

Bahçeşehir University

DEPARTMENT OF
INDUSTRIAL DESIGN

2023 - 2024 | Student Projects

Faculty of Architecture and Design
Department of Industrial Design

-

Student Projects | 2023-2024 Academic Year

FACULTY OF ARCHITECTURE AND DESIGN

Design is not just a profession; it is a way of understanding, transforming, and shaping the future. At Bahçeşehir University Faculty of Architecture and Design, we embrace this philosophy by placing an interdisciplinary approach at the heart of our education system, offering our students a high-quality education that meets international standards and aligns with contemporary needs. Our faculty—which includes the departments of Architecture, Interior Architecture and Environmental Design, Industrial Design, and Textile and Fashion Design—operates with the vision of nurturing individuals who develop creative solutions ranging from the urban scale to product design.

This catalog brings together a curated selection of student projects from studio and design courses, showcasing their design skills, research-driven problem-solving abilities, critical thinking, and innovative approaches. Regularly updated each term, this publication serves as a significant resource documenting both our faculty's educational philosophy and our students' progress.

Our faculty supports its students with an enriched academic and cultural program that extends beyond the classroom, including technical excursions, seminars, exhibitions, international workshops, and exchange programs. Collaborations with Berlin International University of Applied Sciences, annual summer/winter schools in Japan, Spain, Austria, and Italy, as well as Erasmus/World Exchange programs, provide our students with a global design perspective.

The central location of our faculty in Beşiktaş/Yıldız offers students direct engagement with Istanbul's historical and cultural heritage while also enabling them to incorporate strong urban contexts into their design projects. Through our CO-OP program, students gain early professional experience, integrating sectoral engagement into their academic curriculum.

The projects featured in this catalog reflect our students' innovative and original ideas across various scales of design disciplines. Our faculty is committed to educating designers who are not only attuned to the needs of today's world but also responsive to future challenges, uphold ethical values, embrace cultural heritage, and actively engage in the globalized world. These projects stand as concrete evidence of our students' creative potential and our faculty's visionary approach to education. We hope this catalog serves as an inspiring resource that reflects the productive and dynamic academic environment of our faculty.

Prof. Dr. Murat Dündar
Dean, Faculty of Architecture and Design
Bahçeşehir University

DEPARTMENT OF INDUSTRIAL DESIGN

Industrial Design is a strategic problem-solving process that fosters innovation, drives business success, and enhances quality of life through the development of products, systems, services, and experiences. Industrial designers work across various fields, including product design, system design, service design, and experience design. Product Design encompasses a wide range of categories such as furniture, transportation, packaging, electronic devices, power tools, medical equipment, investment products, home and office appliances, exhibition stands, lighting solutions, products for special ability groups, personal care items, sports equipment, jewellery and many more. System Design involves the integration of products and services, product lifecycle management, visual identity for product series, retail design, and visual communication for exhibitions, museums, and other events. Service Design focuses on transforming products and systems into services, designing service processes, mapping customer experiences, and developing service presentation strategies. Experience Design includes user interface (UI) design, user experience (UX) design, and interaction design. Industrial designers can work in private companies, public institutions, and independent design consultancy firms. Their expertise is applied in research and development, quality control and auditing, consultancy, design strategy, and education. Those interested in pursuing a career in industrial design should possess strong analytical and critical thinking skills, spatial perception, empathy, and the ability to conceptualize and restructure ideas in three-dimensional space.

Prof. Dr. Elçin TEZEL
Head of Department of Industrial Design
Bahçeşehir University

ACADEMIC STAFF

Prof. Elçin Tezel (Department Chair)
Assoc. Prof. Bilgen Manzanoğlu
Assoc. Prof. Mehmet Asatekin
Assist. Prof. Handan Temeltaş
Assist. Prof. Murad Babadağ
Assist. Prof. Renk Dimli Oraklıbel
Inst. Anıl Karyağar*
Inst. Aslıhan Yılmaz*
Inst. t. Ayşe Erol*
Inst. Begüm Erçam*
Inst. Begüm Erçam*
Inst. Ingi Fernandez
Inst. Mete Godollar*
Inst. Miray Hamarat Dünder
Inst. Seza Hande Kurnaz*
Inst. Sinan Polvan*
Inst. Ufuk Ulasan*
T.A. Elif Şen Himakı

*part time instructors

DES 1001

BASIC DESIGN

Within DES1001 final project, impressionist paintings were analyzed and transformed through basic design principles to create abstract compositions. These abstractions were then reinterpreted into dynamic 3D models, making them viewable from 360 degrees.

INSTRUCTORS

Handan Temeltaş
Ingi Fernandez
Miray Hamarat Dünder
Hande Kurnaz



DES1001 | Abstraction of Queen's Gate at Aigues-Mortes Ada Taner

The 1867 painting Queen's Gate at Aigues-Mortes by French Impressionist artist Jean-Frédéric Bazille was abstracted based on basic design principles. This abstraction was then transformed into a 3D composition.

DES1001 | Abstraction of Path in the Wheat Fields at Pourville Nida Tepe

The 1882 painting Path in the Wheat Fields at Pourville by the important Impressionist French artist Claude Monet was abstracted based on basic design principles. This abstraction was then transformed into a 3D composition.





A Moment in the Studio

In this Basic Design studio critique session, students present their in-progress 2D compositions, exploring abstraction and fundamental design principles before moving on to 3D transformations.

DES 1002

DESIGN STUDIES

In the first project of DES1002, innovative carton packaging solutions have been developed to improve everyday packaging experiences. Students have designed sustainable carton alternatives for unpackaged products, analyzed packaging issues such as usability and transportation, and proposed improvements. Additionally, they have created packaging scenarios that combine multiple products or functions and replaced plastic and metal packaging with eco-friendly carton alternatives. By generating innovative ideas to enhance sustainability, usability, and functionality, a contribution has been made to the development of environmentally friendly and functional packaging designs.

As part of the final project of DES1002, the Chess Set Design was conducted, where chess pieces were reinterpreted by forming a specific family of components. Their individual characteristics and interrelationships were thoroughly examined. Consequently, students developed a system consisting of defined units and redesigned the chess pieces in alignment with design principles.

