SCHOOL OF DESIGN

- Design for Sustainability (https://catalog.scad.edu/school-design/design-sustainability/)
  - Design for Sustainability, MA (https://catalog.scad.edu/school-design/design-sustainability/design-for-sustainability-ma/)
  - Design for Sustainability, MFA (https://catalog.scad.edu/school-design/design-sustainability/design-for-sustainability-mfa/)
- Graphic Design (https://catalog.scad.edu/school-design/graphic-design/)
  - Graphic Design and Visual Experience, MA (https://catalog.scad.edu/school-design/graphic-design/graphic-dsgnvisual-exper-ma/)
  - Graphic Design and Visual Experience, MFA (https://catalog.scad.edu/school-design/graphic-design/graphic-dsgnvisual-exper-mfa/)
  - Graphic Design, BA (https://catalog.scad.edu/school-design/graphic-design/graphic-design-ba/)
  - Graphic Design, BFA (https://catalog.scad.edu/school-design/graphic-design/graphic-design-bfa/)
- Industrial Design (https://catalog.scad.edu/school-design/industrial-design/)
  - Industrial Design, BFA (https://catalog.scad.edu/school-design/industrial-design/industrial-design-bfa/)
  - Industrial Design, MA (https://catalog.scad.edu/school-design/industrial-design/industrial-design-ma/)
  - Industrial Design, MFA (https://catalog.scad.edu/school-design/industrial-design/industrial-design-mfa/)
- Service Design (https://catalog.scad.edu/school-design/service-design/)
  - Service Design, BFA (https://catalog.scad.edu/school-design/service-design/service-design-bfa/)
  - Service Design, MA (https://catalog.scad.edu/school-design/service-design/service-design-ma/)
  - Service Design, MBI (https://catalog.scad.edu/school-design/service-design/service-design-mbi/)
- User Experience (https://catalog.scad.edu/school-design/user-experience/)
  - User Experience (UX) Design, BFA (https://catalog.scad.edu/school-design/user-experience/user-experience-design-bfa/)
  - User Experience Design, MFA (https://catalog.scad.edu/school-design/user-experience/user-experience-design-mfa/)
- User Experience Research (https://catalog.scad.edu/school-design/user-experience-research/)
  - User Experience Research, BFA (https://catalog.scad.edu/school-design/user-experience-research/user-experience-research-bfa/)

Design for Sustainability

SUST 304 Theories and Methods in Sustainability (5 Credits)
Current methods and theories of sustainability are explored through a series of presentations, discussions and short projects. This course capitalizes on holistic design processes and project planning with the goal of closed system developments, while concentrating on the four pillars of sustainability (Ecology, Economy, Equality, Education).
Attributes: Natural Sciences

SUST 308 Foundation of Sustainable Materials (5 Credits)
Students work in a highly interdisciplinary environment, researching and analyzing sustainable materials as they pertain to the different disciplines. Through a series of lectures and exemplary projects, students gain an understanding of the implications of the use of materials and the effects of their supply chains on the environment. Transportation and local production are key components in solving current issues in manufacturing standards.
Prerequisite(s): DRAW 100 or FOUN 111.
Attributes: Studio Elective Requirement

SUST 384 Design for Sustainability (5 Credits)
The concept of "green design" is introduced and integrated into design projects. Specific techniques, guidelines and examples are used to emphasize the practical aspects of green design. Valuable case studies are included. While considering the profitability of the product, students are required to design in a way that benefits the global environment.
Prerequisite(s): SUST 304 or SUST 290.
Attributes: Studio Elective Requirement

SUST 439 Biomimicry: Collaborative, Nature-inspired Innovation (5 Credits)
Borrowing from nature's genius is essential for creative professionals in all design fields, as the possibilities for applying natural strategies to innovative design solutions are endless. Given the importance of creating sustainable living in the 21st century, designers practicing biomimicry thinking enhance their career opportunities by mastering the biomimicry framework. Students may obtain the Biology to Design Certificate from Biomimicry 3.8 as part of this course.
Prerequisite(s): INDS 210; FASH 216; FASH 315; FIBR 276; ARCH 301; FURN 302; JEWL 304; MTJW 304; SERV 311; SCPT 320; IDUS 321 or GRDS 348.
Attributes: Studio Elective Requirement

SUST 704 Applied Theories in Sustainability (5 Credits)
Using critical inquiry to define an epistemological framework, students combine traditional systems and social theories with sustainable practices—such as biomimicry, life cycle assessment and economic responsibility—to create ethical solutions.

SUST 708 Principles of Sustainable Materials (5 Credits)
Students evaluate the appropriate use of re-usable and biodegradable materials when designing for a closed loop system. Working in an interdisciplinary environment, students analyze the effect sustainable materials, stewardship and logistics have on the environment, economy and current standards of living.

SUST 713 Innovation in Sustainable Branding (5 Credits)
In an interdisciplinary environment, students collaborate to create and apply sustainable methodologies to innovative products, environments or services that transform current user needs and behaviors into meaningful sustainable solutions. The concept of sustainability is integrated into the students' design and development processes with the specific intent to drive consumer behavior change through strategic business practices. Innovative sustainability strategies are leveraged to enhance brand equity and business performance.
Attributes: Studio Elective Requirement

SUST 718 Visualizing Sustainable Stories (5 Credits)
Exciting content coming soon!
Prerequisite(s): SUST 704.
Attributes: Studio Elective Requirement

SUST 720 Designing in Deep Time (5 Credits)
Students are exposed to super forecasting, anti-fragility, world making, and transformative scenario planning, exploring methodologies that reshape traditional approaches to complex social challenges to address extended time frames. Engaging with speculative design, design fiction, and indigenous ways of being and knowing, students navigate creative landscapes where paradigm-shifting ideation stimulates innovation. In co-creation workshops and rapid prototyping sessions, students participate in shaping worldviews and design narratives to address sustainability challenges. Exploring the similarities and differences in various cultural and scientific perspectives on the nature of time, students gain a nuanced understanding of temporal experiences.
Prerequisite(s): SUST 704 and SUST 713.
Attributes: Studio Elective Requirement

SUST 738 Adaptive Strategies in Social Innovation (5 Credits)
Exciting content coming soon!
Prerequisite(s): DMGT 732.
Attributes: Studio Elective Requirement

SUST 739 Biomimicry Methodology (5 Credits)
Borrowing from natures genius is becoming an essential tool for creative professionals in all design fields. Keeping in mind the importance of creating sustainable living in the 21st century, students investigate biomimicry thinking, frameworks and existing case studies. Students may obtain the Biology to Design Certificate as part of this course.
Attributes: Studio Elective Requirement

SUST 743 Sustainable Living Laboratory (5 Credits)
This course focuses on design's influence on people's daily life, and identifies precise interventions that direct human habits toward more sustainable behavior. Students apply research in behavioral economics and cognitive psychology to help individuals alter long-term habits to enhance their positive impacts on the environment and society. Students develop design solutions that create viable sustainable behaviors and life practices.
Prerequisite(s): (SDES 711 or IDUS 711) and SUST 704.
Attributes: Studio Elective Requirement

SUST 748 Design for Sustainability M.A. Final Project (5 Credits)
In this final studio, M.A. students apply all previously acquired skills to develop a truly sustainable product, building, environment or service concept that addresses all aspects of the development process. Students integrate a closed loop system and demonstrate the understanding of the interdependence of the four E's (Ecology, Economy, Equality and Education). With the collaboration of the supervising professor, students must demonstrate command of project planning, development and realization for the topic of their choice.
Prerequisite(s): SUST 713 and minimum score of 5 in 'Graduate Prerequisite Test'.
Attributes: Studio Elective Requirement

SUST 754 Beyond Sustainability: Ethical Interventions for Social Innovation (5 Credits)
Students learn to uncover and address root causes of complex challenges to create design interventions that dramatically enhance short-term and long-term conditions in society. With a focus on aligning various perspectives, needs and aspirations of different stakeholder groups, this class helps students create solutions that are mutually beneficial to all stakeholders and to society as a whole.
Prerequisite(s): DMGT 732.
Attributes: Studio Elective Requirement

SUST 779F Graduate Field Internship (5 Credits)
Students in this course undertake a field assignment under the supervision of a faculty member.

