# **ITD - Integrated Design**

# **Integrated Design: ITD**

# **Lower-Division Courses**

#### ITD 101. Introduction to Integrated Design.

Introduction to the concepts, mindsets, and methods of design thinking as a fundamental skill for all disciplines. The equivalent of one lecture hour a week for one semester.

### ITD 301D. Introduction to Design Thinking.

Same as Design 301. Introduces design thinking and design methods, with a focus on design process. Three lecture hours a week for one semester. Design 301 and Integrated Design 301D may not both be counted. Offered on the letter-grade basis only.

#### ITD 102. Sketching for Thinking and Communication.

Discussion of sketching as the fastest way to convey ideas, both in an ideation session or taking notes in a meeting. Explores the basic elements of sketching to visualize concepts and quickly bring alignment to any team. The equivalent of one lecture hour a week for one semester.

#### ITD 103. Portfolio Critique.

Development of a portfolio of work to present for feedback. Designed to help students understand what is expected to create a personal portfolio to show potential employers. The equivalent of one lecture hour a week for one semester.

#### ITD 103D. Introduction to Prototyping.

Explore translating ideas into tangible and experiential designs through the act of making, building, testing, and iterating in a team setting. The equivalent of one lecture hour a week for one semester. Offered on the letter-grade basis only.

#### ITD 104. Design in Business.

Introduction to the role that business plays in the design industry. Designed to help students learn business principles to enhance problem solving skills. The equivalent of one lecture hour a week for one semester.

#### ITD 105. Introduction to Computer Science Principles.

Restricted to non-computer science majors. Introduction to the basic principles and terms of logic, programming and computer science for non-computer science majors. The equivalent of one lecture hour a week for one semester.

# ITD 106. Presentation and Improvisational Skills in Design Thinking.

Focus on presentation skills and improvisational/impromptu speaking skills in meetings. The equivalent of one lecture hour a week for one semester.

#### ITD 107. Introduction to Desktop Publishing Software.

Introduction to elements of desktop publishing software. Explores basic skills in computer applications such as Adobe InDesign. The equivalent of one lecture hour a week for one semester.

#### ITD 108. Introduction to Graphic Editing Software.

Introduction to elements of graphic editing software. Focus on basic skills in computer applications such as Adobe Photoshop. The equivalent of one lecture hour a week for one semester.

#### ITD 109. Introduction to Vector Graphics Software.

Introduction to elements of vector graphic software. Focus on basic skills in computer applications such as Adobe Illustrator. The equivalent of one lecture hour a week for one semester.

#### ITD 110, 210, 310. Topics in Integrated Design.

Studies within integrated design. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary.

#### ITD 110T, 310T. Topics in Innovative Design.

Exploration of topics in innovative design. For 110T, two laboratory hours a week for one semester; for 310T, six laboratory hours a week for one semester. Additional hours to be arranged as needed. May be repeated for credit when the topics vary.

#### ITD 111. Intro to Design for Artificial Intelligence.

Introduction to exploring design as a problem-solving tool for realworld scenarios posed from artificial intelligence and robotics. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Offered on the letter-grade basis only.

#### ITD 312. Introduction to Design for Health.

Introduction to how design is playing a role in the changing healthcare industry. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C in each: Integrated Design 101, and Design 301 or Integrated Design 301D.

#### ITD 119G, 319G. Storytelling in Design.

Examine the role of storytelling in the user-centered design process and explore the principles that drive influential stories. For each semester hour of credit earned, one lecture hour a week for one semester. Integrated Design 119G, 319G and 150 (Topic: Storytelling in Design) may not both be counted. Offered on the letter-grade basis only.

## **Upper-Division Courses**

#### ITD 320. Advanced Design for Artificial Intelligence.

Advanced exploration of real-world scenarios posed from artificial intelligence and robotics. In-depth study of designing and solving problems for artificial intelligence. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing; Integrated Design 301D and Integrated Design 111 or Integrated Design 110.

#### ITD 125, 225, 325. Topics in Artificial Intelligence Design.

Studies within design and artificial intelligence. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Integrated Design 301D; and Integrated Design 111 or 320.