INSTRUCTORS

Handan Temeltaş
Ingi Fernandez
Miray Hamarat Dünder
Hande Kurnaz

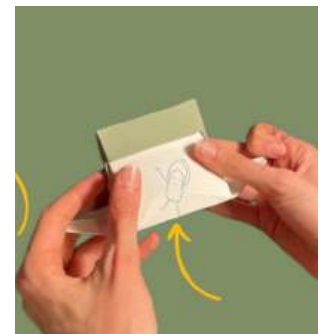
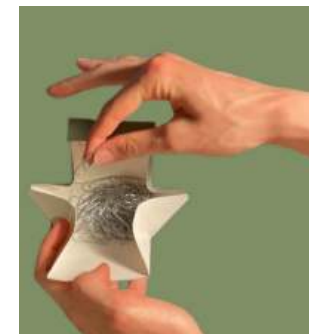
DES1002 | The Boxl | Ahmet Can Kamiloğlu

This project explores innovative packaging for stationery items, designed in the shape of a purse. The packaging not only provides a compact and stylish way to carry essential supplies but also transforms into a larger surface when opened, allowing for easy access and sharing of items like clips and pins. The design enhances both functionality and user experience, making everyday stationery more convenient and engaging.



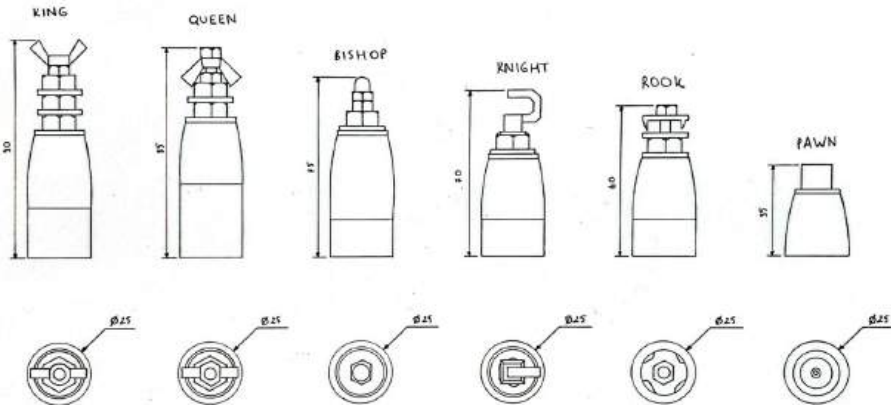
DES1002| Purse Pals Selen Uygur

This project introduces an innovative approach to stationery packaging by incorporating a purse-shaped design. The packaging offers a compact and stylish way to carry essential supplies while also enhancing usability. When opened, it expands into xXa larger surface, making it easier to access and share items such as clips and pins. This transformation adds an interactive element to the design, combining practicality with a playful user experience. By rethinking everyday stationery storage, the project aims to merge functionality with aesthetics in a seamless and engaging way.



DES1002 | Argivet Chess Set| Ahmet Can Kamiloğlu

This chess set reimagines tradition through the creative fusion of clay and industrial hardware elements. Each piece is thoughtfully crafted to balance the elegance of classic design with a contemporary edge. Designed for both chess enthusiasts and admirers of unique design, this set offers a distinctive blend of artistry and functionality, redefining the chess-playing experience.



DES1002 | Arena Chess Set | Nida Tepe

This chess set features decorative assembly screws as bases and 2mm aluminum wires forming the upper structures. The pieces are color-coded for easy team identification, while the wire components are designed using geometric shapes with ergonomic considerations. This thoughtful design ensures a comfortable and enjoyable chess-playing experience, combining functionality with aesthetic appeal.

DES 2001

INDUSTRIAL DESIGN I

The first project involves designing an ergonomic kitchen peeler, focusing on hand-tool functionality and user interaction. Through hands-on research, the design will address ergonomics, user safety, and anthropometry, with attention to form and production details for a practical, user-friendly tool.

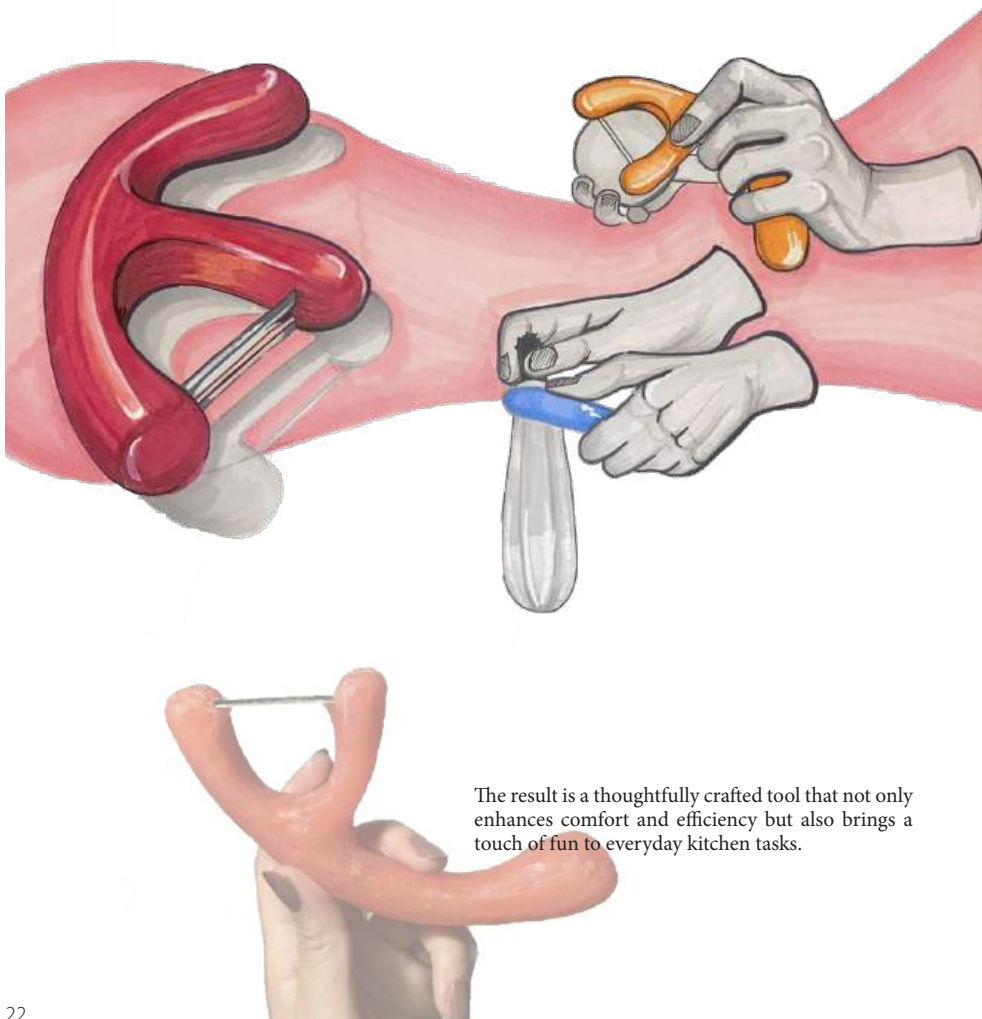
The second project involves designing a user-friendly indoor vending machine that dispenses four essential health-care products: aspirin, dramamine, band-aid, and hand sanitizer. Aimed at *high*-traffic locations like airports, shopping centers, and schools, the machine should be easy to use, service, and maintain. The goal is to create a practical solution that meets the needs of users in urgent situations.