SUST 779T Graduate Teaching Internship (5 Credits)
Students in this course undertake a teaching assignment under the supervision of a faculty member.

SUST 791 Design for Sustainability M.F.A. Thesis I: Planning and Research (5 Credits)
Students conduct comprehensive research to define a ground-breaking sustainable solution to a real problem as outlined in their personal proposal. They create a solid theoretical foundation for a unique contribution to the field that improves quality of life, maximizes economic returns and minimizes consumption of resources. This becomes the framework for the generation of their final design solutions.
Prerequisite(s): SUST 713 and minimum score of 6 in 'Graduate Prerequisite Test'.
Attributes: Studio Elective Requirement

SUST 792 Design for Sustainability M.F.A. Thesis II: Design Execution (5 Credits)
Based on the opportunities identified in the comprehensive research conducted in the previous thesis course, students continue the process by developing concepts that expands the profession's body of knowledge. Students demonstrate leadership skills for the creation and management of effective sustainable design strategies. Students produce a comprehensive written thesis document in conjunction with a conclusive presentation that demonstrates mastery in integrating cross-disciplinary, collaborative, multi-stakeholder and multicultural strategies and methods to generate innovative approaches to solving complex sustainability problems.
Prerequisite(s): SUST 791.
Attributes: Studio Elective Requirement

Graphic Design

GRDS 201 Introduction to Graphic Design (5 Credits)
In this comprehensive introduction to the field of graphic design, students explore the principles, techniques, and tools of the profession. Students study various fundamental aspects of discipline, including typography, composition, visual hierarchy, and design elements. Through the combination of text, images, and messaging, in a variety of communications modes and media, students effectively deliver messages to targeted audiences and incite the intended reaction.
Prerequisite(s): (DSGN 101 or FOUN 112) and DIGI 130.
Attributes: Studio Elective Requirement

GRDS 205 Typography I: Anatomy, Form, and Purpose (5 Credits)
In this foundational study of typography, students focus on the anatomy of letterforms, their visual characteristics, and their functional significance in various design contexts. Students explore how typographic choices can convey myriad meanings, evoke specific moods, and strategically enhance effective communication.
Prerequisite(s): ITGM 130; GAME 130; MOME 130; ADBR 150; ADVE 130; GRDS 201; MATH 204; ILLU 100 or UXDG 101.
Attributes: Studio Elective Requirement

GRDS 229 The Evolution of Graphic Design (5 Credits)
In this course, students explore the historical developments, key movements, and influential figures that have shaped the field of graphic design. Students connect the historical foundations of graphic design's early origins to the profession's evolution alongside advancements in technology, cultural shifts, and artistic movements.
Prerequisite(s): (CTXT 121 or ARTH 100) and (CTXT 122 or ARTH 110).

GRDS 285 Production for Physical Environments (5 Credits)
In this course, students gain a comprehensive understanding of the production processes and techniques involved in creating content for 2D and 3D environments. Students create printed and fabricated projects as well as high-fidelity environmental prototypes.
Prerequisite(s): GRDS 205; ADBR 212; ADVE 207 or ILLU 218.
Attributes: Studio Elective Requirement

GRDS 301 Audience, Behavior, and Influence (5 Credits)
This course will equip students with a deeper understanding and methods for creating memorable and effective communications that elicit anticipated actions. Students will explore the dynamic relationship between graphic design, audience, and the power of influence. Students will gain expertise creating design programs to shape opinions, attitudes, and behaviors, and will explore the importance of ethical considerations and responsible design practices.
Prerequisite(s): GRDS 285.
Attributes: Studio Elective Requirement

GRDS 323 Production for Digital Environments (5 Credits)
In this course, students gain a comprehensive understanding of the production processes and techniques involved in creating content for a wide range of digital platforms and environments. Students explore human-centered design, lo-fi to hi-fi development and prototyping, design-intent documentation, and file transfer. Emphasis is placed on conceptual development and structure, interactivity, and design aesthetics.
Prerequisite(s): GRDS 205 or (SDES 205 or ELDS 205) or (ADBR 212 or ADVE 207) or IDUS 231.

GRDS 348 Studio I: Production and Technique (5 Credits)
With a focus on Designer as Producer, students expand their strategic thinking skills and build knowledge of professional design and problem-solving strategies for complex projects across multiple media. Prioritizing tight deadlines, students work between media as they visualize optimal avenues for messaging while highlighting exceptional visual acumen.
Prerequisite(s): GRDS 285 or GRDS 323.
Attributes: Studio Elective Requirement

GRDS 353 Typography II: Language, Expression, and Media (5 Credits)
Building on the principles of Typography I, students explore the art of visual communication and storytelling and the expressive possibilities of typography. In this course, students experiment with a variety of productions methods, the integration of type and image, and motion media to create unique and complex compositions, develop meaning, and enhance the intended message.
Prerequisite(s): GRDS 348.
Attributes: Studio Elective Requirement

GRDS 360 Art of Poster Design (5 Credits)
Posters are designed to be both informative and influential tools of communication. This course introduces students to the many forms of poster design via content research and development, the creation of the conceptual image, hierarchy and typographic manipulations and the combination of these elements into a cohesive and powerful design.
Prerequisite(s): GRDS 353 and (GRDS 358 or GRDS 323).
Attributes: Studio Elective Requirement

GRDS 370 Data Visualization (5 Credits)
This course addresses visual problem-solving and emphasizes methods of translating complex data into clear, visually dynamic solutions. Topics include: corporate communication systems, publication, way-finding, interaction design, etc.
Prerequisite(s): UXDG 330; UXDG 390; GRDS 358 or GRDS 323.
Attributes: Studio Elective Requirement

GRDS 372 Corporate Identity (5 Credits)
Creative, ideational, image-making design, digital and traditional skills are necessary in this course to meet rigorous conceptual/visual standards pertinent to creating a brand and/or a company's identity. Through a few complex projects and numerous graphic design formats and applications, all major aspects of visual identity are emphasized and developed: logotypes, typographic sets, color palettes, photographic and illustration styles and appropriate project presentation formats.
Prerequisite(s): GRDS 358 or GRDS 323.
Attributes: Business-focused elective; Studio Elective Requirement

GRDS 374 Publication Graphics (5 Credits)
This course examines the graphic designer's role in the layout and design of publications. Lectures and studio work cover historical as well as current practices and technologies used to produce multi-page publications. Students produce visualizations for several publications using the elements of layout with typography and art.
Prerequisite(s): GRDS 358 or GRDS 323.
Attributes: Studio Elective Requirement

GRDS 376 Business of Graphic Design (5 Credits)
Whether working for an established business or bringing a start-up to life, learning to navigate the professional and business aspects of the graphic design industry is critical. While learning the ethical, legal, and financial strategies to create and run a profitable graphic design business, students bolster their collaboration skills in order to effectively build and maintain a client base. In this course, students develop the skills to deliver successful design solutions that align client goals, benefit audience needs, and unlock added business value.
Prerequisite(s): GRDS 358 or GRDS 323.
Attributes: Business-focused elective; Studio Elective Requirement

GRDS 378 Trademark and Logo Design (5 Credits)
Through examination of corporate identity creation, this course focuses on the criteria for an effective logotype and how design firms attach meaning to a single word through typography and color. These issues are explored through a series of assignments totally devoted to the design of effective trademarks and logotypes. Students are also introduced to the major identity firms through research and written analysis.
Prerequisite(s): GRDS 358 or GRDS 323.
Attributes: Business-focused elective; Studio Elective Requirement

GRDS 380 Alternative Design Approaches (5 Credits)
This course challenges students to address unusual design problems through conceptual and artistic innovation. Alternative uses of new media and traditional techniques are explored.
Prerequisite(s): GRDS 358 or GRDS 323.
Attributes: Studio Elective Requirement

GRDS 386 Package Design (5 Credits)
In this course, students explore 3D form and surface graphics by designing containers for a variety of products and constructing 3D prototypes.
Prerequisite(s): DIGI 130; FOUN 240 or DSGN 102.
Attributes: Studio Elective Requirement

GRDS 392 Exhibit and Environmental Graphics (5 Credits)
Students explore the ways in which exhibition and environmental graphics enhance the experience of the user community through interactivity with form and space. Working individually and in teams, students design and build scale models of their concepts for assigned projects.
Prerequisite(s): GRDS 353 and (GRDS 358 or GRDS 323).
Attributes: Studio Elective Requirement

