Design Innovation (DES INV)

Expand all course descriptions [+]Collapse all course descriptions [-]

DES INV 10 Discovering Design 2 Units

Terms offered: Spring 2023, Spring 2022, Spring 2021
This course, ideal for students who are looking for an introduction to the broad world of design, covers design careers, design fields, histories of design and ethics in design. Students will gain language for analyzing and characterizing designs. In this course you will be learning design both from theoretical and historical perspectives, and from studio-based design exercises and projects. The weekly assignments and final projects will emphasize foundational design skills in observation, ideation, problem finding and problem solving, formgiving, communication, and critique.
Discovering Design: Read More [+]
Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit under special circumstances: Repeat requires instructor and advisor consent

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Summer:
6 weeks - 6 hours of lecture per week
8 weeks - 4 hours of lecture per week
10 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Discovering Design: Read Less [-]

DES INV 15 Design Methodology 3 Units

Terms offered: Fall 2023, Spring 2023, Fall 2022
This introductory course aims to expose you to the mindset, skillset and toolset associated with design. It does so through guided applications to framing and solving problems in design, business and engineering. Specifically, you will learn approaches to noticing and observing, framing and reframing, imagining and designing, and experimenting and testing as well as for critique and reflection. You will also have a chance to apply those approaches in various sectors.
This course may be used to fulfill undergraduate technical elective requirements for some College of Engineering majors; students should refer to their Engineering Student Services advisors for more details.
Design Methodology: Read More [+]
Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit under special circumstances: Students who have taken E15 cannot take DES INV 15 for credit. Others require instructor consent.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:
6 weeks - 8 hours of lecture per week
8 weeks - 6 hours of lecture per week
10 weeks - 5 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Design Methodology: Read Less [-]

DES INV 21 Visual Communication & Sketching 3 Units

Terms offered: Fall 2023, Spring 2023, Fall 2022

Good ideas alone are not the key to being a great designer or innovator. Rather, it is the strong process and communication skills that will make you stand out as a design practitioner and leader. In today's landscape of product design and innovation, great visual communicators must know how to 1) effectively and confidently sketch by hand, 2) understand and utilize the basics of visual design, and 3) tell captivating and compelling stories. This course, offered in a project-based learning format, will give participants practice and confidence in their ability to communicate visually.

Visual Communication & Sketching: Read More [+]

Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit under special circumstances: Repeat requires instructor and advisor consent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:
6 weeks - 8 hours of lecture per week
8 weeks - 6 hours of lecture per week
10 weeks - 5 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Visual Communication & Sketching: Read Less [-]

DES INV 22 Prototyping & Fabrication 3 Units

Terms offered: Fall 2023, Summer 2023 Second 6 Week Session, Fall 2022

This course teaches concepts, skills and methods required to design, prototype, and fabricate physical objects. Each week relevant techniques in 2D and 3D modeling and fabrication are presented, along with basic electronics. Topics include a range of prototyping and fabrication techniques including laser-cutting, 3D modeling and 3D printing, soldering, and basic circuits.

This course may be used to fulfill undergraduate technical elective requirements for some College of Engineering majors; students should refer to their Engineering Student Services advisors for more details.

Prototyping & Fabrication: Read More [+]

Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit under special circumstances: Repeat requires instructor and advisor consent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:
6 weeks - 8 hours of lecture per week
8 weeks - 6 hours of lecture per week
10 weeks - 5 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Prototyping & Fabrication: Read Less [-]

DES INV 23 Creative Programming and Electronics 3 Units

Terms offered: Summer 2023 Second 6 Week Session, Summer 2022 Second 6 Week Session, Spring 2022

This course teaches techniques to conceptualize, design and prototype interactive objects. Students will learn core interaction design principles and learn how to program devices with and without screens, basic circuit design and construction for sensing and actuation, and debugging. Students work individually on fundamental concepts and skills, then form teams to work on an open-ended design project that requires a synthesis of the different techniques covered.

This course may be used to fulfill undergraduate technical elective requirements for some College of Engineering majors; students should refer to their Engineering Student Services advisors for more details.