INSTRUCTORS

Mehmet Asatekin
Ayşe Aydemir
Elif Şen Hımakı

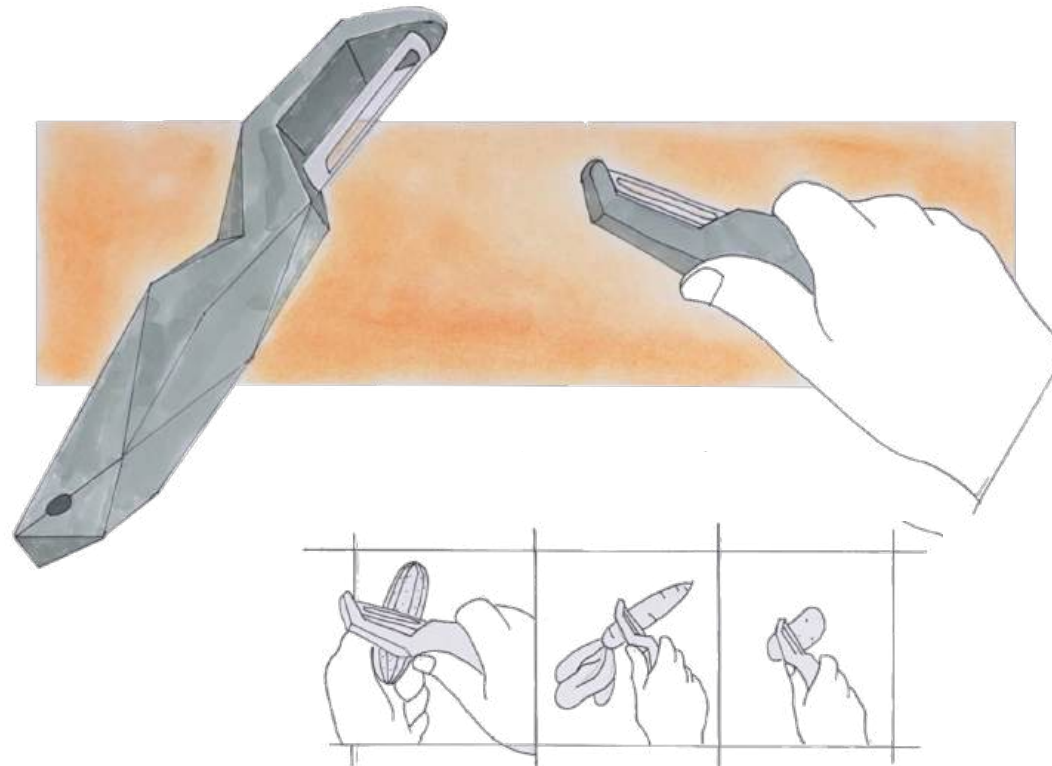
DES2001 | Vegetable Peeler | Duru Nilda Akün

This peeler was designed with a playful approach to ergonomics, ensuring both ease of use and an engaging user experience. Throughout the design process, moodboards were developed to align the product with a specific user group's needs, lifestyle, and aesthetic preferences.



DES2001 | Kuhna Vegetable Peeler | Burak Akalın

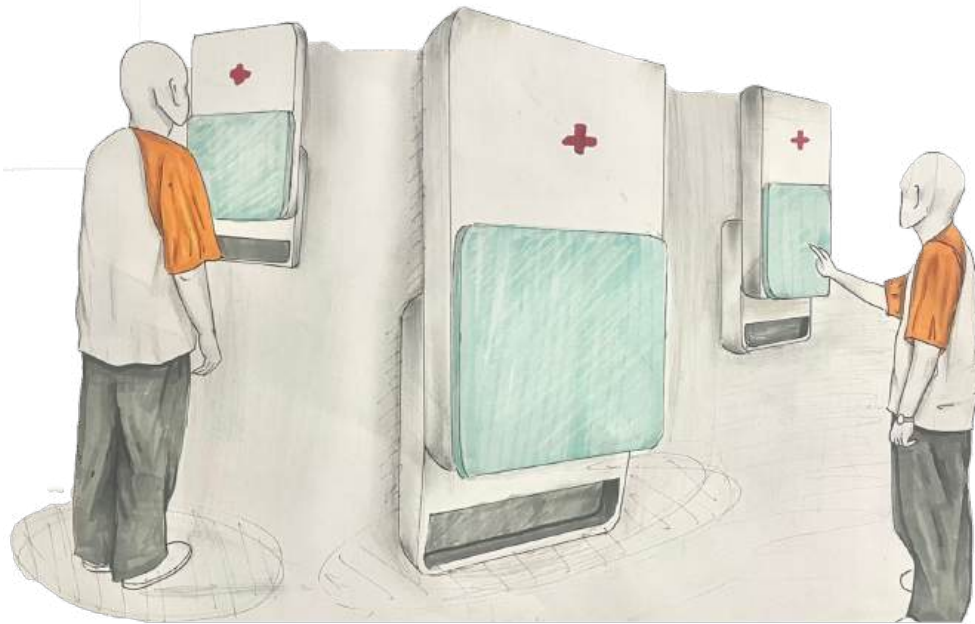
Designed for outdoor enthusiasts, this peeler combines rugged durability with a sharp, functional aesthetic. Inspired by the needs of those who cook in nature, it features bold, angular lines and an ergonomic grip for secure handling in any environment. The design process included moodboards tailored to the outdoor lifestyle, ensuring that the final product aligns with the practical and aesthetic expectations of adventure seekers.