GRDS 400 Studio II: Brand Direction and Activation (5 Credits)
Focused on the second paradigm; 'Designer as Director', students gain skills to concept, lead, and direct projects. Students advance their understanding of the planning and execution of viable solutions both as an individual contributor and as part of a team. Expanding professional practices and collaborations, students will learn to work with clients, craft briefs, direct multi-disciplinary teams and facilitate logistic pipelines to maximize tangible goals of a brand, or sector.
Prerequisite(s): (GRDS 348 and GRDS 353) or GRDS 358.
Attributes: Business-focused elective; Studio Elective Requirement

GRDS 402 Design for Social Issues (5 Credits)
This course addresses the designer's role in shaping the public narrative on social issues, causes and other needs-based topics. Students examine contemporary cultural, political and societal issues around the world that have an impact on our daily lives. They also learn how to design communication strategies that increase awareness, motivate, inspire or incite action from specific or broad audiences.
Prerequisite(s): GRDS 353 and (GRDS 358 or GRDS 323).
Attributes: Studio Elective Requirement

GRDS 405 Typography III: Type Design and Implementation (5 Credits)
This course explores type as innovation, with focus on unconventional and cutting-edge approaches to typography. Based on the development and implementation of an original typeface, students are challenged to push the boundaries of traditional typographic layout and explore innovative methods of expression, to create visually striking and conceptually rich designs that leave indelible impressions.
Prerequisite(s): GRDS 400.
Attributes: Studio Elective Requirement

GRDS 408 Graphic Design Professional Portfolio (5 Credits)
In this course, students focus on the development of a visually cohesive and engaging portfolio while bolstering their skills to build memorable narratives that exhibits their body of work to future clients, studios, and agencies. At the culmination of this course, students create a professional and impactful portfolio that showcases their skills and abilities in graphic design.
Prerequisite(s): GRDS 400.
Attributes: Business-focused elective; Studio Elective Requirement

GRDS 440 Studio III: Discovery, Innovation, and The Human Experience (5 Credits)
Focused on the third paradigm 'Designer as Author', students develop content messaging and focus on the distribution of self-authored communication. This course focuses on the twin practices of aggregation and curation in helping an audience navigate complex communications. Students will consider design opportunities which that aggregate services that cross business categories and engage users in the generation of content—coordinating a series of authored projects across new areas of human activity. In this entrepreneur-styled model, students learn to self-distribute content toward developing a targeted following.
Prerequisite(s): GRDS 405 and GRDS 408.

GRDS 479 Undergraduate Internship (5 Credits)
Internships offer students valuable opportunities to work in a professional environment and gain firsthand experience to help them prepare for careers. In an approved internship setting, a student typically spends one quarter working with an on-site professional supervisor and a faculty internship supervisor to achieve specific goals and objectives related to the program of study.

GRDS 480 Graphic Design Career Strategies and Launch (5 Credits)
This course will cultivate a comprehensive understanding of the graphic design industry, along with the acquisition of practical skills and strategies to amplify students career prospects. The course places emphasis on career trajectory, effective networking and communication, adept self-promotion, mastering the job application process, and the art of forging a successful graphic design career. Identification of potential career paths, potential locations, and opportunities within firms and agencies will equip students to establish valuable relationships that pave the way for fruitful employment prospects.
Prerequisite(s): GRDS 440.

Industrial Design

IDUS 100 Introduction to Industrial Design (5 Credits)
The course introduces students to the fundamentals of industrial design through hands-on projects in design thinking, sketching, prototyping, and presentation. Students will explore the creative process, develop essential visualization skills, and experience the joy of designing through iterative exercises and critiques.
Prerequisite(s): DSGN 102; FOUN 113 or FOUN 240.
Attributes: Studio Elective Requirement

IDUS 215 Contextual Research Methods (5 Credits)
This course presents the techniques necessary to conduct relevant and useful research of a novel domain in context. Students are expected to gain knowledge and expertise to contribute to the design process in user-centered products and systems in which user goals and task needs are given primary importance.
Prerequisite(s): IDUS 100; ARCH 101; ARCH 201; INDS 102; ITGM 130; GAME 130; FIBR 160; FURN 200; GRDS 201; GRDS 205; ADBR 212; ADVE 207 or SERV 216.
Attributes: Studio Elective Requirement

IDUS 225 Visualizing Ideas: Drawing for Designers (5 Credits)
The course enhances students' ability to visualize and communicate design ideas through drawing, using both traditional and digital tools. Emphasizing rapid perspective construction, visual storming, and concept refinement, students will develop fundamental sketching techniques to express ideation rationale clearly. Through exercises in line quality, weight variation, and product assembly visualization, students will gain confidence in illustrating and presenting their design concepts effectively.
Prerequisite(s): IDUS 100; FURN 201; SERV 216 or FOUN 245.
Attributes: Studio Elective Requirement

IDUS 227 Exploration through Visualization (5 Credits)
In this advanced course of industrial design visualization, students will improve efficiency, clarity, and impact in design sketching by immersing in the dynamic workflow of a professional design studio. Students will develop the ability to generate, iterate, and present concepts rapidly through multiple projects, mastering both traditional techniques and advanced digital rendering. Projects focus on creating compelling sketches to effectively communicate innovative design solutions and brand identity while integrating storytelling into ideation boards. By leveraging both standard and experimental digital tools, students will refine their workflow, optimizing the sketching process to meet professional standards.
Prerequisite(s): SDES 213 or IDUS 225.
Attributes: Studio Elective Requirement

IDUS 231 Digitizing Design Ideas (5 Credits)
The course introduces product design students to essential 3D modeling software, equipping them with the fundamental and practical skills needed to translate design ideas into digital form. Students will explore both surface and solid modeling techniques, learning how to construct, modify, and refine digital models for product visualization and development. Through hands-on exercises and project-based learning, they will gain proficiency in industry-standard tools, preparing them to integrate digital modeling into their design workflow effectively.
Attributes: Studio Elective Requirement

IDUS 241 Design Prototyping (5 Credits)
This course introduces students to the skills needed to create models using physical and digital methods. Students learn the fundamentals of basic workshop tools and safety while also receiving an introduction to digital prototyping equipment. Students develop an understanding of the workflow between digital and physical model development. Special emphasis is placed on assembly and manipulation of handmade and rapid-prototyped components.
Prerequisite(s): SDES 205 or IDUS 231.
Attributes: Studio Elective Requirement

IDUS 251 Theory of Industrial Design (5 Credits)
Theory of Design immerses students in the powerful theoretical foundations that revolutionized industrial design. Through an exploration of visionary pioneers, students will discover the transformative theories and methodologies that continue to shape our field today. Students will master essential design processes through hands-on exercises and real-world case studies. By developing a strong theoretical framework, students learn to confidently articulate and defend their design decisions, bridging the crucial gap between theory and practice. Students put theory into action, creating innovative solutions while gaining profound insights into how theoretical principles drive successful design outcomes in the professional world through design projects.
Attributes: Studio Elective Requirement

IDUS 252 Applied Design Thinking (5 Credits)
The course provides students with a comprehensive understanding of design criticism, enabling them to analyze, critique, and reflect on design work across various disciplines. Students will engage with key theories and methods of design critique, learn to write critical analyses, and develop the skills to participate in productive design dialogues. Through the study of historical and contemporary examples, students will become adept at articulating their observations and evaluating design with a deeper awareness of cultural, social, and ethical contexts.
Prerequisite(s): CTXT 122.
Attributes: Studio Elective Requirement

IDUS 311 Studio I: Development of Product Form (5 Credits)
The course explores the development of product form and design language, emphasizing the transition between 2D and 3D representations. Students will investigate form-giving principles, proportion, surface transitions, and material considerations to create compelling product aesthetics. By integrating sketching, digital modeling, and physical prototyping, students will refine their ability to communicate design intent effectively. The course fosters critical thinking and iteration, guiding students toward a deeper understanding of form in relation to function, brand identity, and user experience.
Prerequisite(s): (IDUS 241 and IDUS 225) or (IDUS 209 and SDES 213).
Attributes: Studio Elective Requirement

