INTEGRATED DESIGN, ENGINEERING, ARTS & SOCIETY MAJOR

MAJOR DESCRIPTION

The Major in Integrated Design, Engineering, Arts & Society (IDEAS) challenges students to think broadly, design responsibly, and respond critically to the complex social, technological, cultural, and environmental conditions surrounding them. Through a curriculum that brings together iterative creation, experimentation, and critique, IDEAS majors gain proficiency in making as a form of inquiry and research.

Students attracted to the IDEAS major bring a high level of intellectual curiosity, an interdisciplinary mindset, and an inventive imagination to improve systems and solve problems. Hands-on, collaborative, project-based courses form the core of the major. Drawing on Wesleyan's liberal arts tradition, students complete courses across all three academic divisions before establishing an area of focus. The linked IDEAS major is secondary to a primary major (e.g., Art Studio, Biology, Computer Science, Theatre, Physics, etc.) and students must complete all the graduation requirements from their primary major in addition to those of the IDEAS major. Each student works closely with an IDEAS advisor to develop their individual course of study, including a major capstone project, and assemble a portfolio encompassing work developed within IDEAS courses.

IDEAS majors graduate with an understanding of how design and engineering choices shape—and are shaped by—social structures. They bring a combination of strategic thinking and technical skill to a broad range of fields, including architecture, systems design, user-experience design, robotics and human-computer interaction, urban planning, sustainability, and service design.

ADMISSION TO THE MAJOR

The linked major in Integrated Design, Engineering, Arts & Society (IDEAS) is the secondary major to a primary, companion major (e.g., art studio, biology, computer science, physics, theater, etc.). Students cannot obtain the BA degree with IDEAS as their only major. Students must complete all the requirements for graduation from their primary major in addition to those of IDEAS as their linked major. Each student will work closely with an IDEAS advisor to develop an individual course of study within an established major track. Students are encouraged to declare the IDEAS linked major in the spring of their sophomore year.

MAJOR REQUIREMENTS

IDEAS Core (4 Courses)

Comprising four courses, the IDEAS major Core is designed to introduce students to hands-on, project-based studio, laboratory, and critical coursework in design and engineering. There are multiple possible introductory courses to fulfill three of the four core course requirements. The fourth course within the core (IDEA 292: Interdisciplinary Project Lab) acts as the gateway to the major.

1. Introductory Design Studio (ARST220, ARST235, or ARST270)

2. Engineering Foundations Lab (IDEA170 or IDEA175)

3. Design & Technology Seminar (IDEA180) or another approved Social Science course

4. Major Gateway (IDEA292). All students intending to major must enroll in the Interdisciplinary IDEAS Project Lab after completing a foundations lab or introductory design studio course (1 or 2 above). Completion of the gateway courses is recommended prior to completion of sophomore year, but not required.

Range (4 Courses)

Building on the interdisciplinary foundation of the Core, the second set of course requirements collectively enhance students' design and engineering range. Like the Core, the Range consists of four courses:

1. Design Studio elective

2. Engineering/Quantitative elective

3. History/Theory elective

4. Programming elective (COMP112, IDEA285 or approved alternate)

Except where explicitly excluded by course prerequisites, the Range courses may be taken simultaneously with Core courses to increase the flexibility of student scheduling. Some of these courses may also overlap with the linked major.

Focus (4 Courses)

These four upper-level elective courses are specific to each major track, constitute the focus area of the student's major, and must be at the 200-level or higher. Students are strongly encouraged to select from pre-approved listings of courses for their chosen track, detailed below. At least two of these elective courses should be listed (or cross-listed) by the IDEAS program. Students may develop an alternate sequence with approval from their IDEAS advisor and program director.

Senior Capstone Project (1-2 Credits)

A team-based or independent original project culminating in a public presentation, exhibition, or publication. The capstone may be one to two credits, depending on scope of project. In many cases, this project will take the form of a senior thesis, and may be advised in coordination with the student's primary major. More details are provided in Section I below. Seniors will participate in colloquium lunches where they will make a brief presentation of their project, followed by discussion with students and participating faculty. Students will distribute a summary of their findings in the week prior to presenting to facilitate discussion. All declared IDEAS majors will be invited to the colloquium luncheons to build community and encourage them to plan future projects.

Student Portfolio:

Students will assemble a portfolio of their work. An initial portfolio will be developed in the required IDEAS Project Lab (IDEA292). The portfolio should document the student's work from IDEAS project-based courses, and may include appropriate work from a student's primary major. The portfolio may incorporate both physical and digital forms, as appropriate. Students are strongly advised to add to this portfolio each semester, based on their ongoing work. The portfolio will be reviewed by the student's advisor as one of the major requirements. Students are encouraged to create a portfolio that can be used to present their work for future employment or graduate studies.

IDEAS Major Tracks and their requirements are available on the CoDES website at this link (https://www.wesleyan.edu/codes/program/major-tracks.html).

senior exhibition, senior film thesis). The final project is submitted to the companion department and is not evaluated by IDEAS.

2. The student may register for and complete a senior thesis in the IDEAS major. The mentor can be any Wesleyan faculty member, but the topic must be approved by the student's IDEAS advisor. The thesis material may take the form of a written publication, public presentation, or exhibition, with the form approved by the student's IDEAS advisor and the College of Design & Engineering Studies chair.

STUDENT LEARNING GOALS

- Building a foundation of knowledge that includes the technical, aesthetic, and social aspects of design and engineering.
- Learning how to apply theoretical knowledge to the creation of objects, systems, or methods.
- Understanding how design and engineering choices are influenced by social structures and pressure, and vice-versa.
- Learning how to use the design process as a framework for creative exploration and problem solving.
- Learning how to effectively work in group settings and how to harness complementary skills of group members.

STUDY ABROAD

Study abroad is encouraged for IDEAS major students. Students should consider programs that offer courses in the areas of design and/or engineering. Students should request approval for any courses they wish to transfer for credit prior to study abroad.

LANGUAGE REQUIREMENT

There is no language requirement for IDEAS.

TRANSFER CREDIT

IDEAS Core courses must be taken at Wesleyan. Up to three course requirements for the IDEAS major can be fulfilled with transfer credits, subject to approval from an IDEAS advisor and program chair.

HONORS

Student honors projects may be pursued with an IDEAS Core faculty member or through a project with a mentor from the student's companion major that has prior approval from the student's IDEAS advisor. Such honors projects would fulfill the capstone described above. Projects completed in the companion department are not evaluated by IDEAS. For Departmental Honors in IDEAS, a student must have a minimum GPA of 85.0 and complete both Stage I and Stage II general education expectations. Depending on the focus area, an IDEAS mentored thesis may be a written thesis, exhibition, or body of work, and must be evaluated by the thesis advisor and two additional faculty members to meet the standards for honors or high honors.

CAPSTONE EXPERIENCE

Students will complete a team-based or independent original project culminating in a public presentation, exhibition, or publication. The capstone may be one to two credits, depending on scope of project. There are several ways to fulfill the capstone requirement.

1. The project may take the form accepted by the companion department as a senior project (e.g., senior thesis, senior essay, senior performance,