DES2001 | Vending Machine for Health Products

Parsa Dehnavi

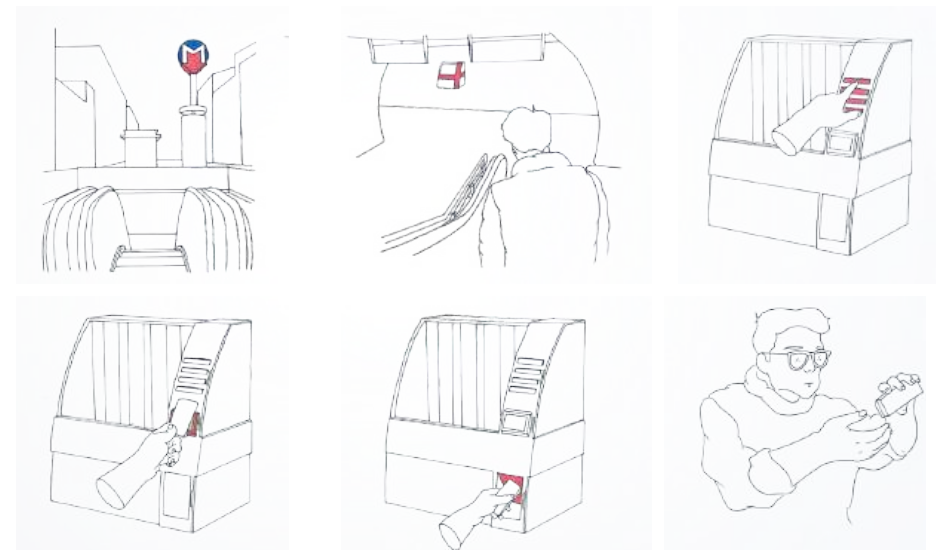
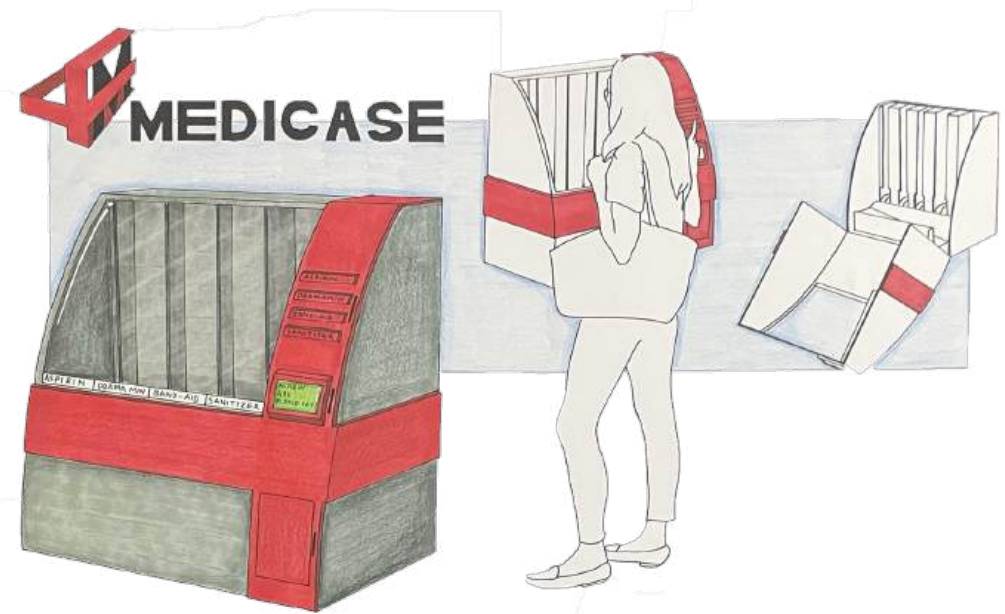
This design features a clean, medical-inspired look with a tech twist, offering a sleek and modern solution for dispensing health-care products. The minimalist aesthetic is combined with innovative technology, ensuring a sophisticated and efficient user experience.



Its futuristic appearance appeals to users seeking a quick, high-tech solution in a busy environment.

DES2001 | Medicae Vending Machine | Armanç Karadeniz

Focusing on practicality and simplicity, this design ensures ease of use and easy maintenance. The visual character is crafted to attract attention from users in need of health-care products, standing out as a clear and accessible choice. Its straightforward functionality makes it an ideal solution for high-traffic locations where convenience is key.



Mehmet Asatekin
Ayşe Aydemir
Elif Şen Hımkı

In the first project, students of DES2002 are tasked with designing a cabin luggage case that meets the strict size, weight, and content regulations imposed by air travel. Recognizing the challenges of lost luggage and the need for travelers to keep essential items close, the project emphasizes creating a case that is both practical and protective. Students are assigned specific user groups and are expected to generate proposals that align with the unique needs, expectations, and lifestyles of these groups. This approach has led to a diverse range of designs that explore user-centered solutions to enhance the travel experience.

In the second project, students of DES2002 explored the redesign of a portable fan heater, focusing on creating a contemporary and user-friendly product while maintaining existing internal components. Through market research and user analysis, they identified key expectations and emerging trends, shaping their design directions. Each project reflects a unique approach, balancing aesthetics, functionality, and manufacturability. With plastic injection molding as the primary production method, students developed innovative housing designs that optimize airflow, enhance usability, and stand out in the competitive market.

DES 2002

Industrial Design II

DES2002 | Fan Heater | İrem Uçur

This fan heater features a sleek, blue-toned grey color, offering a subtle yet contemporary touch to modern living spaces. Designed with two seamlessly integrated pieces, it presents a refined and minimalist look that complements various interior styles.

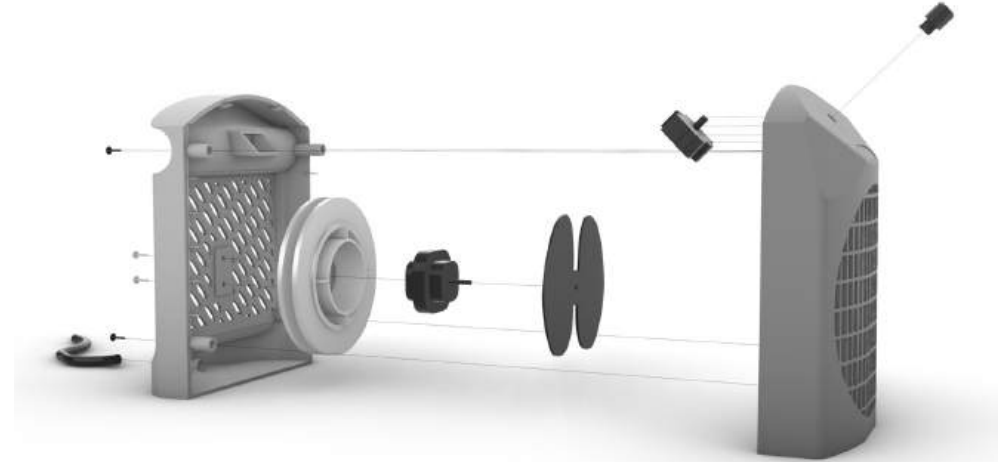


Its clean lines and simple angles make it easy to blend into different environments, creating an unobtrusive yet functional addition to any room. This design prioritizes both aesthetic simplicity and practical utility, ensuring that it fits naturally within a wide range of interior decors.