IDUS 318 Studio II: Design for Humans (5 Credits)
The course immerses students in human factors in design by exploring anthropometric data and cognitive aspects of user behavior. Through hands-on projects and iterative prototyping, students investigate both physical and cognitive ergonomics to develop innovative, user-centered solutions. Emphasizing empirical research and practical application, the course cultivates a deep understanding of designing for human interaction and equips future designers with the skills needed to address real-world challenges.
Prerequisite(s): (IDUS 241 and IDUS 225) or (IDUS 209 and SDES 213).
Attributes: Studio Elective Requirement

IDUS 321 Studio III: Design for Impact (5 Credits)
The course is an immersive studio experience that challenges students to address complex design issues with a focus on creating impact on market and society. Through a targeted design project, students navigate the entire product development process—from in-depth problem analysis to identifying strategic target users and crafting a cohesive design language. Emphasizing real-world applications, the course guides students in creating market-relevant solutions that drive positive societal change. Additionally, it prepares students to collaborate with industry professionals and stakeholders, thereby enhancing communication, critical thinking, and collaborative skills essential for success in today's dynamic design landscape.
Prerequisite(s): (IDUS 313 and IDUS 314) or (IDUS 227 and IDUS 341).
Attributes: Business-focused elective; Studio Elective Requirement

IDUS 331 Advanced Model Building (5 Credits)
This course offers advanced study and practice in the tools, techniques, materials and equipment used to construct professional-quality models and prototypes related to industrial design. Emphasis is placed on accuracy, realism and making multiple function prototypes. Workshop practice and safety are emphasized.
Prerequisite(s): IDUS 212; IDUS 209 or IDUS 241.
Attributes: Studio Elective Requirement

IDUS 332 Parametric Digital Form Development (5 Credits)
The course introduces students to parametric 3D modeling software, enabling them to create complex digital forms, assemblies, and simulations. Students will develop proficiency in industry-standard tools used in product development, gaining the ability to generate adaptive models that respond to design constraints. Emphasis is placed on integrating parametric design thinking into the iterative design process, enhancing collaboration between industrial designers and engineers. Through hands-on projects, students will refine their digital modeling skills to effectively develop, analyze, and communicate design intent in professional workflows.
Prerequisite(s): (SDES 213 or IDUS 225) and (SDES 215 or IDUS 215) or IDUS 231.
Attributes: Studio Elective Requirement

IDUS 341 Materials and Processes (5 Credits)
This course explores the relationship between design and production, covering both traditional and emerging materials and manufacturing processes. Through hands-on projects and case studies, students will learn how to select and apply specific materials to appropriate manufacturing processes, balancing performance, aesthetics, cost, and sustainability. Emphasis is placed on responsible material choices, circular design strategies, and innovations shaping the future of industrial production. Students will be equipped to design for manufacturing and assembly, ensuring their designs are optimized for efficient and effective production.
Prerequisite(s): IDUS 241; IDUS 209 or IDUS 250.
Attributes: Studio Elective Requirement

IDUS 360 Advanced Product Rendering (5 Credits)
Students develop the skills necessary to prepare high quality design presentations in mixed media. The course builds on the knowledge and skills developed in earlier courses.
Prerequisite(s): IDUS 250; IDUS 200 or IDUS 311.
Attributes: Studio Elective Requirement

IDUS 371 Professional Development (5 Credits)
The course explores career opportunities in industrial design, including roles as an in-house designer, design consultant, freelancer, and entrepreneur. Students will develop a strategic career plan, craft a compelling personal brand, and build a professional portfolio and resume. Emphasis is placed on effective self-presentation, networking strategies, and professional etiquette. Through hands-on activities, critiques, and a mock interview, students will gain the confidence and skills needed to transition successfully into the professional world of industrial design.
Attributes: Studio Elective Requirement

IDUS 401 Prototype Project Conceptualization (5 Credits)
By working with industry partners, students acquire a professional-level understanding of the challenges and opportunities that emerge when designers collaborate to translate initial concepts into full-scale mockups. In this course, students research human factors, aesthetic considerations, manufacturing requirements and market demands to identify user needs and product opportunities.
Prerequisite(s): IDUS 321.
Attributes: Studio Elective Requirement

IDUS 402 Prototype Project Construction (5 Credits)
For industrial designers, the ability to resolve mass production and assembly challenges is paramount for professional success. Through collaboration with industry partners, students engage in an iterative design process, employing creative problem-solving strategies to translate their design concepts into fully-operational prototypes.
Prerequisite(s): IDUS 321.
Attributes: Studio Elective Requirement

IDUS 410 Industrial Design Innovation (5 Credits)
This course explores the methods of identifying and developing inventive solutions to a wide range of design problems. Students are presented with design problems concerning user and function, which require them to develop the skills to devise, test and experiment with new design directions and solutions. The course also covers the means of protecting design ideas.
Prerequisite(s): IDUS 314.
Attributes: Studio Elective Requirement

IDUS 421 Studio IV: Design for Futures (5 Credits)
In this course, students will explore the intersection of design, technology, and society to create forward-thinking product systems that respond to the ever-evolving needs of tomorrow. This course empowers students to harness emerging technologies and anticipate societal shifts, enabling them to craft solutions that are not only innovative but also socially and environmentally responsible. Students will gain critical leadership skills, preparing them to guide design teams in navigating complex challenges and delivering impactful products. Through collaborative, multidisciplinary projects, participants will integrate insights from diverse fields—such as engineering, user experience, and sustainability—to create designs that have long-lasting relevance in a rapidly changing world. By the end of the course, students will be prepared to lead transformative design initiatives that improve lives and shape the future of technology and society.
Prerequisite(s): IDUS 321 or IDUS 319.
Attributes: Business-focused elective; Studio Elective Requirement

IDUS 471 Integrated Studio I: Inquiry and Product Intention (5 Credits)
The course focuses on the early stages of a complex and rigorous design process, guiding students from design inquiry to the formulation of a product intention. Through the exploration of significant and systemic issues, students will select a topic of their choice and embark on a comprehensive investigation. By applying research methods, critical thinking, and design tools, they will define a clear design challenge and develop an impactful design concept. This course lays the groundwork for future phases of a robust, on-going project, encouraging students to think deeply about the broader implications of their designs.
Prerequisite(s): IDUS 421; PRO 580 or CLC 580.
Attributes: Studio Elective Requirement

IDUS 479 Undergraduate Internship (5 Credits)
Internships offer students valuable opportunities to work in a professional environment and gain firsthand experience to help them prepare for careers. In an approved internship setting, a student typically spends one quarter working with an on-site professional supervisor and a faculty internship supervisor to achieve specific goals and objectives related to the program of study.

IDUS 491 Integrated Studio II: Implementation and Impact Making (5 Credits)
The course guides students through the crucial phases from design development to delivery, building upon the intentions established in previous courses. Students will refine and elevate their projects through vigorous visualization of ideas, strategic material and process selection, and the formulation of innovative business plans. Emphasizing concept validation and the fabrication of gallery-quality models, this course empowers students to transform their design intentions into impactful, market-ready solutions. Through iterative development and critical feedback, students will seamlessly integrate creative design with practical implementation strategies to deliver a compelling final product.
Prerequisite(s): IDUS 471.
Attributes: Business-focused elective; Studio Elective Requirement

IDUS 501 Design in Context (5 Credits)
The ability to apply appropriate design techniques is vital in professional practice. This course provides the essential skills and tools to develop and visualize concepts and ideas in both two and three dimensions. This course provides students with a range of design challenges that enable them to prepare and present comprehensive solutions.
Attributes: Studio Elective Requirement

IDUS 509 Modeling: Physical to Rapid Prototyping (5 Credits)
This course provides an introduction to the basic and intermediate skills tools needed to develop and visualize concepts and ideas in both two and three dimensions. Students learn the primary methods for digital fabrication and file preparation, including CNC rapid prototyping, laser cutting, and 3D printing. This course provides students with a range of physical and digital design challenges that enable them to prepare and present comprehensive solutions.
Attributes: Studio Elective Requirement

IDUS 701 Design Colloquium: Exploring Design Discourses (5 Credits)
This course offers an exhilarating exploration of the multifaceted world of design, offering a unique opportunity to engage with renowned faculty and professionals from various disciplines. Through thought-provoking lectures, interactive discussions, and hands-on activities, students explore the latest methodologies, emerging trends, and cutting-edge approaches that shape the future of industrial design. Students expand their critical thinking, refine communication skills, and cultivate a nuanced understanding of complex design challenges while exploring their potential thesis topic areas. Prerequisite(s): None.

