SEGAL DESIGN INSTITUTE (DSGN)

DSGN 315-0 Design, Technology, and Research (1 Unit)
A jointly offered CS and Segal learning initiative that empowers students to drive cutting-edge research that shapes new experiences with people and technology. Students work with a mentor to identify a direction of research, explore and iterate over designs, prototype at varying fidelities, build working systems, conduct evaluative studies, and report findings through conference publications. DTR adapts agile development and design-based research practices with scrums, sprints, studio critique, design logs, and pair research. This class may be repeated for credit.

DSGN 350-0 Intellectual Property and Innovation (1 Unit)
Explores the critical role of designers, business strategists and engineers in the invention/creative process. All issues relating to patents and patentability of inventions, copyrights and the protection of the expressions of ideas, trademarks and source identifiers are reviewed and analyzed in the context of multiple engineering domains.

DSGN 395-0 Special Topics (1 Unit)
Topics relevant to design engineering and approved by the institute. Prerequisite: consent of instructor.

DSGN 401-1 Human-Centered Design Studio 1 (1 Unit)
This course is part one of the year-long studio sequence required in the EDI program, and provides a project-based introduction to human-centered product design. The entire class typically works with a single corporate client, who defines a problem area for the class to explore in teams. Teaching methods include lectures, labs, reading, homework assignments, and project deliverables.

DSGN 401-2 Human-Centered Design Studio 2 (1 Unit)
This course builds upon DSGN 401-1, continuing to explore design of human-centered interactions. Students are challenged to design an experience which grows out of the interactions between a person and a product or service. Personas, use cases and scenarios will be introduced for modeling experiences. In this studio-based course, teaching methods include lectures, labs, reading, homework assignments and project deliverables.

DSGN 401-3 Human-Centered Design Studio 3 (1 Unit)
This course builds upon DSGN 401-1, continuing the theme of designing interactions. Students are challenged to design a service experience in a specific opportunity area working with an external project partner. In this studio-based course, teaching methods include lectures, labs, reading, homework assignments and project deliverables.

DSGN 410-0 Design Research (1 Unit)
In this course, students learn the value of field research in the human-centered design process. In addition to homework assignments and labs, students work on a cumulative team-based research and design project that includes generative research, analysis and synthesis, brainstorming, concept generation, and concept evaluation. Open to EDI students only.

DSGN 420-0 Design Communication & Methods (1 Unit)
This class will help students create visualization of their ideas. Course projects and deliverables center on development of students’ career asset packages including: portfolio, resume, and related assets. Students apply these methods to their future projects. But most importantly, this class will allow students to develop new creative methods in design processes.

DSGN 430-0 Mindful Product Management: How to Discover, Design, & Scale Human-Centered Products (1 Unit)
Over the course of 10 weeks we will apply aspects from mindfulness, Design Thinking, Lean Startup, and Agile to address key questions in Product Management such as: How might we continuously satisfy people not by providing more, but by aligning our products with the lives of people? How might we enable agility with a purpose?

DSGN 450-0 Differentiation by Design (1 Unit)
Introduces students to opportunities for innovation throughout the entire new product development process. Lectures supported by case studies, readings, relevant outside experts, and real-world examples.

DSGN 455-0 Design Strategy (1 Unit)
Introduces students to the power of design as a differentiator in the marketplace. Human centered design and strategic design thinking are leading the charge in meaningful innovation that consumers and business find relevant. This course is a highly interactive studio with real-world examples, case studies, guest lectures from industry, class discussions, and storytelling, along with hands on design thinking exercises and assignments.

DSGN 474-0 Brand and Design Leadership (1 Unit)
We will explore the brand, design, and leadership concepts: as separate notions, how they intersect and how different configurations can create value and even lead to similar outcomes. We will discuss various formal frameworks and contextualize them with real-world models, examples and stories. Guest speakers of diverse career backgrounds will share their own frameworks and stories.

DSGN 495-0 Special Topics in Engineering Design (1 Unit)
DSGN 497-0 Advanced Topics in Engineering Design (0.5 Unit)
DSGN 499-0 Independent Research Project (0.5-2 Units)
DSGN 519-0 Responsible Conduct of Research Training (0 Unit)