INDUSTRIAL DESIGN (ID)

ID 6100. Introduction to Graduate Studies in Industrial Design. 3 Credit Hours.
Introduction to the theory and practice of graduate studies in Industrial Design in relation to human-centered design, assistive technology, interaction, product system design, usability, user experience, interface, and instructional design.

ID 6101. Human Centered Design. 3 Credit Hours.
This course examines design artifacts in relation to the human body, aging, disabilities, and environments with a perspective of human-centered methodology that includes data gathering, analysis, and usability.

ID 6102. Graduate Studio A. 4 Credit Hours.
Studio introduces the MID certificate in Design. The ID studio class stands at the heart of design education and professional practice. Industrial Design is considered from a strategic perspective. Assignments explore the business, technology and use experience components.

ID 6103. Graduate Studio B. 4 Credit Hours.
This course is a project-based ID studio that gives students an overview of and practice with the insights-driven, iterative ID process.

ID 6104. Rapid Design Vis. 2 Credit Hours.
This course trains students in the basics of sketching and free hand drawing needed in the Industrial Design studio environment.

ID 6105. Brand and Visual Design. 3 Credit Hours.
This course introduces the principles of branding and visual identity. It emphasizes branded experiences in a service/product/mobile context.

ID 6106. 3D Design Methods. 2 Credit Hours.
This course teaches students about the 3D digital tools needed to develop products for human form. By learning how to model, render and animate, students can better express their research, ideations and designs.

ID 6107. Integrated Product Design. 3 Credit Hours.
Introduction to smart products teaches students to create IOT products. Students work with sensors and signals, U/I design, and multi-platform prototyping.

ID 6108. Survey of Industrial Design History. 3 Credit Hours.
This course surveys the history of industrial design from the Industrial Revolution to contemporary times.

ID 6109. Human Factors and Ergonomics. 3 Credit Hours.
This course teaches students about the human perspective in design, research, and interactions with physical and interface products. Students learn about tools and techniques used instructional design, human-computer interaction, product design, user-centered design, and usability.

ID 6200. Industrial Design Graduate Studio I. 6 Credit Hours.
Graduate application of the design process to advanced multidisciplinary design problems. Experience in solving real design problems for consumer products.

ID 6201. Industrial Design Graduate Studio II. 6 Credit Hours.
Graduate-level application of the design process to advanced multidisciplinary problems.

ID 6211. Graduate Studio One. 4 Credit Hours.
This course introduces the design program philosophy, human-centered design and evidence-driven research from a strategic perspective. Assignments explore the technology, business, and user experience components in the design process and validate the final design with advanced usability tools and methods.

ID 6212. Grad Studio Two: Health and Wellness. 4 Credit Hours.
This course explores the application of systematic product design methods to projects that focus on the design of new and/or improved health products, interactions, and delivery of services.

ID 6213. Grad Studio Two: Interactive Products. 4 Credit Hours.
This course explores the application of systematic product design methods to projects that focus on the design development of new/or improved interactive or smart products.

ID 6214. Strategic Design Language. 3 Credit Hours.
Introduction to techniques to help designers clarify and support design ideas in a strategic business context by exploring methods to better leverage visual design skills.

ID 6215. Service Design. 3 Credit Hours.
This course introduces best practices of service design and focuses on the alignment and design of multiple brand touch points to optimize customer experience.

ID 6216. Service Design, Brand and Value Creation. 3 Credit Hours.
This course introduces students to how data gathering and analysis, perception, visual, product, interface, and service design align to optimize user experiences that drive business service and value creation.

ID 6271. Healthcare Design of the Future. 3 Credit Hours.
Introduction to research-based approaches to integrated healthcare design innovation.

ID 6400. Master's Project. 1-21 Credit Hours.
Under the guidance of a faculty member, students explore a design project that relates to advance theoritical research through a human prespective with a design and/or technology focus on a product. The project may include areas in instructional design, human-computer interaction, learning, neuroscience, perception, product design, user-centered design, and usability.

ID 6401. Visualizing Interaction. 3 Credit Hours.
Introduction to techniques that empower designers to plan and create effective and clear visual communication depicting the interaction and relationships between people, products, and services.