IDUS 713 Industrial Design Studio I: Discovery to Design Solutions (5 Credits)
Students research and assimilate the design needs of a client, becoming skilled at placing their own designs within those parameters. They formulate concept proposals that make a desirable future possible and lead to new design directions. Design concepts are implemented through the creation of an innovative range of products that address the client's design needs and wants, both recognized and unrealized.
Attributes: Studio Elective Requirement

IDUS 718 Industrial Design Studio II: Delivering the Design Solution (5 Credits)
Students apply advanced design methodology and management techniques by designing two products simultaneously. Students must consider not only the key components in the current designs, but must also propose future improvements based on possible technological advances. Students research technical feasibility and user requirements, as well as constructing prototypes, models and components to test the manufacturability or functionality of their proposals.
Prerequisite(s): (SDES 704 or SBIZ 704) and IDUS 713.
Attributes: Studio Elective Requirement

IDUS 723 Digital 3D Modeling and Rendering (5 Credits)
This course addresses industry interest in product simulation using high-end, 3D computer software. The course explores product modeling and assembling simulation and analyzes their application to the design process. Computer graphics are used as a communication tool for newly developed products.
Attributes: Studio Elective Requirement

IDUS 733 Entrepreneurship for Designers (5 Credits)
Students learn the principles of leadership and project planning critical to forming a profitable, successful new business based on an innovative concept. Business plan development is discussed, as well as core financial business strategies toward the end of achieving innovation in the marketplace.
Prerequisite(s): FASH 716; FIBR 745; FIBR 719; FURN 713; IDUS 713 or PRDS 713.

IDUS 748 Industrial Design M.A. Final Project (5 Credits)
In this final studio, M.A. students apply all their skills to develop a product concept that addresses a unique set of needs through an understanding of the consumer and the market. With the collaboration of the supervising professor, students must demonstrate command of all aspects of the design process, from the application of original research findings to the creation of a marketing and production strategy for a product of their choosing.
Prerequisite(s): (IDUS 718 or PRDS 716) and minimum score of 5 in 'Graduate Prerequisite Test'.
Attributes: Studio Elective Requirement

IDUS 751 Graduate Seminar on Research and Thesis Development (5 Credits)
Students acquire the essential skills to craft distinctive frameworks and methodologies for conducting, analyzing, and synthesizing impactful design research. Through structured discussions, persuasive presentations, and meticulous documentation, student fine-tune their understanding of theories and models central to design thinking and innovation. Students explore practical applications of these concepts across diverse domains such as design management, critical review, education, and public service. As a culmination of their efforts, students create a compelling thesis prospectus and professionally present their synthesized research findings and insights.
Prerequisite(s): (IDUS 718 or PRDS 716).

IDUS 755 Thesis Development I: Investigation and Argumentation (5 Credits)
Building upon preliminary research, students leverage their thesis prospectus to delve deeper into their chosen thesis topic area. Students augment their investigation to substantiate the significance and potential impacts of their thesis. Ultimately, students garner a nuanced understanding of their chosen subject matter that facilitates the conceptual development crucial for the subsequent realization of the thesis projects.
Prerequisite(s): (IDUS 763 or IDUS 751).
Attributes: Studio Elective Requirement

IDUS 765 Thesis Development II: Synthesis and Application (5 Credits)
Expanding on research and design concepts initiated in past courses, students progress to the synthesis and application of their thesis project . Students meticulously refine their work, incorporating innovative technologies and materials. In this course, students investigate and apply critical aspects such as concept validation, advanced design methodologies, and effective project management, leading to visionary concepts to execution. Before progressing to the final thesis experience, students complete thorough documentation, utilizing design validation processes to ensure a robust and well-supported final presentation.
Prerequisite(s): (IDUS 755; IDUS 740 or PRDS 788).
Attributes: Studio Elective Requirement

IDUS 770 Professional Practices in Industrial Design (5 Credits)
This course serves as a forum to discuss and prepare for the concerns of the professional world. Emphasis is placed on budgeting skills, portfolio preparation, presentation refinement and professional practices, including ethical issues related to the profession.
Prerequisite(s): (IDUS 713 or DMGT 706).
Attributes: Studio Elective Requirement

IDUS 779F Graduate Field Internship (5 Credits)
Students in this course undertake a field assignment under the supervision of a faculty member.

IDUS 779T Graduate Teaching Internship (5 Credits)
Students in this course undertake a teaching assignment under the supervision of a faculty member.

IDUS 790 Industrial Design M.F.A. Thesis (5 Credits)
All industrial design M.F.A. students are required to prepare an original thesis that researches an area of their particular interest. The thesis culminates in a written submission, in conjunction with a conclusive exhibition of research as applied to a specified product design.
Prerequisite(s): (IDUS 765; IDUS 745 or PRDS 789) and minimum score of 6 in 'Graduate Prerequisite Test'.

School of Design

SDES 332 Advanced 3D Modeling: Computational Design Techniques (5 Credits)
In this course, students explore the world of visual programming, unlocking the potential to create parametric and generative designs that transcend the limitations of traditional 3D-modeling tools. Students are equipped with the skills needed to thrive in the future, where efficiency and adaptability are paramount. Mastering computational design thinking and harnessing the power of industry standard technology, students position themselves as forward-thinking creatives ready to make a significant impact in their future careers.
Prerequisite(s): SFAS 160; SDES 205; ELDS 205; ELDS 225 or IDUS 231.
Attributes: Studio Elective Requirement

SDES 490 Collaborative Experiences (5 Credits)
This collaborative course focuses on responding to project objectives and exceeding client expectations in a professional project environment. By working in multidisciplinary teams, students solve current challenges and problems in the design field and are exposed to the challenges and benefits of working with people from a variety of fields.
Attributes: Studio Elective Requirement

SDES 501 Visual Communication and Presentation (5 Credits)
Proficiency with 2D and 3D digital tools to document and convincingly communicate ideas is essential for the artist and designer in a wide range of creative careers. Students learn and explore the various advantages of the digital tools and their appropriate application toward the effectual presentation of ideas.
Attributes: Studio Elective Requirement

SDES 502 The Human Factor, Design Thinking (5 Credits)
Students explore physical, behavioral and emotional human characteristics as components of the design thinking process. Through a series of projects, students apply human factors and user-centered design methodologies to the diverse fields of design pertaining to products, services and systems.
Attributes: Studio Elective Requirement

SDES 503 Fundamentals of Graduate Research (5 Credits)
Through structured discussions, presentations and readings, students build the knowledge base and critical skills required to formulate methodological research.

SDES 560 Collaborative Experiences in the School of Design (5 Credits)
Students from a variety of disciplines within the School of Design work as a team to research, conceptualize and develop creative solutions for current design challenges. Specific projects vary from quarter to quarter. [This course may be taken up to three times for credit.]
Attributes: Business-focused elective; Studio Elective Requirement

SDES 711 Methods of Contextual Research (5 Credits)
This course presents the techniques—such as interviews, focus groups, contextual inquiry, surveys and questionnaires and the creation of novel research methods—necessary to conduct relevant and useful research. Students gain knowledge and expertise to contribute to the design process of products, services and systems in which goals, users and task needs are given equal importance.
Attributes: Studio Elective Requirement

SDES 791 Collaborative Experience for Graduate Students (5 Credits)
Students from various disciplines collaborate in a client-centered, project-driven studio environment to develop design concepts and prototype solutions that meet project objectives and exceed external industry partner expectations. Students learn specialized design skills and techniques, and effectively manage issues involved in developing design solutions for an industry partner.
Attributes: Studio Elective Requirement

Service Design

SERV 216 Blueprinting Services (5 Credits)
The service experience is made up of multiple interactions that take place over time between the customer and the service provider. By taking a human-centered or "people first" approach, service designers can detect unmet needs, design better interactions, and stage meaningful and memorable experiences. In this course, students apply social research and creative problem-solving methods to analyze experiences, uncover insights, frame problems, generate ideas and validate solutions.
Prerequisite(s): COMM 105 and (ENGL 123 or ENGL 193).
Attributes: Studio Elective Requirement