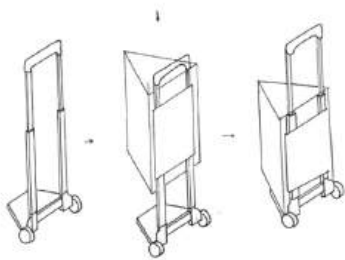
DES2002 | Fan Heater | Görkem Onatça

This heater features a muscular look with bold, angular lines that create a striking presence in any space. Designed with simple manufacturing in mind, the heater uses clean, straightforward construction methods that reduce production complexity. The result is a robust and efficient design that stands out both in form and function.

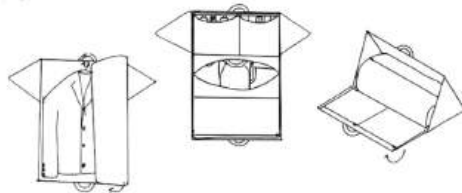


DES2002 | Nexus Luggage | Gülbin Tekin

This product is designed for 2-3 day business trips, serving as an all-in-one suitcase that meets the needs of business professionals. It features custom compartments tailored for everything from suits and daily wear to files and electronics. The suitcase includes a detachable computer bag, eliminating the need for an additional carry-on. Made from high-quality leather, the suitcase is waterproof, providing added protection for both your computer and clothing.



The piece at the back of the suitcase allows it to be easily fitted onto the frame, providing two convenient options for use: wheeled transport or carrying it by hand. Moreover, since the suitcase can be detached from the frame, it offers easy storage when not in use.

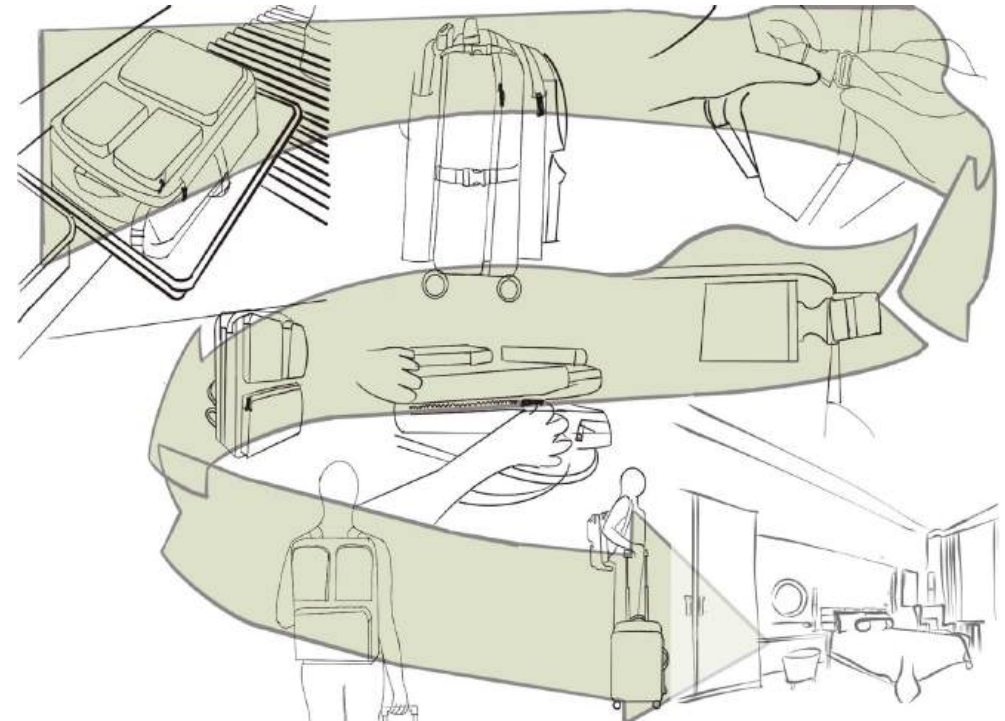


In the packing process, the suit is placed in the bottom zippered section of the suitcase to prevent wrinkling. Once this section is closed, daily care items and accessories are stored in the top zippered compartments, while daily clothes go into the middle zippered section. After securing these sections, the suitcase is fully closed. This organization allows for easy access to the suit without the need to remove all items, thanks to the separate zippered compartments.



DES2002 | Ukiyo Luggage | Rima Dalma

Featuring a minimalist main body paired with a versatile upper cover, this luggage design offers dual modes of carrying. The upper cover, reminiscent of a vest, can be easily attached to the main body for a sleek look, or quickly transformed into a comfortable backpack with a simple move. Designed with simplicity and practicality in mind, this luggage offers a flexible solution for modern travelers seeking both style and convenience.



INSTRUCTORS

Renk Dimli Oraklıbel
Bilgen Tuncer
Hakan Diniz

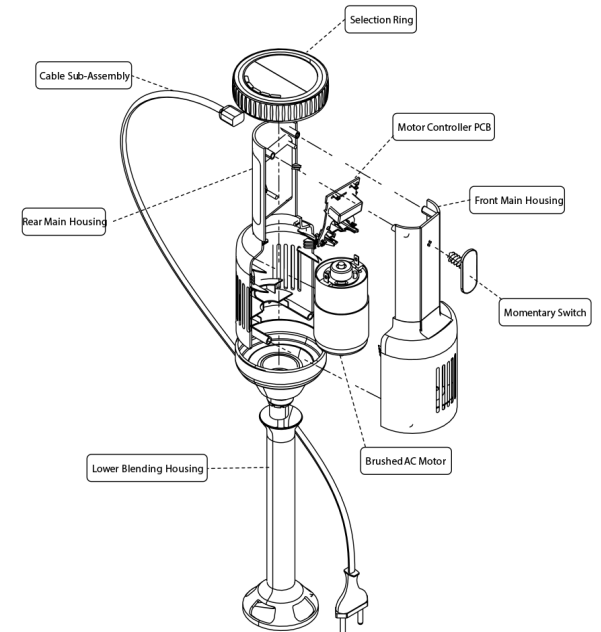
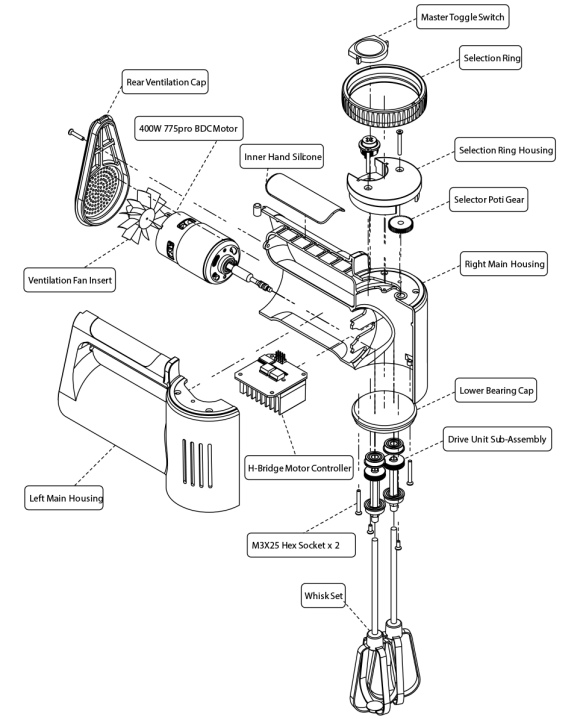
The students of DES3001 were tasked with designing a set of small electrical kitchen appliances, including a mixer, blender, and chopper, along with their necessary accessories. Working in groups of three, they collaborated to define a target user and market, shaping a cohesive product identity and concept. While each student was responsible for a specific appliance, the design process was guided by group critiques, reinforcing the motto: "One for all, all for one." Beyond aesthetics, the project emphasized branding, including logo and marketing elements, as well as detailed production considerations to ensure manufacturability.

