INDUSTRIAL DESIGN (ID)

ID 1011. Industrial Design Fundamentals 1. 2 Credit Hours.
Theory and practice in Industrial Design including an introduction to process, methodology, ergonomics, research tools and user research. Focus is on fundamental design principles.

ID 1012. Industrial Design Fundamentals 2. 2 Credit Hours.
Theory and practice in Industrial Design including an introduction to process, methodology, ergonomics, research tools and user research. Focus is on CAD and digital prototyping.

ID 1101. Introduction to Industrial Design 1. 1 Credit Hour.
Introduction to Industrial Design ♦ a survey of evolving diverse career options and the designer's impact on society. Emphasis on traditional product design, research, and strategy.

ID 1102. Introduction to Industrial Design 2. 1 Credit Hour.
Introduction to Industrial Design ♦ a survey of evolving diverse career options and the designer's impact on society. Emphasis is on user experience and interaction design.

ID 1401. Introduction to Graphic Communications 1. 1 Credit Hour.
Introduction to graphic design, composition, layout, color, typography, photography, social media & videography. Emphasis of this first course is on development of basic visual literacies.

ID 1402. Introduction to Graphic Communications 2. 1 Credit Hour.
Introduction to graphic design, composition, layout, color, typography, photography, social media & videography. This second course in the sequence will emphasize digital skill development.

ID 1418. Introduction to Sketching and Modeling 1. 1 Credit Hour.
Introduction to basic visual representation techniques that empower designers of products, services and systems through sketching, model making, computer-assisted drawing, rapid prototyping, and other methods.

ID 1419. Introduction to Sketching and Modeling 2. 1 Credit Hour.
Introduction to intermediate visual representation techniques that empower designers of products, services and systems through sketching, model making, computer-assisted drawing, rapid prototyping, and other methods.

ID 1XXX. Industrial Dsgn Elective. 1-21 Credit Hours.

ID 2011. Introductory Design I. 4 Credit Hours.
Foundation course in visual communications theory and practice, continuing the development of two-dimensional visual literacy. Emphasis on both analog and digital media.

ID 2012. Introductory Design II. 4 Credit Hours.
Foundation course in form giving and representing, continuing the development of three-dimensional visual literacy. Emphasis on visual relationships between form and image.

ID 2021. Industrial Design Studio 1. 4 Credit Hours.
This course provides an introduction to the design process on visual principles and presentation techniques with a focus on sketching and modeling techniques related to 3D form.

ID 2022. Industrial Design Studio 2. 4 Credit Hours.
This course applies more structured design methods to research and exploration of product form and function and introduces concepts of universal design and user centered design.

ID 2023. Industrial Design Studio 1. 3 Credit Hours.
This course applied structured design methods to research and exploration of product form and function and introduces concepts of user centered design.

ID 2024. Industrial Design Studio 2. 3 Credit Hours.
This course applies more structured design methods to research and exploration of product form and function and introduces concepts of universal design.

ID 2101. Digital Design Methods. 3 Credit Hours.
This course introduces the basics of product design in the CAD environment. Students design a product, apply 3D scanning, produce an animation and 3D print.

ID 2102. 3D Modeling. 2 Credit Hours.
This course introduces 3D modeling methods for solid and surface modeling in CAD software. Students create multi-component assembly drawings and explore product rendering techniques.

ID 2201. Sustainable Issues for Design. 3 Credit Hours.
Introduction to the broad environmental issues that face humankind as a participant in the biosphere.

ID 2202. History of Modern Industrial Design. 3 Credit Hours.
History and development of industrial design from the beginning of the Industrial Revolution to the present.

ID 2301. Sustainable Issues for Design. 3 Credit Hours.
This course examines the theory of Human Factors to provide a working knowledge of the physical and cognitive attributes of people that designers must accommodate.

ID 2320. Human Factors in Design. 3 Credit Hours.
This course introduces students to user-centric design methods used to identify, understand, assess and prioritize the factors that contribute to more effective design solutions.

ID 2401. Visual Design Thinking. 3 Credit Hours.
Introduction to techniques to help designers build a vocabulary to support effective visual communication including fundamentals of layout, sketching, rendering, schematics, information graphics & storyboarding.

