissolution, disintegration, and collapse of the Ottoman Empire, along with the factors that paved the way for the Turkish Revolution; events that occurred during the disintegration of the Ottoman Empire; World War I; occupations; societies; the activities of Mustafa Kemal Pasha and his crossing to Anatolia, the opening of the Grand National Assembly of Türkiye, the Treaty of Sèvres, the establishment of the regular army, the Greek general offensive and the battles on the Western Front, Mustafa Kemal Pasha's commandership, the Battle of Sakarya, the Great Offensive, and the signing of the Mudanya Armistice, and the Treaty of Lausanne.

GNL105 Turkish Language 1
(2- 0- 2- 2)
Understanding the structure and basic grammar of Turkish, comprehending texts as required, and expanding students' vocabulary are among the course's objectives. The history and basic rules of Turkish are covered, and sample literary and scientific texts are read.

LNG101 General English 1
(2- 0- 2- 2)
Work is done to enable students to express the most basic patterns, adjectives, and personal characteristics in everyday conversation and to communicate using the language they have learned. Students learn to read, understand, and comment on texts in the language they have learned, and to compose written texts using the patterns they have learned.

2. TERM

ENT102 Industrial Basic Design 2
(4- 4- 6- 8)

Design principles, design elements, product language, collage and composition, emotional design, abstraction, and concepts of transition between dimensions are covered.

ENT104 Technical Drawing for Product Design 2
(2- 4- 4- 6)
In sequence during the term, drawing exploded views using parallel perspective rules, drawing the projected views of objects with angles, drawing the projections of prisms

intersecting at various angles, dimensioned drawings based on the projected views of various objects, drawing the sectional views of various objects, and drawing the single and double vanishing point views of various objects using the conical perspective drawing method.

ENT106 Structure in Industrial Design
(2- 0- 2- 2)
To develop the student's ability to think abstractly, the relationships between function, structure, and form are explained using geometric theory and techniques. These theories and methods are applied in three-dimensional product design. Definition and concept of structure. Traditional and contemporary structures. External forces affecting the structure. Definition of stress-strain. Structural design criteria. Material selection is also addressed.

ENT114 Introduction to Industrial Design
(2- 2- 3- 4)
It covers the methods industrial designers use to design manufacturable products. Within the context of cause-and-effect relationships, it examines and addresses topics such as problem definition, conceptual ideas and form development, expressing initial ideas through sketching, and interdisciplinary interaction in the design process.

ENT116 Visual Expression Techniques 2
(2-2-3-4)
The aim of this course is to take students' visual communication skills to the next level by developing advanced presentation techniques, including form creation, material expression, and texture expression. Students gain the ability to accurately convey form, volume, and material effects using markers, colored pencils, and similar tools. This develops their ability to visually express the form, colour, and material integrity of a design effectively.

GNL101 Atatürk Prin. and Hist. of Rev. 2
(2- 0- 2- 2)
It evaluates the stages Türkiye has undergone since its founding, its relations with other countries, and its efforts to achieve modern civilisation.

GNL106 Turkish Language 2
(2- 0- 2- 2)
Oral expression, definition and scope of speech, importance of speech, characteristics of oral and written expression, principles of beautiful, effective, and correct speech, speech errors and pronunciation characteristics of Turkish, Types of Speech, Types of Oral Expression, Types of Written Expression, Official Correspondence, Scientific Research Methods, Scientific Report Preparation, Citation, bibliography, and footnote rules are covered.

LNG102 General English 2
(2- 0- 2- 2)

Basic English language skills are taught.

3. TERM

ENT201 Industrial Design Project 1
(4- 4- 6- 10)
It involves conveying to students the methodology for designing the proposed product, based on an examination of changes and developments in products intended for mass production in industry, taking various factors into account. This is achieved through research and development, appropriate drawing techniques, and the creation of innovative designs documented in technical drawings that comply with international standards.