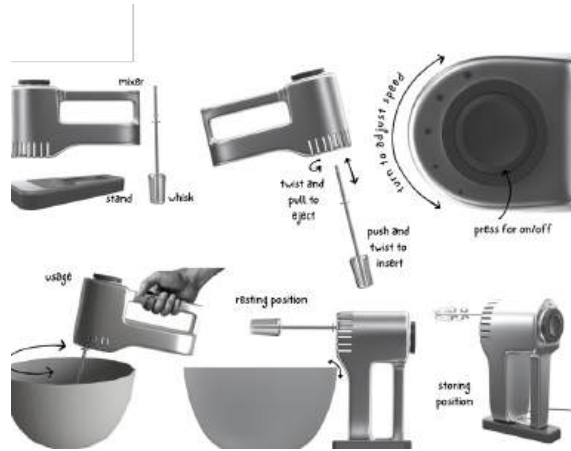
DES 3001

Industrial Design III

DES3001 | Küchraft Electrical Kitchen Appliances Set Orhan Söylemez | Berfin Yalçın | Kuzey Yıldız

Küchraft is a set of small electrical kitchen appliances—including a mixer, blender, and chopper—designed for functionality, durability, and professional performance. With robust materials, thoughtful production details, and a focus on longevity, each product is built to withstand intensive use without compromising efficiency. Designed as reliable kitchen tools, they ensure a seamless cooking experience for users who value both practicality and lasting quality.





DES3001 | Haz Electrical Kitchen Appliances Set Halil Moralioglu | Abdulrahman Alaga | Zeynep Karaçoban

Designed with a matte metallic finish and clean, refined lines, this kitchen appliance set brings a balance of elegance and durability to the modern kitchen. The set includes a mixer, blender, and chopper, each crafted for seamless performance and long-lasting use. The cohesive design ensures a professional yet approachable feel, making these appliances reliable tools for everyday culinary tasks.



The students of DES3002 explored the design of Smart Product-Service Systems (SPSS)—technology-integrated product-service models aimed at enhancing users' quality of life through data collection, processing, and feedback. The project focused on SPSS solutions for indoor environments, addressing diverse user needs and considering stakeholder interactions, including manufacturers, distributors, and policymakers.

Throughout the process, students defined a system, developed a product, and designed a user feedback mechanism, ensuring seamless integration of detection, analysis, and transmission functions. The project outcomes covered various domains such as healthcare, consumer electronics, daily routines, education, and sustainability, with applications for individuals, shared users (e.g., caregivers and elderly), and non-tech-savvy groups.

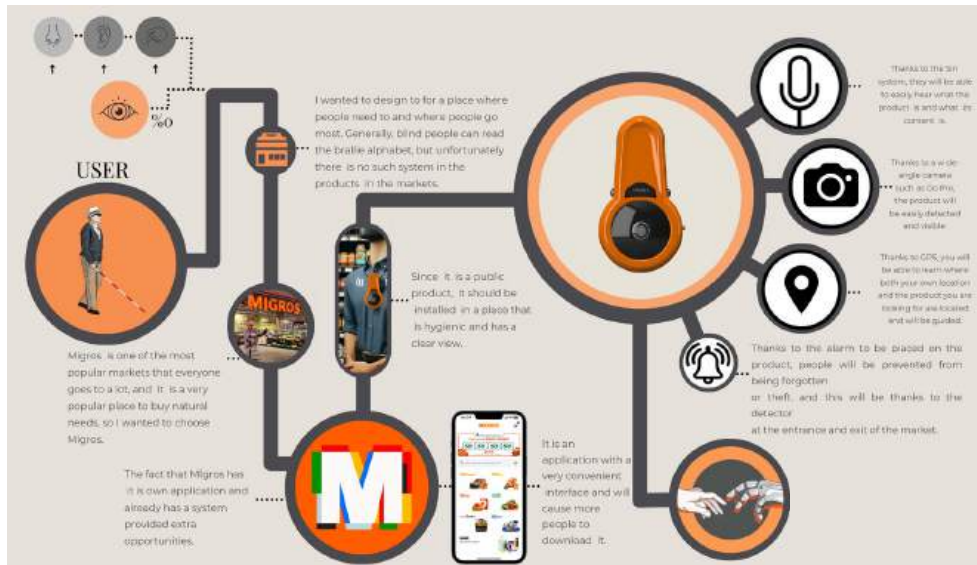
INSTRUCTORS

Renk Dimli Oraklibel
Bilgen Tuncer
Hakan Diniz

DES 3002

Industrial Design IV

Nobs is a smart product-service-system designed to assist blind and visually impaired individuals during grocery shopping. Combining a wearable device, a mobile app, and smart store integration, Nobs helps users navigate aisles, identify products and access detailed product information through audio feedback. By bridging accessibility gaps, Nobs empowers users to shop efficiently and safely, making everyday grocery trips more inclusive and seamless.