Creative Programming and Electronics: Read More [+]

Rules & Requirements

Prerequisites: This course has no pre-requisites. This course pairs well with DES INV 22: Prototyping & Fabrication, but the two courses can be taken in either sequence, or individually

Repeat rules: Course may be repeated for credit under special circumstances: Repeat requires instructor and advisor consent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:
6 weeks - 8 hours of lecture per week
8 weeks - 6 hours of lecture per week
10 weeks - 5 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Creative Programming and Electronics: Read Less [-]

DES INV 25 User Experience Design 3 Units

Terms offered: Spring 2023, Spring 2022, Spring 2021

This studio course introduces students to design thinking and the basic practices of interaction design. Following a human-centered design process that includes research, concept generation, prototyping, and refinement, students work as individuals and in small teams to design mobile information systems and other interactive experiences. Becoming familiar with design methodologies such as sketching, storyboarding, wire framing, and prototyping, students learn core skills for understanding the rich contexts of stakeholders and their interactions with technology, for researching competing products and services, for modeling the current and preferred state of the world, and for prototyping and communicating solutions. No coding is required.

User Experience Design: Read More [+]

Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit under special circumstances: Repeat requires instructor and advisor consent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:
6 weeks - 8 hours of lecture per week
8 weeks - 6 hours of lecture per week
10 weeks - 5 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Formerly known as: Design Innovation 24

User Experience Design: Read Less [-]

DES INV 90 Special Topics in Design Innovation 1 - 4 Units

Terms offered: Spring 2016, Fall 2015
Selected topics in design innovation. This course cannot be used to complete any course or unit requirement for College of Engineering undergraduates.
Special Topics in Design Innovation: Read More [+]
Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 1-8 hours of lecture per week
8 weeks - 1-8 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Summer:
6 weeks - 2-10 hours of lecture per week
8 weeks - 2-10 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Special Topics in Design Innovation: Read Less [-]

DES INV 90E Technical Special Topics in Design Innovation 1 - 4 Units

Terms offered: Prior to 2007
Selected topics in design innovation. This course counts towards the technical elective requirement for College of Engineering undergraduates.
Technical Special Topics in Design Innovation: Read More [+]
Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 1-8 hours of lecture per week
8 weeks - 1-8 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Summer:
6 weeks - 2-10 hours of lecture per week
8 weeks - 2-10 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Technical Special Topics in Design Innovation: Read Less [-]

DES INV 95 Design Innovation Lecture Series 1 - 2 Units

Terms offered: Fall 2023, Spring 2023, Fall 2022
This lecture series exposes students to a diverse range of leaders, innovators, and concepts in design innovation. Students will learn from speakers, who will share their insights, practices, and projects from working at the intersections of design and technology innovation.
Design Innovation Lecture Series: Read More [+]
Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-2 hours of colloquium per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Design Innovation Lecture Series: Read Less [-]

DES INV 97 Field Study 1 - 4 Units

Terms offered: Spring 2020, Spring 2018
Students take part in organized, off-site field programs with companies that work in design innovation, overseen by an instructor. Examples of a field program include field trip series, internship programs, etcetera.
Field Study: Read More [+]
Rules & Requirements

Prerequisites: Consent of sponsoring instructor required

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-10 hours of fieldwork per week

Summer:
6 weeks - 1-29 hours of fieldwork per week
8 weeks - 1-20 hours of fieldwork per week
10 weeks - 1-15 hours of fieldwork per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Field Study: Read Less [-]

DES INV 98 Directed Group Study for Undergraduates 1 - 4 Units

Terms offered: Spring 2023, Fall 2022, Spring 2022
Directed group study on various topics in design innovation.
Directed Group Study for Undergraduates: Read More [+]

Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes. Students may enroll in multiple sections of this course within the same semester.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Alternative to final exam.