ENT203 Computer Aided Design 1
(2- 2- 3- 5)
Developing modelling and visualisation skills as a professional form of expression. Visualising design sketches and ideas in 3D, as well as visualising material, colour, and texture information, is conveyed using the Rhino program. Computer-aided design is implemented in projects using 2D drawings.

ENM205 Material and Production Methods 1
(3- 0- 3- 5)
The internal structure of materials, mechanical and physical properties, Hooke's law, composites, wood and paper, extrusion, injection, plastics, powder metallurgy, and any design studies are conducted.

ENT207 Model Making Techniques
(3- 2- 4- 5)
The course provides design candidates in the initial phase of industrial design education with advanced application skills in modelling and realisation techniques, such as static displays, mock-ups, and prototypes, as design methods and presentation techniques, while also conveying information on the use and qualities of model and mock-up construction materials.

ENT219 Form in Ceramics (Elective Course)
(2-2-3-5)

This course aims to help industrial design students develop intuitive and conceptual skills in three-dimensional form creation processes by understanding the nature of ceramic materials.

ENT211 Design and Perception (Elective Course)
(3-0-3-5)
The goal is to create more effective designs by understanding how visuals are perceived.

4. TERM

ENT202 Industrial Design Project 2
(4- 4- 6- 8)

Research, development, and implementation of innovative designs using appropriate drawing techniques and technical drawings that comply with international standards.

ENT204 Computer Aided Design 2
(2- 2- 3- 5)
Advanced modelling and graphics presentation training

ENM206 Material and Production Methods 2
(3- 0- 3- 5)
Basic information about manufacturing methods, machining, unconventional manufacturing methods, and prototyping processes

ENT208 Industrial Design Theory and Methods
(3- 0- 3- 5)
Explaining the content of design processes in industrial design, learning about systematic problem-solving methods, researching methods for defining design problems, and discussing theoretical and conceptual approaches to explaining situations that aspiring designers may encounter in all areas of their professional practice.

ENT212 Research Methods in Design (Elective Course)
(3- 0- 3- 5)
To reveal the dimensions of the consumer's relationship with institutions, products, and brands. It aims to present product and idea theories that can differentiate the relationship with the consumer and ensure that the brand and product stand out and gain value.

5. TERM

ENT301 Industrial Design Project 3
(4- 4- 6- 8)
The topic is addressed at a level appropriate to the students' class so that they can design a product that fits their original project idea, based on market standards. Research, development, appropriate drawing techniques, and technical drawings that comply with international standards are used to create innovative designs.

ENT303 Industrial Furniture Design
(2- 2- 3- 4)
The project is being carried out on furniture for indoor and outdoor spaces and on the relationship between furniture and users. The trends that determine furniture design and the ways technology is reflected in design are being addressed.

ENT305 Detailed Understanding of the Product
(2- 0- 2- 2)
To understand the functional and formal functions of existing products, they must be disassembled and their design stages discussed and learned.

ENT307 Human Factors in Design
(2-0-2-2)

The aim is to introduce Industrial Product Design students to ergonomic standards, data, and methods related to human-machine-equipment and environmental factors they may encounter during the design and project development process. In addition, examining and understanding the concepts of interface and communication through products constitutes the basic objectives and content of the course.

MTF300 Research Project Preparation
(2-0-2-2)
This course serves as preparation for the Final Project courses that students will take in their senior year. The primary objective of the course is to introduce students to scientific research methods prior to graduation and equip them with the necessary skills to develop project ideas and write project proposals.

ENT315 Exhibition Systems and Stand Design (Elective Course)
(2- 2- 3- 5)
This course aims to enable students to physically recognise exhibition elements, learn which inputs are beneficial, and understand their role in trade shows, exhibitions, and promotional functions. Additionally, students learn about differences in size and scale, study the applications of study materials, and utilise them. The course also includes the design of products developed within its scope.