SERV 310 Idea Visualization for Service Designers (5 Credits)
The ability to effectively visualize and communicate systems, insights, ideas and concepts is a critical skill for service designers. Students explore and effectively apply the principles of graphic and information design in order to create compelling narratives, information graphics and layouts that best communicate a service design project process and deliverables.
Prerequisite(s): ((SDES 215 or IDUS 215) and SERV 216) or GRDS 348.
Attributes: Studio Elective Requirement

SERV 311 Service Architectures, Ecologies, and Touch Points (5 Credits)
Service design can be used as a powerful tool to understand and tackle many of the complex social and environmental problems facing organizations, communities and societies today. Working closely with client organizations, students apply a wide range of collaborative design and creative problem-solving methods to investigate societal challenges, analyze existing solutions, develop solutions that improve quality of life, and create implementation roadmaps.
Prerequisite(s): (SDES 215 or IDUS 215) and SERV 216.
Attributes: Studio Elective Requirement

SERV 312 Prototyping Experiences (5 Credits)
An essential part of defining and designing services is the conceptualization, development and simulation of a service concept and its ecology, including all touch points engaged with when using the service. Experience prototypes are used for rapid ideation of services by simulating the experience the customer has. Students learn to develop low, medium and high-fidelity experience prototypes. Scenarios are explored where new service concepts are ideated and simulated, describing and configuring the experiences of the user, onstage and offstage.
Prerequisite(s): COMM 105 and (ENGL 123 or ENGL 193).
Attributes: Studio Elective Requirement

SERV 325 Technology and Services (5 Credits)
Service organizations utilize information technology and information systems to support business processes, increase service productivity, improve service quality, forge stronger relationships and create differentiation. In this course, students explore core concepts in services marketing and business-driven information systems. Furthermore, students help service organizations measure, monitor and improve performance by identifying critical success factors, determining key performance indicators and designing three types of management dashboards..
Prerequisite(s): BUSI 265 and SERV 312 and (UXDG 310; IACT 315 or UXDG 101).

SERV 421 Services and Enterprise (5 Credits)
Service designers have the potential to be excellent entrepreneurs; social research, creative problem-solving and collaborative design skills are invaluable in any startup. Students create innovative service concepts and business plans that exploit white spaces in service sectors of their choice during this course. Students also verify the viability, desirability and feasibility of proposed concepts with the help of service blueprints, business models, financial forecasts, prototypes and implementation roadmaps.
Prerequisite(s): (BUSI 110 or BUSI 101) and SERV 311 and (UXDG 310; IACT 315 or UXDG 101).
Attributes: Business-focused elective; Studio Elective Requirement

SERV 431 Service Design Senior Studio (5 Credits)
Students work on solving service design problems developing innovative services, products and experiences within physical and virtual environments. The concept of service design is developed and explored using comprehensive design processes. Specific techniques, guidelines and examples are used to emphasize the practical aspects of service design where students are required to design in a way that is both user centric and market oriented. Students must consider the social, technological and economic considerations when designing services where they research lifestyle and the context of use of the service.
Prerequisite(s): SERV 421.
Attributes: Business-focused elective; Studio Elective Requirement

SERV 479 Undergraduate Internship (5 Credits)
Internships offer students valuable opportunities to work in a professional environment and gain firsthand experience to help them prepare for careers. In an approved internship setting, a student typically spends one quarter working with an on-site professional supervisor and a faculty internship supervisor to achieve specific goals and objectives related to the program of study.

SERV 501 Principles of Service Design (5 Credits)
Services are essential to everyday life and comprise an overwhelming component of the world's economies. In this course, students study the principles and complexities of service design and how they are applied to create a better quality of life for users and enhanced profitability for providers.
Attributes: Studio Elective Requirement

SERV 700 Service Design: A Systemic Perspective (5 Credits)
Exploring systemic approaches to service design, students dive into the origins and history of economic environments. Through examining innovative practices, students hone their visualization skills, learn to adapt to an ever-changing market and discover their roles within the service industry.

SERV 710 Mixed Methods Research: Analysis to Synthesis (5 Credits)
From the perspective of research-for-design, students explore theories and methods of data creation, collection, analysis and synthesis. Students utilize a combination of approaches and tools to conduct relevant and useful research. Students also contribute to the design process of goods and/or service systems in which value, stakeholders and processes are given appropriate levels of importance.

SERV 727 Visualizing Services: Storyboards, Maps, and Models (5 Credits)
Storyboards, maps and models distill the complexity of service systems, allowing audiences to understand and make data-focused decisions regarding service solutions. Students research their intended audience and employ visualization techniques to illustrate and simplify complex service systems.
Attributes: Studio Elective Requirement

SERV 732 Service Design Prototyping: Testing Service Solutions (5 Credits)
When it comes to business, leaders must explore new opportunities and weigh the risks and benefits of a service. Through prototyping, students explore new ideas, assess their risks and develop methods to reduce uncertainty for stakeholders. Students identify opportunities and solutions through experimentation and immersive pilots of service designs.
Prerequisite(s): SERV 727.
Attributes: Studio Elective Requirement

SERV 735 Service Design Metrics: Evaluating Results (5 Credits)
Displaying evidence of a cohesive and intentional design is key to earning stakeholders' trust. Students asses the value of their projects and learn the tools to demonstrate the necessity of their ideas. By measuring and evaluating the performance of their designs, students provide evidence of an organized, efficient program using visual data as well as hard and soft metrics.
Prerequisite(s): SERV 710 or DMGT 720.
Attributes: Studio Elective Requirement

SERV 745 Service Design M.F.A. Thesis I: Research and Design (5 Credits)
Through substantial research and systemic literature review, students identify and effectively communicate the viability of a meaningful and ethical research topic. Students refine their methodology and synthesize results into a robust service design document.
Prerequisite(s): SERV 710.

SERV 747 Systemic Innovation for Service Evolution (5 Credits)
Organizations become change makers through innovative practices and adaptive management ingenuity. Students examine the systemic movements of economics, while also researching progressive methods of marketing to promote their designs to a wider audience. Learning the fundamentals of innovation, students focus on social climate, consumer interaction patterns and profitable opportunities to expand business models.
Prerequisite(s): SERV 745; SERV 728 or SERV 732.
Attributes: Studio Elective Requirement

SERV 748 Service Design M.A. Final Project (5 Credits)
Through analysis and exploration of an existing service, students demonstrate their knowledge in the field of service design. By documenting their process and presenting a formal presentation, students display evidence of effective communication within complex markets, and develop innovative ideas to further enhance their services for economic and social application.
Prerequisite(s): SERV 735 and minimum score of 5 in 'Graduate Prerequisite Test'.
Attributes: Studio Elective Requirement

SERV 751 Communicating Value: Marketing Service Experiences (5 Credits)
An organization is only as strong as the design of its services. Students analyze the roles that branding and marketing play in creating value for their service designs. Stressing the importance of self-promotion, students learn how to configure the monetary values of their designs and communicate their projects to a marketable audience.
Prerequisite(s): (SBIZ 710 or BUSI 710) and (SERV 745 or SERV 728).
Attributes: Studio Elective Requirement

SERV 762 Service Design Implementation: Insight to Action (5 Credits)
Project planning, assessment and accountability are all key aspects in implementing a successful and dynamic service design. Students take action and oversee their design plans from start to finish, ensuring that challenges are identified and resolved throughout the process. By acknowledging systemic changes and adapting resources to facilitate implementation, students manage their designs with stakeholders' objectives in mind.
Attributes: Studio Elective Requirement

SERV 779F Graduate Field Internship (5 Credits)
Students in this course undertake a field assignment under the supervision of a faculty member.

SERV 779T Graduate Teaching Internship (5 Credits)
Students in this course undertake a teaching assignment under the supervision of a faculty member.

SERV 790 Service Design M.F.A. Thesis II: Validation and Communication (5 Credits)
Building on primary and secondary research, students prepare a consistent documentation structure for the creation of an original thesis. Students document their validation structure and process results through the presentation of a completed artifact. This culminating thesis demonstrates advanced professional competence and provides a meaningful academic contribution to the service design community.
Prerequisite(s): (SERV 745 or SERV 728) and minimum score of 6 in 'Graduate Prerequisite Test'.