Directed Group Study for Undergraduates: Read Less [-]

DES INV 99 Supervised Independent Study 1 - 4 Units

Terms offered: Prior to 2007
Supervised independent study. Enrollment restrictions apply.
Supervised Independent Study: Read More [+]

Rules & Requirements

Prerequisites: Consent of sponsoring instructor required

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-10 hours of independent study per week

Summer:
6 weeks - 1-29 hours of independent study per week
8 weeks - 1-20 hours of independent study per week
10 weeks - 1-15 hours of independent study per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Supervised Independent Study: Read Less [-]

DES INV 181 Reimagining Mobility 3 Units

Terms offered: Spring 2020, Fall 2019, Spring 2019
In Reimagining Mobility, offered in a project-based learning format, students will envision meaningful interactions between people and different transportation modalities. Looking 10-15 years into the future, they will address elements such as car sharing, public transportation, autonomous driving, and more. The core objectives of this course are to 1) equip students with tools, techniques, and practice to master the design thinking process and 2) facilitate the creation of portfolio-grade design solutions, to be pitched to real-world customers and investors.
Reimagining Mobility: Read More [+]

Rules & Requirements

Prerequisites: This course is intended for advanced undergraduates and graduate students, from all departments. Previous design process experience is recommended, but not required

Repeat rules: Course may be repeated for credit with instructor consent.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Summer:
6 weeks - 7.5 hours of lecture per week
8 weeks - 6 hours of lecture per week
10 weeks - 4.5 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Reimagining Mobility: Read Less [-]

DES INV 190 Special Topics in Design Innovation 1 - 4 Units

Terms offered: Fall 2023, Spring 2023, Fall 2022
Selected topics in design innovation. This course cannot be used to complete any course or unit requirement for College of Engineering undergraduates.
Special Topics in Design Innovation: Read More [+]

Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 1-8 hours of lecture per week
8 weeks - 1-8 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Summer:
6 weeks - 2-10 hours of lecture per week
8 weeks - 2-10 hours of lecture per week
10 weeks - 2-6 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Special Topics in Design Innovation: Read Less [-]

DES INV 190E Special Topics in Design Innovation 1 - 4 Units

Terms offered: Spring 2023, Spring 2022, Spring 2021
Selected topics in design innovation. This course includes sufficient treatment of engineering principles that it may be used to fulfill College of Engineering undergraduate unit requirements.
Special Topics in Design Innovation: Read More [+]

Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 1-8 hours of lecture and 0-4 hours of laboratory per week
8 weeks - 1-8 hours of lecture and 0-4 hours of laboratory per week
15 weeks - 1-4 hours of lecture and 0-4 hours of laboratory per week

Summer:
6 weeks - 2-10 hours of lecture and 0-6 hours of laboratory per week
8 weeks - 2-10 hours of lecture and 0-8 hours of laboratory per week
10 weeks - 2-6 hours of lecture and 0-6 hours of laboratory per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Special Topics in Design Innovation: Read Less [-]

DES INV 195 Design Innovation Lecture Series 1 - 2 Units

Terms offered: Fall 2023, Spring 2023
This lecture series exposes students to a diverse range of leaders, innovators, and concepts in design innovation. Students will learn from speakers, who will share their insights, practices, and projects from working at the intersections of design and technology innovation.
Design Innovation Lecture Series: Read More [+]

Rules & Requirements

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-2 hours of colloquium per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Design Innovation Lecture Series: Read Less [-]

DES INV 197 Field Study 1 - 4 Units

Terms offered: Prior to 2007
Students take part in organized, off-site field programs with companies that work in design innovation, overseen by an instructor. Examples of a field program include field trip series, internship programs, etcetera.
Field Study: Read More [+]
Rules & Requirements

Prerequisites: Consent of sponsoring instructor required

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-10 hours of fieldwork per week

Summer:
6 weeks - 1-29 hours of fieldwork per week
8 weeks - 1-20 hours of fieldwork per week
10 weeks - 1-15 hours of fieldwork per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Field Study: Read Less [-]

DES INV 198 Directed Group Study for Undergraduates 1 - 4 Units

Terms offered: Spring 2023, Fall 2022, Spring 2022
Directed group study on various topics in design innovation.
Directed Group Study for Undergraduates: Read More [+]
Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes. Students may enroll in multiple sections of this course within the same semester.

Hours & Format

Fall and/or spring: 15 weeks - 1-4 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Alternative to final exam.