ENT319 Material Selection and Manufacturability in Design (Elective Course)
(3- 0- 3-5)
Product component design. Examination of product components from a mechanical design perspective. The importance of materials in design, classification of materials, material selection, and selection methods. Standard elements and connecting elements. Design for manufacturing methods such as casting, forging, machining, sheet metal forming, and welded forming. Examination of the manufacturability of designed parts. Design for assembly. Assembly methods. Processes for changing the physical and visual properties of components. The effect of the selected production method and material on the design. Factors determining production method preferences. Systems that control design and production methods. Preliminary estimation of manufacturing costs.

ENT321 Jewellery Design (Elective Course)
(2-2-3-5)
Examining the stages of development in jewellery and accessory design from the past to the present. Investigating the steps to be followed in jewellery design in light of production methods, mineral stones, raw materials, and technologies.

ENT327 Lighting Design (Elective Course)
(2-2-3-5)
In the field of Industrial Design, the visual, sensory, and psychological effects of lighting design and applications from a user-centred perspective, and the consideration of design alongside systems, the presentation of principles and methods in lighting design and applications.

ENT335 Sustainability in Design (Elective Course)
(2-2-3-5)

The concept of sustainability in design is addressed alongside fundamental approaches and applications. Topics related to designers' responsibilities are examined with examples.

6. TERM

ENT302 Industrial Design Project 4
(4- 4- 6- 8)
Research, development, and implementation of innovative designs using appropriate drawing techniques.

ENT306 Computer Aided Design and Manufacturing
(2- 2- 3- 4)
General information about computer-aided design programs. Recognition of commercial software and its use in the design process. Learning the SolidWorks program and recognising computer-aided manufacturing elements.

ENT308 Packaging Design
(2- 2- 3- 4)
To be able to commission sustainable, user-focused packaging designs tailored to the target audience and brand identity, in line with industrial production methods.

ENT330 Project Presentation Techniques and Portfolio Preparation 1
(2- 2- 3- 4)
The process begins with learning the necessary software and continues with the design of portfolios that include individual identity design and projects. In the next step, the portfolios are transferred to digital media and presented with multimedia support.

ENT312 Industrial Ceramics (Elective Course)
(3-0-3-5)
The Industrial Ceramics course aims to familiarise students with ceramic materials and ceramic production processes; enable them to develop product designs using basic shaping, moulding, casting, glazing, and decoration techniques; and plan their designs for production-scale manufacture and create prototypes. In this way, students gain the ability to design ceramics suitable for industrial production.

ENT328 Food Design (Elective Course)
(2-2-3-5)
Within the discipline of industrial design, the aim is to approach food as a design object, experience, and system; to encourage students to question their relationship with food and to reconstruct this relationship through creative design processes. The goal is to develop conceptual thinking skills through the cultural, historical, sensory, and social contexts of food and to prepare the ground for students to produce food-focused design projects.

ENT324 Design for All (Elective Course)
(3- 0- 3- 5)
The concept of universal design and its historical development are studied; the situation and position of people with disabilities worldwide and in Türkiye are examined; the factors

influencing the classification of physical disabilities are understood; the principles of universal design are taught; and designs implemented in line with these principles are analysed.

7. TERM

ENT401 Industrial Design Project 5
(4- 4- 6- 8)
The design of industrial products suitable for mass production, under research to establish the new product definition, transferring the process methodology for change and development under different factors to the student in a manner suitable for mass production. Ensuring the realisation of new product designs that can be applied in industry using methods and techniques suitable for research and development. Experiencing the development of new product design projects suitable for mass production in various industries.

ENT403 Industrial Design Management
(2- 0- 2- 2)
Industrial Design Management explores the relationships and distinctions between R&D, innovation, and design, focusing on design as a strategic management tool. The course addresses design-driven and meaning-driven innovation, strategic design, experience economy, open innovation, and value co-creation. Through case studies, it examines new product development, service innovation, alternative business models, and the organisation of the design function. The course also highlights the role of design and branding in value chains and in creating competitive advantage within global markets.