ID 6403. Intro to Thesis Studies. 3 Credit Hours.
This introduction to thesis course helps students understand the human-centered research methods, analytical tools, and design processes used in developing a thesis or project in graduate studies.

ID 6420. Advanced Sketching. 3 Credit Hours.
This class will focus on developing advanced, traditional (non-digital) sketching, rendering, and presentation techniques.

ID 6506. Parametric Product Modeling. 3 Credit Hours.
This graduate course focuses on advanced digital methods in product modeling for visual analysis, flexible design approaches and digital fabrication methods.

ID 6508. Shape Grammars. 3 Credit Hours.
Shape grammars are a powerful formal system for the generative description, interpretation and evaluation of designs.

ID 6509. Computation, Creativity and Design Cognition. 3 Credit Hours.
This course investigates computational methods, models, tools that support design creativity and cognition. Credit not allowed for both ID 6509 and ARCH 6509.

ID 6510. Design for Interaction: Working with New Technologies. 3 Credit Hours.
This course examines opportunities for designers to leverage visualization and prototyping methods to foster new applications of technology to enhance user experience in everyday life.

ID 6515. Interface Prototyping: Exploring Tools & Theories. 3 Credit Hours.
This course focuses on interface prototypes, how these are used throughout the design process and the varity of ways they can be created with different technologies. Through interface prototypes, students learn how to express their research, receive user feedback, explore user perceptions, and improve their designs.

ID 6520. Crafting Design Methods. 3 Credit Hours.
Traditional craftwork and how we can use material change, scale shifts, methods of manufacture, and algorithmic analysis to incorporate and revitalize these traditions into design.

ID 6620. Soft Goods Design. 3 Credit Hours.
This graduate course focuses on product opportunities highlighting user benefits from soft material integration.

ID 6753. Human-Computer Interaction Professional Preparation and Practice. 1 Credit Hour.
Preparation for a professional career in HCI. Hands-on workshops in resume and portfolio building, interviewing, public speaking, team work. HCI career choices and trajectories.

ID 6763. Design of Interactive Environments. 3 Credit Hours.
Investigate and design ambient, intelligent, interactive interfaces and computational applications in tangible and physical environment to support health, wellness and quality of life. Credit not allowed for both ID 6763 and COA 6763 or CS 6763.

ID 6800. Investigations of Universal Design in the Built Environment. 3 Credit Hours.
This course provides an advanced level to universal design focusing on the implications of ability on the usability of places, products, and systems for all individuals.

ID 6820. Web Design, Usability and Accessibility. 3 Credit Hours.
This course will teach students the fundamentals of web design and usability issues in online environments, with an emphasis on universal design principles and accessibility.

ID 6830. Wearable Tech for Health. 3 Credit Hours.
This course explores the future of wearable technologies for health by adopting various human-centered design methodologies to meet users' needs, abilities, and expectations.

ID 6998. HCI Master's Project. 1-9 Credit Hours.
Final project for students completing a Human-Computer Interaction master's degree in the Digitial Media track. Repeatable for multi-semester projects.

ID 7000. Master's Thesis. 1-21 Credit Hours.
Under the guidance of a faculty member, students explore advance theoretical research through a human perspective in areas instructional design, human-computer interaction, learning, neuroscience, perception, product design, user-centered design, and/or usability.

ID 7655. Designing For Curiosity. 3 Credit Hours.
This course focuses on the development of research-through-design skills particular to their application in interaction design.

ID 8802. Special Topics in ID. 2 Credit Hours.
Special Topics in Industrial Design.

ID 8803. Special Topics. 3 Credit Hours.
Special Topics in Industrial Design.

ID 8804. Special Topics. 4 Credit Hours.
Special Topics in Industrial Design (lecture and supervised lab).

ID 8900. Special Problems. 1-21 Credit Hours.
Special problems in industrial design.

ID 8903. Special Problems in Human-Computer Interaction. 1-3 Credit Hours.
Small-group of individual investigation of advanced topics in human-computer interaction. Guided study and research.

ID 8997. Teaching Assistantship. 1-9 Credit Hours.
For graduate students holding graduate teaching assistantships.

ID 8998. Research Assistantship. 1-9 Credit Hours.
For graduate students holding graduate research assistantships.