Directed Group Study for Undergraduates: Read Less [-]

DES INV 199 Supervised Independent Study 1 - 4 Units

Terms offered: Fall 2017
Supervised independent study. Enrollment restrictions apply.
Supervised Independent Study: Read More [+]
Rules & Requirements

Prerequisites: Consent of sponsoring instructor required

Repeat rules: Course may be repeated for credit without restriction.

Hours & Format

Fall and/or spring: 15 weeks - 1-10 hours of independent study per week

Summer:
6 weeks - 1-29 hours of independent study per week
8 weeks - 1-20 hours of independent study per week
10 weeks - 1-15 hours of independent study per week

Additional Details

Subject/Course Level: Design Innovation/Undergraduate

Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.

Supervised Independent Study: Read Less [-]

DES INV 200 Design Frameworks: History & Methods 3 Units

Terms offered: Spring 2023, Spring 2022, Fall 2021
This course exposes students to the mindset, skillset and toolset associated with design, and interweaves practical design methods with readings and lectures on the history of design and technology.
Design Frameworks: History & Methods: Read More [+]
Hours & Format

Fall and/or spring: 15 weeks - 1.5 hours of lecture and 1.5 hours of discussion per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Design Frameworks: History & Methods: Read Less [-]

DES INV 201 Debates in Design 3 Units

Terms offered: Fall 2022, Fall 2021, Spring 2021
As today's most pressing challenges cut across disciplinary boundaries, designers need to articulate new methods for connecting conceptual knowledge with technical skills and develop new ways of integrating ideas from various perspectives and world views. Each year students in this colloquium-style course explore a topic in design. Invited lecturers present a relevant project or challenge from their professional careers at a given intersection of critical contemporary issues expressed at a particular scale of design practice. Speakers share background material or readings in advance, allowing students to arrive with thoughtful questions and discussion points. Students compose written reflections throughout and following each speaker.
Debates in Design: Read More [+]
Rules & Requirements

Repeat rules: Course may be repeated for credit up to a total of 1 time.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of colloquium per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Debates in Design: Read Less [-]

DES INV 202 Technology Design Foundations 4 Units

Terms offered: Fall 2022, Fall 2021, Spring 2021
This course introduces foundational design and technology frameworks and builds skill sets essential to the design of products, services, and experiences enabled by emerging technologies. It follows a human-centered design process that includes research, concept generation, and prototyping, with an emphasis on iteration and refinement. It also develops fluency across a range of core technologies, from fabrication to micro-controllers, and how to operationalize them within a design context. These activities are supported by regular practice of design critique. Students engage with a highly technical semester-long project to create a product-service system leveraging both hardware and digital technologies that addresses a well-defined need.
Technology Design Foundations: Read More [+]
Objectives & Outcomes

Course Objectives: Students are expected to build fluency in the following skill sets through Technology Design Foundations:
Iteratively prototyping a range of physical and interactive concepts;
Validate hypotheses using technical and experiential prototypes, and statistical methods;
Visually and experientially communicating design concepts to inspire audiences and solicit feedback.
design ideation;
establishing empathy for users and stakeholders;
framing complex problems as actionable design opportunities;

Student Learning Outcomes: - Communicate both conceptual and concrete ideas effectively, using a range of visual and verbal presentation techniques
- Give form to design ideas through prototyping at a range of fidelities, and using a range of materials and tools, including electronics, to convey specific information about a design idea
- Lead key steps in an iterative and human-centered design process, including conducting research, uncovering insights, generating ideas, and developing and testing prototypes.
- Work effectively in teams with a toolkit of resources to support productive teamwork
Upon completing this course, students will be able to:

Rules & Requirements

Repeat rules: Course may be repeated for credit with advisor consent.