ID 2510. Introduction to Smart Product Design. 3 Credit Hours.
This course provides an introduction to smart product design including the basics of sensor technologies, electronics and programming required to produce working product concept prototypes.

ID 2698. Undergraduate Research Assistantship. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ID 2699. Undergraduate Research. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ID 2XXX. Industrial Dsgn Elective. 1-21 Credit Hours.

ID 3011. Intermediate Design I. 5 Credit Hours.
The systematic design process as applied to industrial design and packaging problems.

ID 3012. Intermediate Design II. 5 Credit Hours.
Various dimensions of human factors applied to design, including: aging, disability, normal age change, childhood and adult anthropometrics, and human capability.

ID 3031. Health Design Studio 1. 4 Credit Hours.
The application of systematic design methods to projects focused on the design development of new and/or improved health-related products with an emphasis on inclusive design.
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ID 4203. French Society and Culture. 3 Credit Hours.
Studies in French society and culture.

ID 4204. Theorizing Design. 3 Credit Hours.
Introduction to what designers do and how they undertake their tasks; examples will come from a variety of design disciplines.

ID 4205. French Design and Culture. 3 Credit Hours.
Studies in French design and culture.

ID 4206. Culture of Objects: A Seminar on the Design and Culture of Objects. 3 Credit Hours.
This seminar surveys the theories and methodologies within the field of industrial design that locate meaning in the designed object as derived from culture.

ID 4210. Introduction to Universal Design in the Built Environment. 3 Credit Hours.
This course provides an introduction to universal design focusing on the implications of ability on the usability of places, products, and systems for all individuals.

ID 4320. Prototyping Interaction: Designing for Experience. 3 Credit Hours.
This course exposes students to a range of practical methods for research and design exploration to support the design development of interactive products and technologies.

ID 4418. Design Sketching. 3 Credit Hours.
This course addresses drawing and visualization techniques necessary for design thinking and development and introduces methods and processes to formulate and present visual information.

ID 4450. Developing a Professional Design Portfolio. 3 Credit Hours.
The portfolio development course provides students with a structured approach to preparing a professional visual record of their work in print and digital formats.

ID 4510. Wearable Product Design. 3 Credit Hours.
Wearable Product Design explores techniques in producing designs and prototypes for on-body interactions, and general textile knowledge for making effective wearable products.

ID 4698. Undergraduate Research Assistantship. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ID 4699. Undergraduate Research. 1-12 Credit Hours.
Independent research conducted under the guidance of a faculty member.

ID 4803. Special Topics: Furniture. 3 Credit Hours.
Special topics in furniture design not covered in the professional curriculum.

ID 4813. Special Topics: Sustainability. 3 Credit Hours.
Special topics in sustainability not included in the professional curriculum.

ID 4823. Special Topics: Information Technology. 3 Credit Hours.
Special topics in information technology not included in the professional curriculum.

ID 4833. Special Topics: Collaborative. 3 Credit Hours.
Application of the design process to advanced multidisciplinary problems by a team. Projects from a range of interest areas: consumer, industrial products, transportation, furniture.

ID 4843. Special Topics: History and Theory. 3 Credit Hours.
Special topics in history and theory not included in the professional curriculum.

ID 4900. Special Problems: Visual Communications. 1-21 Credit Hours.
Special problems in communication not covered in the professional curriculum.

ID 4901. Special Problems: Mentor Program. 1-21 Credit Hours.
Special problems in teaching pedagogy; mentoring by senior faculty in basic and intermediate design courses.

ID 4902. Special Problems: Mentor Program. 1-21 Credit Hours.
Special problems in teaching pedagogy; mentoring by senior faculty in basic and intermediate design courses.

ID 4903. Special Problems: Research. 1-21 Credit Hours.
Special research topics for advanced students not covered in the professional curriculum.

ID 4904. Special Problems: Research. 1-21 Credit Hours.
Special research topics for advanced students not covered in the professional curriculum.

ID 4XXX. Industrial Dsgn Elective. 1-21 Credit Hours.