INSTITUTE OF DESIGN

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Faculty with Research Interests
For more information regarding faculty visit the Institute of Design website.

A Legacy of Experimenting and Responding to Change

The Institute of Design has continuously explored emerging ideas about how design interacts with society. At its founding as the New Bauhaus in 1937, the faculty and students experimented with new visual languages and use of new media and material. The school was renamed the Institute of Design (ID) in 1944 and merged with Illinois Institute of Technology in 1949. In the mid-1950s, while the mainstream of design focused on visual embellishment of communications and products, ID faculty recognized design could be useful in the large-scale problems facing business and society and were the first to incorporate approaches from the social sciences with the design process. In the 1960s, two decades before it was common, ID pioneered the use of computers to support analysis and synthesis in design. In the late 1980s, ID faculty noticed an increasing need for organizations to link their strategy to a deeper understanding of people. Thus, ID created areas of study in strategic design planning and human-centered design to complement traditional specialties like communication design and product design. As design addressed larger problems and increased its influence in various parts of organizations, it became evident that design needed a more formal body of knowledge. To help increase the rigor and speed of the development of new theories and methods in design, and with the support of the GE Foundation, ID created the first Ph.D. program in design in the United States. Today, ID is focused on using design methods to address complex problems that confront organizations and society at large.

ID Today

Institute of Design attracts students and faculty from around the world who want to create and learn new design methods to address major challenges of organizations and society at large. The 200-person community of graduate students, full-time and adjunct faculty, staff, and visiting researchers are very diverse yet share a common goal.

The diversity at ID comes from the interesting people who join. Entering students, on average, have six years of professional experience in design or in other fields including the social sciences, engineering, business, and the arts. Some are recent graduates from the best universities in the world while others may have ten years of work experience or graduate degrees in a variety of fields. About fifty percent come from outside the United States. Fifteen full-time and thirty adjunct faculty members represent a phenomenal range of experiences from academic research to leadership within design firms and centers of innovation at large companies. Visiting researchers come from government agencies and other universities around the world, representing a variety of fields such as design, law, and business.

Those who join ID share the goal of using design methods to help define and solve challenges facing companies, governments, and civic organizations. They have noticed that standard ways to plan for next-generation products, messages, and services lack efficacy because the nature of business and the lives of users are more complex, ambiguous, and faster changing than before. They believe structured design methods can define and explore strategic options to make organizations more productive and improve the daily life of people.

ID Degree Programs

ID's programs are markedly different from other graduate design programs because we teach rigorous methods, focus on complex problems, and link strategy to a human-centered viewpoint.

The Master of Design (M.Des.) program is for students who want to achieve mastery of advanced design. Students can take a variety of classes to form one or more specialties. These include communication design, interaction design, product design, strategic planning, user research, design methods, and systems design. This full-time program has a four-semester duration for those holding degrees in industrial or communication design and a five-semester duration for those with degrees in other fields.

The M.Des./M.B.A. program allows a student to earn a Master of Business Administration degree (through Stuart School of Business) while concurrently earning the Master of Design degree.

The M.Des./M.P.A. program allows a student to earn a Master of Public Administration degree (through Stuart School of Business) while concurrently earning the Master of Design degree.

The Master of Science in Strategic Design Leadership program is for mid-career professionals from a variety of backgrounds who want to augment their current abilities by learning advanced design methods. Students may have backgrounds from design or other fields and

should have at least eight years of experience leading projects in either design or innovation. This degree can be earned full-time over two semesters or part-time over four to six semesters.

The Ph.D. program is for researchers who seek to contribute to theories and methods core to the field of design.

Faculty Research

Full-time and adjunct faculty represent specific areas of expertise critical to the field, like product design, communication design, information design, design planning, the history of design, interactive diagrams, cognitive psychology, anthropology, semantics of form, imaging, and computer science. The faculty at ID conducts various types of research supported by foundations, companies, government agencies, and individuals. In general, the research intends to add to the body of knowledge in design while at the same time demonstrates how design can be applied to a variety of problems that often seem extremely complicated or vexingly ambiguous.

Admission Requirements

Admission to all degree programs at ID is highly competitive. Meeting the minimum requirements does not guarantee admission. Test scores and GPA are just two of several important factors considered.