#### ITD 130T, 330T. Topics in Innovative Design.

Explore innovative topics in design. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### ITD 150, 250, 350. Advanced Topics in Integrated Design.

Advanced studies in integrated design. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### ITD 350D. Business of Design.

Designed to help students form an advanced understanding of the role that business plays in the design industry and the operational components necessary to be successful in the design industry. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and the following with a grade of at least C in each: Integrated Design 101, 304, and Design 301 or Integrated Design 301D.

#### ITD 150T, 350T. Topics in Advanced Innovative Design.

Exploration of topics in advanced innovative design. For 150T, two laboratory hours a week for one semester; for 350T, six laboratory hours a week for one semester. Additional hours to be arranged as needed. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### ITD 360. Perspectives in Design.

Explore unique perspectives in design. Three lecture hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### ITD 365. Applied Ethnographic Research in Design.

Focus on how to create actionable insights using ethnographic research. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and the following with a grade of at least C in each: Integrated Design 101, and Design 301 or Integrated Design 301D.

#### ITD 170, 270, 370. Topics in Off-Site Field Studios.

Project-based work with off-campus industry studio partners. Professional experience solving real-world problems including, but not limited to, commissioned projects, student-initiated projects, and pro bono projects. For 170, two laboratory hours a week for one semester; for 270, four laboratory hours a week for one semester; for 370, six laboratory hours a week for one semester. Additional hours to be arranged as needed. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: For College of Fine Arts majors, upper-division standing and six semester hours of upperdivision coursework in design or integrated design; for non-College of Fine Arts majors, upper-division standing and consent of instructor.

#### ITD 375. Capstone in Integrated Design.

Restricted to students in the bridging discipline program. Multidisciplinary groups of students research an integrated design problem and propose and prototype an appropriate solution, guided by feedback from supervising instructor(s). Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Integrated Design 101, Integrated Design 301D, three additional one-credit Integrated Design Courses, and consent of instructor.

## **Graduate Courses**

#### ITD 380. Design Thinking.

Explores the concepts of design thinking and human-centered design methods, with a focus on design process and problem solving. Three lecture hours a week for one semester. Prerequisite: Graduate standing.

#### ITD 185, 285, 385. Topics in Integrated Design.

Graduate studies within integrated design. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing; and Integrated Design 380 or consent of instructor. May be taken concurrently with Integrated Design 380 if topic is appropriate.

# ITD 186, 286, 386, 486, 586, 686. Topics in Integrated Design Studio.

Project-based studio graduate work within integrated design. For each semester hour of credit earned, the equivalent of two hours of laboratory work per week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing; and Integrated Design 380 or consent of instructor. May be taken concurrently with Integrated Design 380 if topic is appropriate.

#### ITD 390. Design for Health.

Exploration of creative design-based approaches and problem-solving methods and their application to solving contemporary health care challenges. Three lecture hours a week for one semester. Prerequisite: Graduate standing and Integrated Design 380, or consent of instructor

#### ITD 291. Health Design Seminar.

Design techniques, case studies, and team critiques. Seminar component of Integrated Design 692. Two lecture hours a week for one semester. Prerequisite: Graduate standing; and Integrated Design 390 or consent of instructor. Concurrent enrollment in Integrated Design 692.

#### ITD 692. Health Design Lab.

Team-based, project-focused application of the principles of design to real-world health and wellness challenges. Lab component of Integrated Design 291. Twelve laboratory hours a week for one semester. Prerequisite: Graduate standing; and Integrated Design 390 or consent of instructor. Concurrent enrollment in Integrated Design 291.

#### ITD 195, 295, 395. Topics in Health Design.

Graduate studies within health design. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and Integrated Design 380 and 390, or consent of instructor

# ITD 196, 296, 396, 496, 596, 696. Topics in Health Design Studio.

Project-based studio graduate work within health design. For each semester hour of credit earned, the equivalent of two hours of laboratory work per week for one semester. Additional hours to be arranged as needed. May be repeated for credit when the topics vary. Prerequisite: Graduate standing and Integrated Design 380 and 390, or consent of instructor

### **Professional Courses**