

# Design (DES)

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## Courses

### **DES 400. Independent Study in Graphic Design. 1-5 hours.**

Supervised independent study in graphic design. Course Information: May be repeated for a maximum of 8 hours for undergraduate students or 10 hours for graduate students. Previously listed as AD 418. Extensive computer use required. Prerequisite(s): Senior standing or above and consent of instructor. Taken by faculty invitation only.

### **DES 410. Senior Design Colloquium I. 1 hour.**

Advanced overview of design practice. Includes lectures representing current and emerging forms of commercial and social practice. Course Information: Previously listed as AD 415. Prerequisite(s): DES 319 or DES 322, and senior standing or above, and consent of instructor.

### **DES 411. Senior Design Colloquium II. 1 hour.**

This course is a continuation of DES 410 which introduces students to the breadth and depth of design theory and practice. The course focuses on the student's individual skills, interests and possibilities for professional engagement. Course Information: Prerequisite(s): DES 410.

### **DES 420. Professional Practice Project I. 0-5 hours.**

Year-long course sequence option allowing students to engage in an interdisciplinary professional project with a commercial or community concern. Emphasis on teamwork and client interaction. Course Information: Previously listed as AD 411. Prerequisite(s): Senior standing or above and completion of the design foundation program. Class Schedule Information: To be properly, registered students must enroll in one Lecture and one Laboratory.

### **DES 421. Professional Practice Project II. 4 hours.**

Year-long course sequence option allowing students to engage in an interdisciplinary professional project with a commercial or community concern. Emphasis on teamwork and client interaction. Course Information: Extensive computer use required. Prerequisite(s): DES 420. Class Schedule Information: To be properly registered, student must enroll in one Lecture and one Laboratory.

### **DES 426. Video Game Design and Development. 3 or 4 hours.**

Theory and practice of video game design and programming. Students will form interdisciplinary teams, to design, build and demonstrate video games or related interactive simulation environments. Course Information: Same as CS 426. 3 undergraduate hours. 4 graduate hours. Prerequisite(s): Grade of C or better in CS 251.

### **DES 427. Creative Coding. 3 or 4 hours.**

Creative Coding investigates how contemporary computational techniques can inspire novel forms of art making, providing students with the skills to make use of technology for expressive purposes. Course Information: Same as CS 427. 3 undergraduate hours. 4 graduate hours. Prerequisite(s): Grade of C or better in CS 251.

### **DES 430. Interdisciplinary Product Development I. 4 hours.**

Introduces cross-functional team-based work focusing on problem identification and use-centered research methods in the fuzzy front end of new product development. Course Information: Previously listed as AD 420. Prerequisite(s): DES 319 or DES 322 and senior standing or above. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 431. Interdisciplinary Product Development II. 4 hours.**

Continues cross-functional team-based work focused on problem identification and user-centered research methods in the fuzzy front end of new product development. Course Information: Previously listed as AD 421. Prerequisite(s): DES 430 and senior standing or above. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 432. Interaction Design. 4 hours.**

Design thinking and mastery of design process with opportunity for collaborative work in small teams focused on client-based project. Course Information: Previously listed as AD 413. Prerequisite(s): Junior standing or above. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 440. Design and Identity I. 4 hours.**

Year-long course sequence option allowing students to engage in an interdisciplinary professional project involving design research and civic or social engagement. Emphasis on teamwork, advocacy and presentation. Course Information: Extensive computer use required. Prerequisite(s): DES 319 or DES 322. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 441. Design and Identity II. 4 hours.**

Year-long course sequence option allowing students to engage in an interdisciplinary professional project involving design research and civic or social engagement. Emphasis on teamwork, advocacy and presentation. Course Information: Extensive computer use required. Prerequisite(s): DES 440. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 450. Advanced Topics in Design. 4 hours.**

Advanced special topics in design theory and practice. Course Information: May be repeated. Students may register in more than one section per term. Extensive computer use required. Prerequisite(s): Open only to advanced undergraduate and graduate students in the School of Design. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 452. Information Aesthetics I. 4 hours.**

Introduction to information visualization and programming in the context of art and design. Project oriented course using computer code and custom software for information analysis, representation and creative expression. Course Information: 4 hours. May be repeated to a maximum of 8 hours. Previously listed as AD 452. Extensive computer use required. Prerequisite(s): DES 319 or DES 322 and sophomore standing or above; or consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

### **DES 453. Information Aesthetics II. 4 hours.**

Intermediate course emphasizing the database as cultural form. Creative projects and research in information aesthetics through data driven two, three and four dimensional visualizations and custom computer interfaces. Course Information: 4 hours. May be repeated for a maximum of 8 hours. Previously listed as AD 453. Extensive computer use required. Prerequisite(s): DES 452 or ART 452 and junior standing or above; or consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 458. Integrative Studio Project. 4 hours.**

Exploration, deduction and design of student-selected research topic. Accumulated knowledge and skills are utilized to develop a year-long capstone project. Course Information: Previously listed as DES 358. Extensive computer use required. Prerequisite(s): DES 357. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 470. Industrial Design Thesis I. 4 hours.**