User Experience

UXDG 101 User Experience Design Methods (5 Credits)
This course presents the principles of user experience (UX) design. Students are expected to gain knowledge and expertise to contribute to the design process in computer-based, user-centered systems in which user and task needs are given primary importance. Students also evaluate the usability of interactive systems in fulfilling the requirements of their users.
Attributes: Studio Elective Requirement

UXDG 301 User Experience Design Methods (5 Credits)

UXDG 315 Front-End Visual Interface Design (5 Credits)
This course presents the principles of visual human-machine interfaces. Students are expected to gain knowledge and expertise to develop visual human-machine interfaces that consistently promote high usability and perceived quality. Students also evaluate the aesthetics and visual identity, learning to approach such intangible concepts in an objective and consistent fashion.
Prerequisite(s): IACT 315; UXDG 310 or UXDG 101.
Attributes: Studio Elective Requirement

UXDG 320 Coding for UX Designers (5 Credits)
In this course, students propose solutions to real-world problems with novel, interactive technology solutions. Students explore variety of coding languages and their intended user experience design applications. Students effectively collaborate to design solutions, evaluate design feasibility, and test user experiences.
Prerequisite(s): MATH 240.
Attributes: Studio Elective Requirement

UXDG 325 Prototyping Electronics for Designers (5 Credits)
This course introduces practical techniques for sketching with sensors, electro-mechanical components and code while exposing students to the theoretical underpinnings of electronic prototyping. Through a series of hands-on workshops and projects, students learn how to rapidly and efficiently translate a design concept into a working prototype.
Prerequisite(s): (SDES 205; ELDS 205 or IDUS 231) and UXDG 320.
Attributes: Studio Elective Requirement

UXDG 340 Interactive Product Design (5 Credits)
This course focuses on the issues related to the aesthetics of digital media within a nonlinear environment. Students are introduced to design problems in various disciplines through the use of current authoring techniques and technologies.
Prerequisite(s): (UXDG 101 or UXDG 310) and (UXDG 325; IACT 330 or IACT 315).
Attributes: Studio Elective Requirement

UXDG 350 Professional Practices for UX Designers (5 Credits)
Students focus on in-depth preparation for professional practices of user experience design careers. Students learn to develop career building promotional materials such as digital portfolios, resumes and other materials necessary to professionally present their creative talents. This course examines the different forms of intellectual property protection, their value and how they operate. Students engage in skills for networking, professional self-representation and career development strategies.
Prerequisite(s): UXDG 390 or UXDG 330.
Attributes: Business-focused elective; Studio Elective Requirement

UXDG 360 Information Architecture (5 Credits)
This course provides an overview of an important graphic and interaction design specialty and includes selected studio projects that emphasize visual problem solving. Students are expected to learn to translate complex data into clear, visually dynamic solutions. Types of data can include statistical content, representing sequences that occur in space and time. This course complements study in topics of corporate communications systems, as well as publication, wayfinding and webpage design.
Prerequisite(s): (UXDG 310 or UXDG 101) or IACT 315.
Attributes: Studio Elective Requirement

UXDG 370 Perceptual and Cognitive Human Factors (5 Credits)
This course explores the physical, psychological and behavioral characteristics of humans. Through a series of lectures and projects, this information is applied to interaction design to develop usable, desirable and effective products. The course builds on and applies theories and methods studied in User Experience (UX) Design methods and Information Architecture.
Prerequisite(s): UXDG 315.
Attributes: Studio Elective Requirement

UXDG 380 Usability Testing: People vs. the World (5 Credits)
Usability testing is a vital component of the UX design process. Students learn methods for capturing and measuring user interaction and satisfaction as well as strategies for incorporating those results into an iterative UX design process. Through case study analysis, students practice techniques for planning, researching, analyzing, designing, testing, and reporting usability for various UX designs formats.
Prerequisite(s): UXDG 370 or IACT 375.

UXDG 390 UX Design Studio I: Innovation (5 Credits)
Students deliver innovative designs for digital products and interfaces that utilize best practices for user engagement and creating memorable experiences. This studio focuses on applying user experience design skills gained throughout the program as a holistic practice with professional developmental methodologies such as agile development.
Prerequisite(s): UXDG 370 or IACT 375.
Attributes: Studio Elective Requirement

UXDG 415 UX Design Studio II: The Complexity of Simplicity (5 Credits)
In this advanced studio, students produce working prototypes of their designs and generate digital products that deliver emotional connections to the user. By translating complex tasks and sets of information into user-friendly, understandable, and intuitive digital interfaces and products, students create meaningful and engaging user experiences.
Prerequisite(s): UXDG 390 or UXDG 330.
Attributes: Studio Elective Requirement

UXDG 435 Interaction Design Studio (5 Credits)
Students undertake work that presents complex interaction design problems and propose their own design briefs for a major piece of work. Design work is developed and prototypes are created within the time frame of the course. The project offers students an opportunity to synthesize understanding and method in interaction design.
Prerequisite(s): UXDG 370 or IACT 375.
Attributes: Studio Elective Requirement

UXDG 450 UX Design Senior Studio I: Researching and Ideation (5 Credits)
In the first of two senior design studios, students produce innovative user experience solutions to real design problems and generate working prototypes. Following state-of-the-art processes and design methodologies, students identify valuable opportunities and conduct thorough research that informs the ideation stage. Students envision and document a range of potential solutions for refinement in the successive studio.
Prerequisite(s): UXDG 380 and UXDG 390.
Attributes: Studio Elective Requirement

UXDG 479 Undergraduate Internship (5 Credits)
Internships offer students valuable opportunities to work in a professional environment and gain firsthand experience to help them prepare for careers. In an approved internship setting, a student typically spends one quarter working with an on-site professional supervisor and a faculty internship supervisor to achieve specific goals and objectives related to the program of study.

UXDG 490 UX Design Senior Studio II: Prototyping and Communication (5 Credits)
Students continue their design process through the evaluation, testing and refinement of the concepts they generated in the first senior design studio. Informed by the results of the user testing evaluation, they initiate a new ideation stage and produce professional presentation packages including working prototypes of their interfaces and digital products.
Prerequisite(s): UXDG 450.
Attributes: Studio Elective Requirement

UXDG 701 Theory of UX Design (5 Credits)
UX design theory provides a framework for creating products and services that are not only functional but also delightful and meaningful for users. In this course, students learn how elements such as psychology, design, technology, and business strategy combine to achieve this goal. Through comprehensive research and evaluation, students gain proficiency in articulating the significance and alignment of user experience design within the broader landscape of commercial design. Furthermore, students learn to connect their design solutions to advanced conceptual theories and underlying rationales, fostering a holistic approach to user experience design that transcends the practical.

UXDG 705 Front-End Design for User Experience (5 Credits)
Immerse yourself in the dynamic realm of visual interfaces as you learn the foundational principles that underpin the design of digital based, user-centered systems. Students acquire the knowledge and expertise necessary to ensure optimal controllability and the utmost quality of output, all while maintaining efficiency. Through a systematic and scientific approach, students adeptly evaluate the usability of interactive systems and skillfully define custom requirements. Additionally, students explore the aesthetic and visual identity aspects of design, gaining the tools to objectively and consistently approach these often-intangible concepts.