ENT427 Final Preliminary Research
(3-0-3-4)
Conducting systematic and integrated studies on the preliminary research processes regarding the topic to be covered in the MTF 402 Final Project

ENT421 Project Presentation Techniques and Portfolio Preparation 2
(2-2-3-4)
The goal is for students to present the projects they have completed at school in the most effective way for their professional lives and to showcase their portfolios, demonstrating modern media usage. Designing a portfolio book with the aim of helping students in their post-school lives, organising their projects and presenting them in an integrated manner under a personal brand identity. Creating an infrastructure that will enable participants to present themselves and their projects more effectively in their professional lives, using widely used industry software and allowing them to position themselves more assertively in the industry.

ENT437 Design Philosophy (Elective Course)
(3- 0- 3- 5)
Theoretical explanations and analyses range from the artistic and architectural development of humanity that shapes design philosophy to the construction of a sustainable world that shapes the needs of the 21st century.

ENT443 Urban Furniture (Elective Course)
(2-2-3-5)
The main objective of this course is to enable students to evaluate the phenomenon of the city, urban morphology, and urban identity within the framework of urban memory, and to help them identify all the elements that constitute the city. In addition, the course aims to provide students with basic theoretical knowledge of urban furniture classification. Within the scope of the course, materials commonly used in urban furniture, as well as production and design techniques, will be discussed in detail; fundamental design problems encountered in relation to urban elements and proposed solutions to these problems will be developed. The integration of ergonomic principles into the urban furniture design process will be examined, with the aim of increasing spatial efficiency through user-centred approaches.

8. TERM

MTF402 Graduation Project
(4- 4- 6- 10)
The final project involves conducting a comprehensive design process that allows students to utilise all the knowledge and skills acquired throughout their education. The course aims to develop original design approaches in light of the fundamental professional knowledge acquired by the student over four years through the design of products to be mass-produced in industry, to transfer application-oriented knowledge, and to use professional approaches and decision-making methods necessary for designing realistic products in professional life.

HUK404 Design Law
(2- 0- 2- 5)
Design definition from the perspective of designers and lawyers. The concepts of intellectual property and design law. Conditions for protection. Ownership, registration. Infringement of design rights and the rights of the owner.

GNL450 Career Planning
(2- 0- 2- 0)
Seminars are held every week, during which designers with different specialisations give presentations and answer questions, enabling students to gain knowledge of that particular field of expertise.

ENT 404 Semantics
(2- 2- 3- 5)
Bu ders, tasarımda anlam üretimi ve yorumlanmasına odaklanarak öğrencilere semantik çalışmalara ilişkin temel fikirleri, kuramları ve yöntemleri tanıtmayı amaçlar. Okuma metinleri, tartışmalar, sınıf içi egzersizler ve ödevler aracılığıyla; göstergebilim, iletişim çalışmaları, ürün semantiği, kültürel çalışmalar ve bilişsel bilimlerden beslenen interdisipliner bir çerçeve benimsenir. Ders kapsamında anlam, gösterge, temsil, metafor, ideoloji, ürün karakteri, kimlik, kültürel yapıntılar ve semantik profiller gibi kavramlar ele alınarak, tasarlanan nesnelerin işlevsel olduğu kadar sembolik ve kültürel boyutları da analiz edilir.

ENT410 Cinema and Design (Elective Course)
(3-0-3-5)
This course aims to explore the relationship between cinema and product design through projects. Students examine object design in films to develop applications in visual storytelling and world-building. Using a speculative design approach, they practice designing products for fictional contexts and presenting design decisions within a narrative framework.

ENT428 Marketing and Branding in Design (Elective Course)
(3-0-3-5)
The aim is to understand that industrial design is the only visual and tangible link between the consumer and the brand, and to comprehend the connection between Brand and design. Therefore, the course aims to examine the relationship between Brand-Industrial Product Design and Consumer Behaviour and to equip aspiring designers with the necessary skills to produce designs under the brand umbrella.