Research and design of student-selected topic. Accumulated knowledge and skills are utilized to develop a year-long capstone project providing opportunity to develop a specific focus within design. Course Information: Previously listed as AD 423. Prerequisite(s): DES 236 and DES 331 and senior standing or above. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 471. Industrial Design Thesis II. 4 hours.**

Research and design of student-selected topic. Accumulated knowledge and skills are utilized to develop a year-long capstone project providing opportunity to develop a specific focus within design. Course Information: Extensive computer use required. Prerequisite(s): DES 470 and senior standing or above. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 480. Graphic Design Thesis I. 4 hours.**

Exploration, deduction and design of student-selected research topic. Accumulated knowledge and skills are utilized to develop a year-long capstone project. Course Information: Previously listed as AD 412. Prerequisite(s): DES 236 and DES 319. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 481. Graphic Design Thesis II. 4 hours.**

Exploration, deduction and design of student-selected research topic. Accumulated knowledge and skills are utilized to develop a year-long capstone project. Course Information: Extensive computer use required. Prerequisite(s): DES 480. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 499. Design Internship. 1 hour.**

Academic learning is coupled with professional experience in an off-campus design studio or department. Co-operative education placement is arranged by the student. Course Information: May be repeated for a maximum of 3 hours. Previously listed as AD 499. Requirements of organization offering internship: understanding/agreement that a student intern is a design professional in training (not a volunteer, not a freelancer), positions are paid (at or above federal minimum wage), student is seeking professional experience (not a portfolio piece), setting is a design department or student environment (the student is not the only designer on site), 15 hours per week expected, 20 hours per week maximum. Prerequisite(s): Approval of the Department.

**DES 500. Combined Studio. 4 hours.**

Studio course comprised of first and second year graduate students. Topical projects and investigations are completed on an individual basis or in groups. Course Information: May be repeated to a maximum of 8 hours. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 501. Research Seminar I. 4 hours.**

Systematic investigation into current and historical materials relevant to design and drawn from a broad range of disciplines for the purpose of identifying a theme or topic worthy of a written master's research project. Class Schedule information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 502. Research Seminar II. 0-6 hours.**

Detailed use of creative language as an inspirational and conceptual tool to craft a logical, well-reasoned, and compelling written master's research project. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 510. Advanced Graphic Design I. 4 hours.**

Exploration of graphic design basics at an advanced level. Introduction to typographic discipline and experimentation. Design process made tangible and visible. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 511. Advanced Graphic Design II. 4 hours.**

Topical creative projects and research in graphic design. Independent exploration. Course Information: Prerequisite(s): DES 501 and 510. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 512. Documentation Studio. 4 hours.**

Team-based publication design in a studio setting. Subject matter provided. Course Information: Prerequisite(s): DES 501 and DES 510. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 520. Design Seminar. 4 hours.**

Seminar on a current topic in the criticism, theory or history of design. Course Schedule Information: May be repeated up to a maximum of 8 hours. Prerequisite: DES 500. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 531. Industrial Design Master's Research Project I. 4 hours.**

Seminar focused on research basics, specifically "research for inspiration" used to locate and articulate the master's research project. Emphasis on secondary research, particularly from non-design sources. Class Schedule Information: To register properly, students must enroll in one Lecture and one Laboratory.

**DES 532. Industrial Design Master's Research Project II. 4 hours.**

Seminar focused on primary research methods, analysis, and synthesis. Emphasis on user-testing of prototypes that support the development of master's research projects. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 540. Research Studio. 4 hours.**

Master's research project paper, completed in the first year, is designed into publication form. Course Information: Prerequisite(s): DES 502 and DES 511. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 541. Master's Research Project + Exhibition. 4 hours.**

Supervised coursework toward graduation requirement of master's research project, public exhibition, and oral defense. Independent advisement as well as group discussion and critique. Course Information: Prerequisite(s): DES 502 and DES 511. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 542. Master's Research Project Advising. 2 hours.**

Independent progress on master's research project supervised by faculty advisor. Course Information: Prerequisite(s): DES 540.

**DES 550. Industrial Design Master's Research Project Studio. 4 hours.**

Supervised independent studio initiating in-depth design process from previously completed master's research project statement. Emphasis on ideation, prototype iteration, formal/technical development, model fabrication and user evaluation. Course Information: May be repeated to a maximum of 12 hours. Prerequisite(s): DES 501 and DES 531. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 551. Master's Research Project Documentation + Exhibition. 4 hours.**

Supervised work toward graduation requirements of master's research project process and outcome documentation, public exhibition, and oral defense. Independent advisement as well as group discussion and critique. Course Information: Prerequisite(s): DES 502 and DES 550. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 560. Design Teaching Internship. 0-2 hours.**

Practical and theoretical aspects of teaching lecture/lab, studio courses in Design. Course Information: May be repeated for credit. No graduation credit. Prerequisite(s): Consent of instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory.

**DES 597. Master's Project. 0-4 hours.**

Independent research under faculty supervision in a specific area of interest. Course Information: May be repeated to a maximum of 16 hours. Prerequisite(s): Consent of instructor.