Master of Design

For admission to the Master of Design (M.Des.) an applicant must hold a baccalaureate degree from an accredited educational institution with a minimum cumulative GPA of 3.0/4.0, have a strong record of academic achievement, and be highly recommended. Applicants should have a minimum of two years of professional experience. Applicants from countries whose native language is not English must submit scores for TOEFL (100 minimum) or IELTS (7.5 minimum). Portfolios are required for applicants who possess design degrees. Applicants without design degrees are encouraged to apply to the M.Des. program. Regardless of previous degrees, students may be required to complete prerequisite design courses before starting their M.Des. requirements.

Master of Science in Strategic Design Leadership

In addition to the requirements for Master of Design, applicants to the Master of Science in Strategic Design Leadership program must have at least eight years of professional experience in leading teams creating novel, effective products, communications or services. A document or portfolio representing this work is required along with three letters of recommendation from professional colleagues.

Doctor of Philosophy

Applicants to the Ph.D. program must hold a master's degree in design from an accredited educational institution, have a distinguished record of academic achievement, and be very highly recommended. Applicants without a master's degree should apply for the M.Des. program. Doctoral applicants with a master's degree in design must show evidence of distinguished academic and, if appropriate, professional work in their fields. Depending on the applicant's academic background and intended area of study, other prerequisite courses may also be required.

Degrees Offered

- Master of Design
- Master of Science in Strategic Design Leadership
- Doctor of Philosophy in Design

Dual Degree Program

- Master of Design/Master of Business Administration (with Business)
- Master of Design/Master of Public Administration

Course Descriptions

IDN 501

Communication Systems

Explores the techniques of planning and designing communications systems in print, web, and three-dimensional exhibition form from concept generation to visualization. Relevant perceptual, cognitive, and systems principles are investigated and prototyped.
Credit: Variable

IDN 502

Making the User-Centered Case

Covers the rhetoric of design case making using verbal, quantitative, visual, and spatial modes of persuasion. Includes a survey of document and presentation types useful in the product development process.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 503

Embodied Design

At the end of this course, students should be able to explore, create, and communicate design directions for simple products and environments taking into account design principles, human factors, technology, and business issues.
Credit: Variable

IDN 504

Introduction to Observing Users

This class will introduce students to theory and methods of behavioral observation, description, and analysis.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 505

Digital Media

Surveys the basic media types used in interactive software. Includes a culminating project that demonstrates basic principles of screen design and computer-human interaction using a variety of media. Projects require use of common software applications for creating and editing six data types -- text, bitmap, geometry, sound, animation, and video.
Credit: Variable

IDN 506

Research Planning and Execution

This course examines research methods used throughout the design and development process from process, financial, and results standpoints with a focus on planning research activities.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 508

Principles and Methods of User Research

This course is a survey of the research methods commonly used in design research and gives an overview of distinctions between primary and secondary research, quantitative and qualitative research, and online and in-person research in order to prepare students for research-intensive projects.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 510

Research Photography

This course aims to give design researchers the knowledge and tools to consistently make the right decisions when capturing and selecting photographs to use in storytelling.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 512

Interview Methods

The focus of this course is to gain familiarity with an underlying set of the principles and practices of ethnographic interviewing.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 514

Experience Modeling

This course is intended to familiarize students with the methods and practice of experience modeling. It entails a deep understanding of people in naturalistic, everyday settings and interpretive methods of analysis to create representations of the organization of everyday life.
Lecture: 3 **Lab:** 0 **Credits:** 1.5,3

IDN 516

Cultural Probes

This course examines methods that aim to understand the cultural meaning that artifacts have to people.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 518

Survey Methods

This class aims to familiarize designers with the tools and techniques that are commonly used by quantitative researchers such as surveys and statistical analysis. Students will learn how to design, understand, and evaluate surveys and other quantitative research tools and techniques as well as how to use online survey tools in their own work.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 519

Evidence-based Design

Introduction to the use of analytics measure the success of design solutions.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 520

Co-Design and Social Interventions

This course will introduce students to co-design methods including when to use co-design methods, what are the advantages and disadvantages of co-design methods, and how to create engaging co-design workshops. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.
Prerequisite(s): IDN 508 or IDN 504
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 522
Research Synthesis
This course will allow students to gain rigorous training in how to develop coding schemes, code qualitative data, and gain a deeper analysis of users based on field research.
Prerequisite(s): IDN 504 or IDN 508
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 526
Online Research Methods
This class covers methods and tools used in online research with a focus on the design of research objectives, implementation of their study protocol, and moderation of study participants.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 530
Innovation Frontiers
Introduces students to the broad context of strategic planning. It includes a discussion of the general forces acting upon an organization (competition, technological developments, channels of information, and product distribution) and ways to understand the people who use design.
Prerequisite(s): IDX 542
Lecture: 0 **Lab:** 3 **Credits:** 1.5,3