User comes to market



User can't read the packaging



User cant understand what is the product



Consultant welcomes user



Consultant comes to introduce the product



Because of the user cannot see, she understand it by touching it



User wear the t-shirt



Consultant cannot fit the product to the user



User ask how can we fit



The consultant shows that for such situations,



Consultant shows how to use



The user now uses the product alone



The user can find easily what she/he wants



The users happy and they can understand the packaging

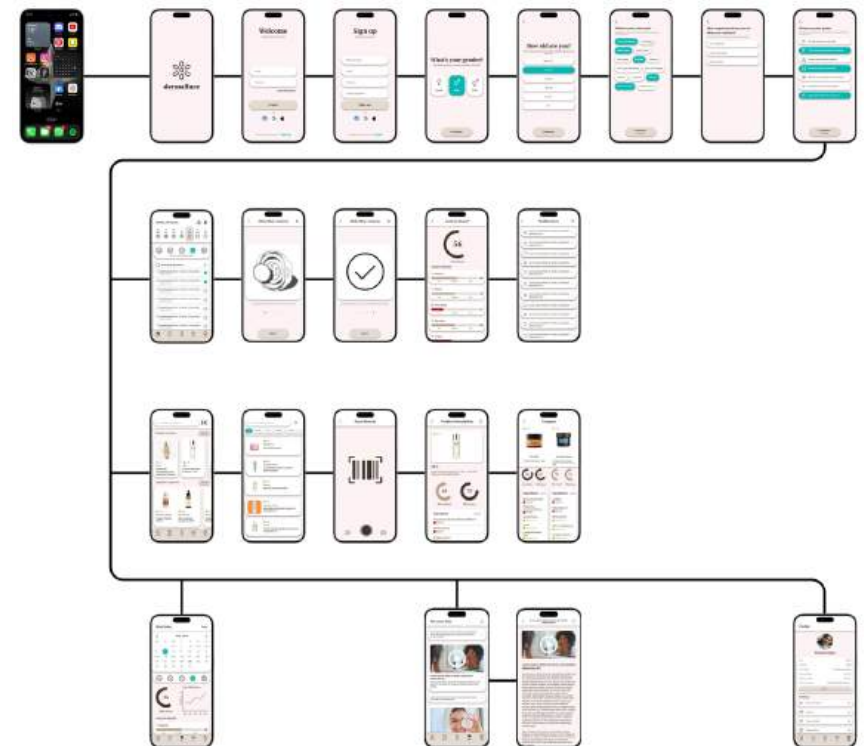
Storyboard





DES3002 | Dermalure | Teoman Oguz

Dermalure is a smart product-service system designed for individuals who care about their skin and want to understand, track, and improve their skincare routine at home. By analyzing skin conditions over time, Dermalure provides personalized insights and recommendations, helping users make informed decisions about their skincare. Integrated with smart sensors and a companion app, the system detects skin changes, tracks product effectiveness, and encourages consistency in routines. Offering a seamless blend of technology and self-care, Dermalure transforms skincare into an interactive and data-driven experience.



DES4001 project explores the design of a compact, collapsible bicycle trailer that expands into a functional personal space, merging mobility with convenience. Designed for battery-powered bicycles, the trailer optimizes weight distribution and stability while ensuring ease of transport. The primary goal was to create a structure that remains compact when closed but expands to accommodate specific user needs—such as sleeping, sitting, or selling—enhancing outdoor experiences. The project focused on defining a lifestyle-driven user scenario, considering ergonomics, assembly processes, and material choices. Technical solutions for the chassis, movement transmission, and rotation mechanisms were integrated, allowing for smooth operation and adaptability to various terrains. The final design balances structural integrity, lightweight materials, and collapsibility to create a seamless user experience. By combining human-centered design with functional innovation, this project reimagines the potential of bike trailers as versatile, sustainable micro-living spaces.

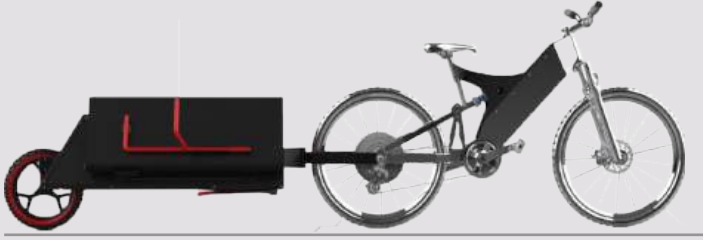
Elçin Tezel
Murad Babadağ
Gökhan Akış

DES 4001

Industrial Design V

DES4001 | Terradome | Çağıl Uyaroğlu

Terradome is a one-wheel bicycle trailer designed for solo campers seeking mobility across diverse terrains. Its collapsible, portable design ensures easy transport and setup, while the 3mm aluminum structure provides a balance of strength and lightweight durability. The main body offers ample storage, supporting adventurers with essential gear.

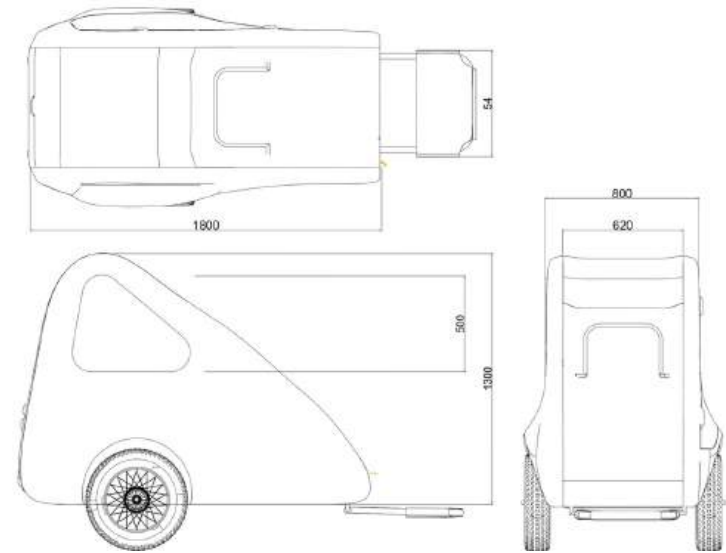


Engineered for seamless conversion and adaptability, Terradome utilizes structural tensions to enhance stability and performance, making it an ideal companion for off-road exploration.



DES4001 | Surfcart| Şevval Mumcu

Surfcart is a multifunctional mobile unit designed for surfers, combining transport, storage, and relaxation features in a compact design. It ensures optimal surfboard carrying at the best angle for stability, along with dedicated compartments for food, drinks, and surfing gear, including wetsuits. Designed for seaside adventures, it features an integrated sleeping space for overnight stays and a semi-open chill area for relaxation. Built with a durable yet lightweight fiberglass and aluminum U-profile chassis, with polypropylene (PP) inner components, Surfcart offers an efficient, organized, and comfortable solution for surfers who seek convenience both on and off the waves.