UXDG 720 Prototyping Coding: Proof of Concept (5 Credits)
Prototypes serve as tangible evidence that a concept or idea can be transformed into a functional and valuable product or solution and play a crucial role in the validation and refinement of ideas before significant resources are invested in full-scale development. Through diligent research, students learn how to pinpoint the optimal development environments for crafting novel digital solutions. Students foster effective collaboration and communication with engineers and developers in diverse contexts, actively contributing to the translation of their design visions into reality. They master an iterative approach, testing design feasibility and using data-driven insights to refine their decisions. Finally, students conceptualize and design interactive products and high-fidelity prototypes, harnessing a range of coding languages and environments to turn their ideas into tangible, fully-realized creations. (

UXDG 730 Modeling Electronics for Designers (5 Credits)
In this course, students cultivate advanced skills for user experience design projects as they master the art of programming, debugging, and seamlessly combining code to create functional prototypes. With a focus on implementing complex technologies, students employ advanced analytical skills to bring their designs to life. Through hands-on experience, students create comprehensive documentation for both tangible circuits and digital code. They develop the expertise to evaluate and select electronic components, ensuring their prototypes' success. Ultimately, they translate design concepts into electronic, operational prototypes with finesse and precision.
Prerequisite(s): UXDG 720.
Attributes: Studio Elective Requirement

UXDG 731 Information Architecture for Designers (5 Credits)
This dynamic course equips students with the expertise to tackle complex information design challenges. Students delve into research and solution development, developing the skills to simplify and visualize vast, complex datasets. Through procedural techniques, students navigate intricate systems with confidence. They learn to craft clear and actionable graphic structures for organizing information, images, and concepts. Utilizing graphic and digital prototypes, students simulate real-world scenarios to understand the profound impact of information design on human actions and decision-making processes.
Prerequisite(s): UXDG 701 or IACT 701.
Attributes: Studio Elective Requirement

UXDG 740 Cognitive Human Factors for Designer (5 Credits)
User Experience Designers must consider the psychological and cognitive aspects of human behavior and perception to shape how users interact with and respond to products, interfaces, and experiences. Through the art of visualization, students adeptly translate intricate theoretical concepts into informative infographics for their future reference. Armed with analytical prowess, students dissect existing solutions and craft experimental models to tackle specific human factor challenges through strategic design modifications. They embrace the scientific method to build, test, and evolve their designs based on empirical evidence. Additionally, students cultivate human factor checklists to meticulously guide design evaluations, ensuring the delivery of high-quality, user-centric outputs.
Prerequisite(s): UXDG 731.

UXDG 750 Usability Testing and Evaluation (5 Credits)
Usability testing places the user at the center of the design process, ensuring that products are user-friendly, effective, and aligned with user needs and business objectives. In this course, students are immersed in academic and professional principles, methodologies, and tools for generative and evaluative usability testing, as well as both quantitative and qualitative usability research. With a focus on long-range usability testing, students progress from initial human-centered design evaluation to the critical analysis, implementation of enhancements, and comprehensive effectiveness evaluation. They master the art of strategic measurement to ensure ongoing solution performance and usability. The course culminates in students creating compelling usability reports, strategically defending their UX research and design process, findings, and solutions, tailored for executive stakeholders.
Prerequisite(s): UXDG 731.
Attributes: Studio Elective Requirement

UXDG 770 Leading UX Design (5 Credits)
Leading UX design teams requires a unique blend of skills, including a deep understanding of user needs, interdisciplinary collaboration, ethical considerations, and a commitment to continuous improvement. To maintain the balance of user-centric design with business goals, students must gain proficiency in communication, team dynamics, project management, agile, and waterfall methodologies. Students explore the ethical and social responsibilities inherent to UX design, formulating strategies for making informed ethical decisions. They conduct in-depth research to align UX design with business strategy, measure its impact, and inform strategic decisions. Through critical thinking and problem-solving, students tackle real-world challenges in UX design management, fostering effective team leadership, strategic planning, and ethical decision-making. They analyze, evaluate, and continually enhance UX design decisions for optimal user experience and satisfaction, ensuring a holistic approach to UX design management.
Prerequisite(s): UXDG 740 or UXDG 750.
Attributes: Studio Elective Requirement

UXDG 779F Graduate Field Internship (5 Credits)
Students in this course undertake a field assignment under the supervision of a faculty member.

UXDG 779T Graduate Teaching Internship (5 Credits)
Students in this course undertake a teaching assignment under the supervision of a faculty member.

UXDG 780 UX Design M.F.A. Thesis I: Research, Synthesis, and Insight (5 Credits)
The insights synthesized from UX design research offer a comprehensive, user-centered view of the design process, empowering designers and organizations to create products and experience that not only meet user needs, but resonate emotionally, resulting in enhanced user satisfaction and market success. In this course, students identify valuable opportunities and conduct thorough user research that informs the ideation stage along with state-of-the-art processes and design methodologies. Through substantial user research and systemic literature review, students identify and effectively communicate the viability of a meaningful and ethical user research topic. Students refine their methodologies and synthesize results into a robust UX design document. Students envision and document a range of potential solutions for refinement in the successive thesis course.
Prerequisite(s): UXDG 730 and (UXDG 750 or UXDG 779).
Attributes: Studio Elective Requirement

UXDG 790 UX Design M.F.A. Thesis II: Design, Validation, and Execution (5 Credits)
In this course, students rigorously test, refine, and execute their final design solutions to ensure they meet user needs, perform effectively, and align with intended goals. Through concise visualizations, oral presentations, working prototypes, and written works, students adeptly refine and convey intricate UX concepts. Students integrate novel research methodologies and desirable design practices, fostering innovation in UX. They engage in collaborative, rapid prototyping, while analyzing and testing design solutions infused with user desires. As the culmination of this program, students present and defend their comprehensive documentation, encompassing user research, UI/UX design, user testing results, and prototypes, all skillfully interwoven into their compelling theses.
Prerequisite(s): minimum score of 6 in 'Graduate Prerequisite Test'; UXDG 770 and UXDG 780.
Attributes: Studio Elective Requirement

User Experience Research

UXR 210 Data Mining Technology (5 Credits)
User experience researchers unearth insights from data like miners search for gold. In this course, students utilize data mining technology to extract actionable that enable organizations to anticipate and lead change. Students explore the volume, velocity, and variety of large data sets used to propel design teams to make impactful decisions and ultimately affect the experience of stakeholders.
Prerequisite(s): MATH 180.
Attributes: Studio Elective Requirement

UXR 250 User Behavior Research Methods (5 Credits)
In this course, students apply generative and evaluative research methods to study how users incorporate products, services, and systems to enhance their everyday lives. Through qualitative and quantitative research methods, students analyze their findings to derive meaningful user behavior insights. Students collect, analyze, prioritize, and effectively communicate their findings that can be used to advance their user experience design solutions.
Prerequisite(s): SDES 215 or IDUS 215.

UXR 350 Research Ethics and Professional Practices (5 Credits)
Successful and meaningful user centered design for diverse populations requires rigorous, ethical, and inclusive user research. Drawing from the fundamental ethical approaches of virtue ethics, consequentialism, rights, and justice, students learn how to apply ethical theories to a variety of issues that arise in professional UX research including the importance of inclusion in research subjects and research teams.
Prerequisite(s): UXR 250 or RSCH 250.

UXR 390 Research Design and Data Collection (5 Credits)
In this course, students synthesize research, design, and visualization skills into a holistic process that informs user-centric design and leads to strategic business opportunities. Through compelling visualizations and storytelling, students deliver an actionable business brief that illustrates research findings and helps guide the ideation of engaging and memorable UX design solutions.
Prerequisite(s): MATH 280 and (UXDG 370 or IACT 375).
Attributes: Studio Elective Requirement

UXR 415 Insight Generation and Business Strategies (5 Credits)
Students utilize user and industry research methodologies to uncover insights leading to new and innovative product and service designs. This studio focuses on applying research methods learned throughout the user experience research program that mirrors professional research practices.
Prerequisite(s): UXDG 380 and (UXR 390 or RSCH 390).
Attributes: Studio Elective Requirement

UXR 450 Senior Studio I: Research, Discovery, and Synthesis (5 Credits)
To conduct primary research, students work with public audiences to collect user data for real-world design problems. Following innovative processes and research methodologies, students conduct thorough user assessments that inform the ideation stage of design, and analyze the collected data to identify valuable opportunities. Students envision and document a range of potential user insights and opportunities for refinement in the successive studio.
Attributes: Studio Elective Requirement

UXR 479 Undergraduate Internship (5 Credits)
Internships offer students valuable opportunities to work in a professional environment and gain firsthand experience to help them prepare for careers. In an approved internship setting, a student typically spends one quarter working with an on-site professional supervisor and a faculty internship supervisor to achieve specific goals and objectives related to the program of study.

UXR 490 Senior Studio II: Actionable Insights to Innovative Solutions (5 Credits)
In this course, students progress their user research through the analysis, synthesis, and refinement of insights generated in Senior Studio I. Students produce professional presentation packages and compelling user research reports that illustrate collected, analyzed, and synthesized user data as well as derived insights and recommendations for UX design.
Prerequisite(s): UXR 450 or RSCH 450.
Attributes: Studio Elective Requirement