IDN 531
Adaptive Leadership
Explore different established and emerging change management models and their application to design.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 533
Innovation Ecosystems
This course is for students who are interested in leading and facilitating multi-disciplinary collaborative projects using design as know-how to innovate. Students will learn design tactics and strategies for knowledge brokering through tutorials, examples, practical activities and simulations.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 534
Business Design
In this course, students will develop a practical understanding of how business models are used to create appropriate value for participants in a value web, such as core business, its customers, suppliers, and other stakeholders.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 535
Organizational Models of Innovation
This course will examine traditional and emerging models for how large organizations and other corporate entities engage to develop innovative offerings. Readings will cover recent developments in cooperative and open-sourced forms of innovation development.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 536
Introduction to Product Strategy
This course will introduce students to the techniques and processes involved in product strategy: the mindset and act of developing multiple products, services, and associated offerings to optimize a company's investment against constraints and strategy.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 537
New Venture Design
New Venture Design will teach aspiring entrepreneurs how to build design-led start-ups and new ventures, making this course ideal for students with new business ideas that they have been itching to design and launch. This exploration will happen across the four critical elements of a new venture: brand / value proposition; user experience; business model; and organization. Students will walk away with an understanding of how to architect new ventures using a combination of user empathy, market data, and intuition.
Lecture: 3 **Lab:** 0 **Credits:** 1.5,3

IDN 538
Strategic Design Workshop
This course covers the application of design planning methods and theory to real-world challenges. With a team-based, hands-on approach, students will tackle all stages of problem solving from initial framing to final solution proposals. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.
Prerequisite(s): IDX 542
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 539
Social and Economic Context of Design
This course examines the broader issues and forces that affect the conditions of how design can be effective within typical organizations. Through exercises and application of frameworks to examine these forces, students learn to recognize and adapt design plans to changing contexts.
Lecture: 3 **Lab:** 0 **Credits:** 1.5,3

IDN 540
Implementing Innovation
Introduces frameworks and methods for effectively implementing change in organizations. Using cases, students will identify principles, actions, and measures that mitigate risk, improve implementation success, and inform stronger designs.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 541
Civic Design
Covers the emerging practice of applying design to areas of civic-oriented challenges.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 542
Behavioral Design
This course will introduce how concepts from the field of behavioral economics can be thought of as another kind of "human factor" and ways in which they can help inform the process of design thinking.
Credit: Variable

IDN 544
Diagram Development
Explores the language of diagrams as a communication means to represent different types of abstract, relational information. Students will be introduced to design principles of developing effective diagrams and multiple types of diagrams.
Prerequisite(s): IDN 552
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 546
Design Rhetoric
This class explores how to bring ideas to life in a logical and compelling case through the use of proven rhetorical tools: framing, emotional appeals, evidence, and narrative structure.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 548
Animated Diagramming
This class focuses on the study and development of visualizations to expand information presentation by using dynamic, interactive properties. Explorations to include data narratives, data visualization, time-based visualizations, analyzing motion, narration, transitions, and other visual properties that can enhance comprehension.
Prerequisite(s): IDN 544*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 550
Communication Design Workshop
A project-oriented workshop focusing on applying design principles to link theoretical methods to practice in the area of human-centered communication design. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.
Prerequisite(s): IDN 544
Lecture: 3 **Lab:** 0 **Credits:** 3

IDN 552
Fundamentals of Visual Communication
Discusses pictures, abstract symbols, text, numbers, diagrams, three-dimensional form, and other sign systems in the context of communicating a designed offering. Additional teachings include the basics of visual communication principles to aid in developing effective communications.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 556
Strategic Communication
This class teaches students how to use communication as a design method to accelerate synthesis and give tangible form to valuable information throughout the development process. Students are introduced to relevant theories of language, visual perception, visual representation, and communication.
Credit: Variable