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture and 2 hours of studio per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Technology Design Foundations: Read Less [-]

DES INV 210 Studio Foundations 3 Units

Terms offered: Not yet offered
Studio Foundations introduces students to the key concepts of a design studio and the foundational principles and methods that inform the ways designers work, collaborate, and practice.
Studio Foundations: Read More [+]
Rules & Requirements

Prerequisites: This course is only open to students in the first year of the Master of Design (MDes) program. There are no other prerequisites

Hours & Format

Fall and/or spring: 15 weeks - 2-3 hours of lecture and 1.5-2.5 hours of studio per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Studio Foundations: Read Less [-]

DES INV 211 Designing Emerging Technologies I 5 Units

Terms offered: Spring 2023, Spring 2022, Fall 2021
This course is an intensive, project-based course that focuses on design of interactive artifacts that use emerging technologies. Students are led through a sequence of projects of varying lengths (from one week to three weeks). This serves as the first in a two part sequence of courses (with DES INV 212) intended to develop student skills in designing with technology as a material. Projects include both individual and team activities, with teams frequently changing in size and composition.
Designing Emerging Technologies I: Read More [+]
Rules & Requirements

Prerequisites: Students must have either completed or be concurrently enrolled in DES INV 202: Technology Design Foundations and DES INV 200: Design Frameworks

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 3 hours of laboratory per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Instructor: ERIC PAULOS

Designing Emerging Technologies I: Read Less [-]

DES INV 212 Designing Emerging Technologies II 3 Units

Terms offered: Fall 2022, Spring 2022
This course is an intensive, project-based course which serves as part of the core required curriculum for students in the Master of Design program. Students are led through a sequence of projects of varying lengths (from one week to one month). The course builds on Designing Emerging Technologies I, and focuses on developing fluency with a different set of technologies. Projects include both individual and team activities, with teams frequently changing in size and composition.
Designing Emerging Technologies II: Read More [+]
Rules & Requirements

Prerequisites: DES INV 211: Designing Emerging Technologies I

Hours & Format

Fall and/or spring: 15 weeks - 1.5 hours of lecture and 1.5 hours of laboratory per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Designing Emerging Technologies II: Read Less [-]

DES INV 213 Design Studio 5 Units

Terms offered: Fall 2023, Fall 2022, Spring 2022
In this course you will participate in a hands-on design studio focused on key topics of concern related to design and technology innovation. The primary goal of this course is to orient students to fabrication, building technologies, and fundamental design production skills in a studio environment. A key secondary goal is to provide students the opportunity to address a real world problem and provide an application or solution. Themes and project topics, as well as subject matter expertise, are provided by either external partners, including companies, local governmental offices, or nonprofits, or provided by faculty and related to research interests.
Design Studio: Read More [+]
Rules & Requirements

Prerequisites: Students must be concurrently enrolled in DES INV 219: Capstone Portfolio

Hours & Format

Fall and/or spring: 15 weeks - 6 hours of studio and 2 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Design Studio: Read Less [-]

DES INV 219 Capstone Portfolio 2 Units

Terms offered: Fall 2023, Fall 2022, Spring 2022
In this culminating course for the MDes degree, you compile a portfolio of work that has been completed during the MDes program, selecting at least four meaningful pieces that demonstrate the achievement of key learning objectives and highlight the underlying themes of your course of study. Two projects should be deeper investigations of projects done in previous classes. The third project featured should be a deep dive into the project pursued in studio. The fourth entry of the portfolio should reflect on Design@Large, an experience you have had outside of an MDes course or studio where you have furthered your design knowledge and expertise within a broader context.
Capstone Portfolio: Read More [+]
Rules & Requirements

Prerequisites: Culminating course taken at the end of the MDes program

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Capstone Portfolio: Read Less [-]

DES INV 290 Advanced Special Topics in Design Innovation 1 - 4 Units

Terms offered: Fall 2023, Spring 2023, Fall 2022
Selected advanced topics in design innovation.
Advanced Special Topics in Design Innovation: Read More [+]
Rules & Requirements

Prerequisites: Varies by topic. Check syllabus and/or Jacobs Institute website for specific prerequisites

Repeat rules: Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 1-8 hours of lecture per week
8 weeks - 1-8 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Summer:
6 weeks - 2-10 hours of lecture per week
8 weeks - 2-10 hours of lecture per week

Additional Details

Subject/Course Level: Design Innovation/Graduate

Grading: Letter grade.

Advanced Special Topics in Design Innovation: Read Less [-]