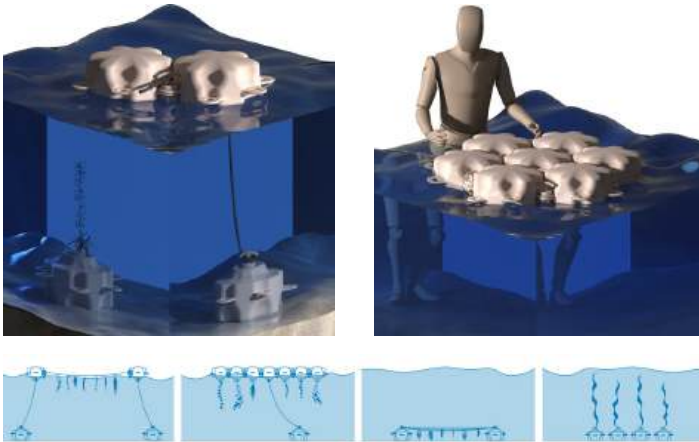
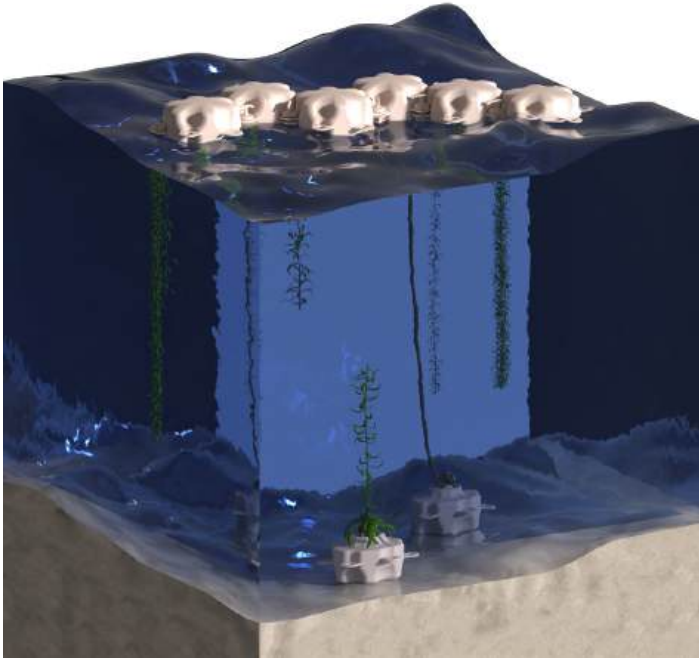
In their final semester, DES4002 students tackled pressing global challenges by designing for sustainable development, aligning with six key UN Sustainable Development Goals: Zero Hunger, Good Health and Well-being, Quality Education, Clean Water and Sanitation, Affordable and Clean Energy, and Sustainable Cities and Communities. Through in-depth research and iterative design processes, students identified critical problems, formulated design briefs, and developed innovative solutions addressing social, environmental, and economic sustainability. The project involved multiple stages, including problem definition, concept development, prototyping, and refinement, culminating in a final presentation to a jury. Focusing on real-world impact, the students explored diverse solutions, from products and systems to services and policy innovations. Their projects demonstrate a professional level of research, creativity, and responsibility, showcasing how design can drive meaningful transformation for a more sustainable future.

INSTRUCTORS

Elçin Tezel
Murad Babadağ
Gökhan Akış

DES 4002

Graduation Project



DES4002| Algeo | Burak Oğlakçı

ALGEO is a farming tool which is designed for increasing seaweed production and industrializing seaweed farms. Aim of the ALGEO is mimicking traditional farm techniques without drastically changing them, drawing attention of potential investors, and decreasing pollution caused by wrong upcycle of plastic wastes.

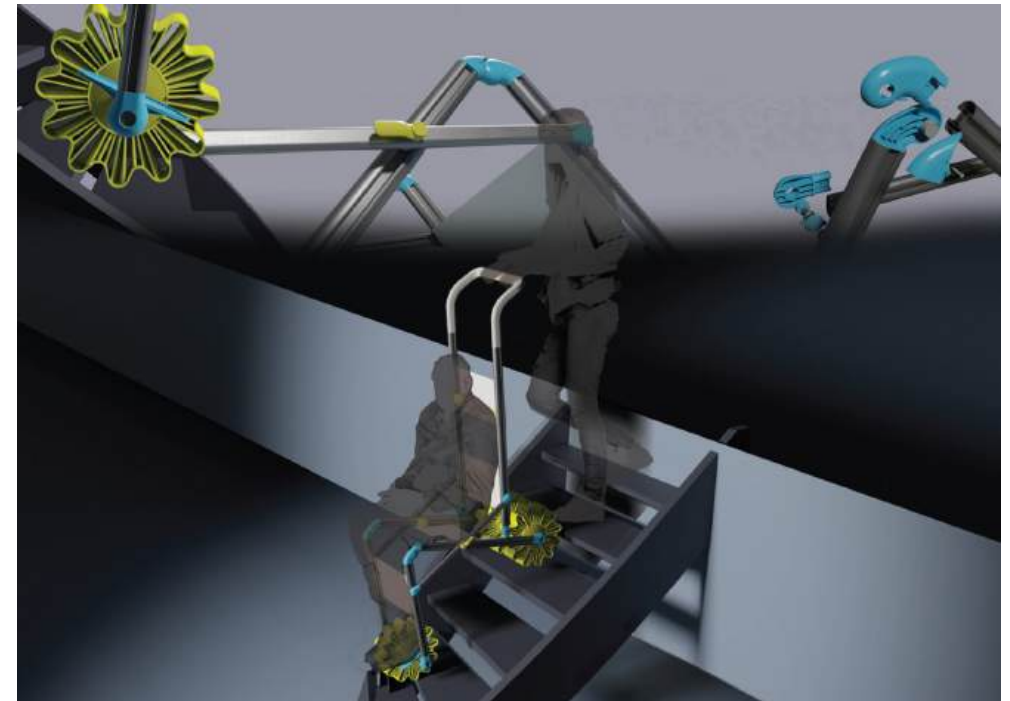
DES4002 | Tritepe | Ayşe Etkü Öner

Tritepe is a dual-ownership transportation chair designed to evacuate patients through high-rise building stairs.

The Tritepe Chair uses 3D-printed airless tire technology to safely transfer patients through stairs. The unique mechanical properties of airless tires provide soft sliding on stairs, even when operated by a single user.

One of the most critical points during patient transfer is when they are carried by holding their body parts. Whether they are conscious or not, patients cannot fully express their discomfort during the transfer, especially in an emergency. To ensure safe transfer onto the Tritepe chair, the helper can use a transfer vest to secure the user's correct body position, avoiding unintentional harm.

Instead of complex systems and locks that need to be memorized by the chair operator, Tritepe only uses a single lock system. This lock is located on the sides of the chair, allowing the operator to swiftly locate and use it both to open the chair to its operational state and lock it at the predetermined angle for transport through stairs or on the ground.





DES4002 | Ardena | Alp Pinar

Ardena is a modular indoor vertical farming system designed for easy and efficient home cultivation. It enables users to grow fresh produce such as lettuce, basil, parsley, red cabbage, coriander, and kale, offering a space-saving and sustainable solution for urban living.