IDN 558
Innovation Narratives
In both professional and academic careers, there is an increased need for storytelling skills and self awareness. Creating passion-filled, compelling, and effective stories is a critical part of leadership.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 559
Video Storytelling
This course provides a methods-driven approach to communicating ideas with audio and video. During this course, instructors and industry experts will provide guidance and structure to learn and apply the techniques of communicating your ideas with video. Students will learn introductory skills intended to craft compelling video deliverables by leveraging individual ideas and strengths combined with the myriad audio/video resources available.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 562
Modeling Complexity
How does one visually capture and represent complex systems, topics, and activities that are too large to conceptualize using memory and cognition alone? Modeling complexity is a visual approach to large-scale problem definition that seeks to represent the full picture of a system by applying theories of visual perception and known techniques for representing relationships in data.
Prerequisite(s): IDN 544* with min. grade of C, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 564
Bias + Sensemaking
The class introduces the basic principles and methods for structuring complex information for effective understanding, identifying problems, and guiding solution development.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 568
Service Systems Workshop
This workshop introduces concepts of services, design principles, and methods that are needed for the design of service systems. Topics include the nature of services, customer acquisition and retention, value propositions in service business, service prototyping and pilot testing, stakeholder management, infrastructure, and operational and implementation issues. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.
Prerequisite(s): IDX 542
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 570
Structured Planning Workshop
Introduces structured planning methodology and applies it to complex design problems at the system level. Team techniques are emphasized, and formatted information handling and computer-supported structuring processes are used through the design process from project definition to information development, structuring, concept development, and communication. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 571
Introduction to Systems Theory
The course investigates principles and methods for representing and understanding structure and behavior of different types of systems. Various forms of theoretical and philosophical frameworks and methodologies are introduced to model and understand fundamental characteristics of domains of concern from different perspectives. Class topics include general systems theory, system modeling, causality, and formalisms. The class will also explore example applications of system concepts and modeling methods in design research.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDN 572
Platform-Based Design Strategy
Platform is an innovation strategy that provides a common set of standards to enable a variety of offerings to be built on top of it, creating higher value for all stakeholders involved. This course explores how platforms provide a base to accommodate many options that can support diverse contexts and user needs.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDN 573
Sustainable Solutions Workshop
In this course students will learn how to apply design methods and strategic thinking through open innovation practices for leveraging the interconnectivity of markets, technology, finance, and social networks in order to envision sustainable solutions with impact in the local lives and well-being of communities.
Prerequisite(s): IDN 571
Lecture: 0 **Lab:** 4 **Credits:** 3,4

IDN 575
Re-Thinking Systems
In this course, students will learn key principles and concepts on complex adaptive systems in relation to human-centered design for understanding how product and service innovation can shape sustainable value webs and marketplaces.
Prerequisite(s): IDN 571*, An asterisk (*) designates a course which may be taken concurrently.
Lecture: 3 **Lab:** 0 **Credits:** 3

IDN 576
Systems Modeling and Prototyping
This workshop class introduces system modeling methods for representing different types and aspects of systems including continuous models, discrete models, probabilistic models, and structural models. System modeling and simulation software packages are used to understand and predict the system behavior. Various forms of physical prototyping are also applied as complementary methods to understand, analyze, explore, and evaluate systems through the development process.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDN 685
Ph. D. Principles and Methods of Design Research
Introduces the basic principles and methods for assembling, developing, and analyzing information in the tasks of design research. Techniques for collecting data, testing hypotheses, and presenting conclusions are learned in the context of conducting a pilot research project.
Lecture: 0 **Lab:** 1.5 **Credits:** 1.5

IDN 687
Ph. D. Philosophical Context of Design Research
Explores the philosophical framework for conducting research and building knowledge in the field of design. Topics include concepts from epistemology, phenomology, and structuralism. Comparisons are made between design research and research in other fields.
Lecture: 0 **Lab:** 1.5 **Credits:** 1.5

IDN 689
Ph.D. Research Seminar
Investigation and discussion by faculty and students of topics of interest from different perspectives such as building a design research discourse (reading research papers critically, selecting among publication venues); investigating alternative philosophical bases for design research (comparing empirical, pragmatic, and phenomenological approaches); or exploring methodological and theoretical conflicts in design research.
Lecture: 3 **Lab:** 0 **Credits:** 3

IDN 691
Ph. D. Research and Thesis
Research and thesis writing for Ph. D. degree.
Credit: Variable

IDN 999
General Elective Placeholder
Credit: Variable

IDX 504
Prototyping Methods
Prototyping is a key method that designers use to navigate the design development process. Although prototyping is often thought of as coming at the end of the process to verify a design solution, our approach maintains that prototyping needs to happen throughout the process from initial research to storytelling to concept generation and lastly to refine and improve the selected direction.
Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 505
Critique Methods
Explore the various types of critique and their usefulness at different stages of the design process.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 506

Fundamentals of Product Design

In this course students will examine what, how, and why product form happens. Topics include the relationship between a product's form and corporate identity, visual trends, new materials, manufacturing techniques, semantics, product architecture, and ergonomics.

Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 508

Modes of Human Experience

Analysis of issues involved in a design project with a human factors perspective is an important step during user research and the design development process. Knowing the basic concepts and principles of human factors will enable students to be user centered in their approach.

Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 509

Data Literacy

Introduction to the methods, tools, and techniques for working with "quant" data in the design process.

Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 510

Design Development and Implementation

An introduction to the common methods used to produce or manufacture products. Alternative processes, materials and finishing methods, relative costs, and applicability to design of products will be explored.

Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 511

Shaping Digital Futures

Explore the interdisciplinary practice of crafting computational and networked services that enhance human life, balancing technological innovation with social responsibility, ethics, and economic values.

Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 512

Product Design Workshop

This course is an opportunity for students to exercise their design muscles throughout an entire product development experience from framing through ideation to final concepts. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.

Prerequisite(s): IDX 504

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 513

Generative Design

Explores a variety of digital fabrication tools alongside the language, limitations, and capabilities of contemporary and near-future digital manufacturing.

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 515

Introduction to Data Visualization

This course will take on these interrelated awareness, educational, and communication design challenges while striving to build student skillsets in a wide variety of contemporary design application spaces. Students will complete a variety of data research and visualization challenges throughout the course, explore data aesthetics and persuasion techniques, develop coding skills and data manipulation and research abilities, and complete a self-defined project focused on interactive and journalistic data storytelling.

Lecture: 0 **Lab:** 3 **Credits:** 1.5,3

IDX 518

Interaction Design Methods

This course introduces methods for effectively describing the dynamic nature of interaction and applies them to different types of design cases.

Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 519

Fundamentals of Web Development

Prepares students to confidently build projects with front-end web development tools.

Lecture: 0 **Lab:** 3 **Credits:** 1.5,3

IDX 520

History of Interaction Design

This course examines thought leaders in interaction design, their innovations, and the technology and business contexts that shaped the environment for their work. Students will review designs to better understand the elements that led to significant design breakthroughs.

Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 523

Agile for Design Outcomes

Upon completion of this course students will be able to create a focused point-of-view and reframe a problem, decompose a strategy statement into "who, what, wow" statements, generate a service blueprint, map to specific features and functions and a backlog of prioritized work – that can trace back to the strategic statement in a virtuous cycle.

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 524

Interaction Design Workshop

This workshop offers students the opportunity to practice methods for design research, concept development, interaction design, and rapid prototyping. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.

Prerequisite(s): IDX 518

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 528

Prototyping Interactions

This course introduces different methods and tools for the prototyping of interactive systems. Students will employ the different methods to translate a concept from ideation to installation through multiple layers of sketches, prototypes, and interactive peripherals.

Lecture: 0 **Lab:** 3 **Credits:** 1.5,3

IDX 529

Applied Tech Frontiers

Explorations of technology applications and opportunities for contemporary societal issues.

Credit: Variable

IDX 530

Interaction Design for Immersive Systems

This course explores issues in design for interactions that are enabled by affordances available in ubiquitous computing, mixed reality, and virtual reality environments.

Lecture: 3 **Lab:** 0 **Credits:** 1.5

IDX 532

Human + Data Systems

Upon completing this course, students will be able to demonstrate visually how human-data systems drive feedback loops, facilitate data capture and ask for consent, and explain how that differs between conscious data creation and passive data collection; analyze different human-data systems and be able to identify how feedback is captured, what that data is going to inform, and what actions are dependent on the insights derived from that data; and explore through making the opportunity for different data representation formats and mediums to facilitate data management and influence data awareness.

Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 534

Design for Climate Leadership

The course introduces students to the science of climate change, the vulnerabilities of different populations to CC impacts, and the range of actions pursued by individuals, organizations and nation-states in response to it. We will also critically explore the role of design in contributing to the current trajectory of CC, and in developing strategies for mitigation, adaptation and resilience to CC.

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 535

Politics of Design

To design is to perform an ideological and political act that has the power to fundamentally shape societies and systems. And yet, design utilizes methodologies that possess an illusion of neutrality situated outside of a societal or systemic context which inherently reifies discrimination by masking the biases of designers and co-creators. The empathic designer still possesses their own history, politics, and intentions that color the orientation of that empathy. This course will explore the interrelationship of the politics of design across individuals, practices, organizations, institutions, and systems.

Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 536

Introduction to Design Futures

This "Introduction to Design Futures" course is structured as a comprehensive exploration of the future-focused design process, employing a four-step, multidisciplinary approach called Synthesizing Futures.

Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 537

Designing Futures

This course overviews a wide range of methodologies and approaches that have been used to engage in narratives about these futures including backcasting & histories of the future, predictive analytics and big data, forecasting and trend analysis, visioning & "visioneering", scenario planning, anticipatory design, speculative and critical design, science fiction, design fiction, speculative fabulation and feminist futures, Afrofuturism and decolonizing design.

Prerequisite(s): IDX 550

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 540

Methods of Community Development

An exploration and comparative analysis of Asset-Based Community Development approaches, methods and tools, and ways to evolve the mindsets and practices of Human Centered Design.

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 541

Critical Contexts

The world is in flux. Everything must be re-designed. This course will survey a selection of theories, ideas and concepts that form the basis for understanding ourselves, the category of "the human" and the world that we live in. Currently, many aspects of human experience are being reconsidered through emergent notions of the posthuman and the more-than-human.

Credit: Variable

IDX 542

Analysis + Synthesis

This course is an overview of methods to analyze data and synthesize solutions that will likely be encountered as part of a design effort.

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 548

Innovation Methods

The course will present an overview of some of the key principles that drive design innovation followed by a broad look at the design innovation process, various methods, and frameworks.

Prerequisite(s): IDX 542

Lecture: 0 **Lab:** 3 **Credits:** 1.5,3

IDX 550

Building and Understanding Context

This course will improve critical thinking skills when wrestling with the wide variety of input and insight that often accompanies design initiatives. The course will include basic overviews of argumentation, secondary research, and group-based discussion methods.

Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 551
Facilitation Methods
Explores the methods and techniques to guide teams to desired outcomes in ways that build alignment, engagement, and momentum.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 552
Managing Interdisciplinary Teams
This class will teach methods and tools that focus a team's creativity and analysis on the right deliverables and explore how the basic functional methods of the business world (such as schedules, budgets, emails, and meetings) can be informed by design thinking to be more effective for teams composed of multiple disciplines.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 554
Agile Culture
Understanding key principles, values, culture/behaviors, and practices of Agile methodology in design practice.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 555
Metrics that Matter
In this course, students explore how designers can develop their own interim measurement strategies that are more sensitive to design's influence, thereby building data and evidence for their adoption and success.
Lecture: 1.5 **Lab:** 0 **Credits:** 1.5

IDX 557
Teaming Methods
In this course, you will learn teaming methods and best practices by working on several teams. Through research and collaborative activities, teams will arrive at learnings that will inform their best practice playbooks.
Lecture: 0 **Lab:** 1.5 **Credits:** 1.5

IDX 560
Introduction to Design Thinking
An introduction to the techniques and process of problem definition and solution generation as used in the field of design.
Lecture: 3 **Lab:** 0 **Credits:** 3

IDX 561
Introduction to Design Concepts
An introductory course into the methods and techniques of the field of design. Students will learn creative problem solving including how to manage ambiguous problems and work across disciplines.
Lecture: 3 **Lab:** 0 **Credits:** 3

IDX 562
Multidisciplinary Innovation
Prototyping new business concepts for both designers and non-designers. A focus on inter-disciplinary collaboration.
Lecture: 0 **Lab:** 3 **Credits:** 3

IDX 593
MDM Immersion
This course covers contemporary topics through a cohort exploration and hands on charette. Visiting lecturers will guide student through emerging and topical issues as they relate to how the field of design is changing. This course can be taken multiple times for up to 6 credits.
Lecture: 0 **Lab:** 1.5 **Credits:** 1.5

IDX 594
Faculty Research
Classes, workshops, and seminars revolving around faculty specific research. Instructor permit only. Instructor will define requirements for enrollment. Students may take this class multiple times for a maximum of 24 credits toward their degree.
Credit: Variable

IDX 595
Internship
Supervision of participation in curricular practical training (CPT).
Lecture: 0 **Lab:** 0 **Credits:** 9

IDX 596
Externship
This course enables students to receive academic credit for externing with a designated supervising design firm or department. Externs integrate and assimilate the skills learned in the classroom with those acquired in a specialized design placement.
Credit: Variable

IDX 597
Special Topics
Classes that cover special and contemporary topics in design. Students may take this class multiple times for a total of 24 credits toward their degree.
Credit: Variable

IDX 598
Independent Study
Student-driven course to explore contemporary issues in the field of design. Students may take this class multiple times, non-concurrently, for a maximum of 12 credits towards their degree.
Credit: Variable