A minor in IDEAS requires seven credits. Comprised of three courses the IDEAS minor core is designed to introduce students to hands-on project-based studio, laboratory, and critical coursework in design and engineering. The remaining four elective courses come from course concentrations. Some courses offered on an irregular basis are not listed in concentrations, but may be used for electives subject to approval from the minor advisor.

**MINOR REQUIREMENTS**

**MINOR CORE**

3 COURSES
The **Minor Core** is identical for all IDEAS Minor Tracks.

- **Engineering Foundations Lab:**
  IDEA 170 or IDEA 175

- **Introductory Design Studio:**
  ARST220/IDEA 120, ARST235/IDEA 234, ARST270/IDEA160, IDEA 185, IDEA 190, ARST236/IDEA 236, ARST243/IDEA243 ARST221/IDEA221, IDEA285, THEA 185

- **Design & Technology Seminar:**
  IDEA 180, Any 200-level SISP Course, or other Design & Technology focused seminar.

Multiple options for each Core course requirement:

- **Engineering Foundations Lab:**
  IDEA 170 or IDEA 175

- **Introductory Design Studio:**
  ARST220/IDEA 120, ARST235/IDEA 234, ARST270/IDEA160, IDEA 185, IDEA 190, ARST236/IDEA 236, ARST243/IDEA243 ARST221/IDEA221, IDEA285, THEA 185

- **Design & Technology Seminar:**
  IDEA 180, Any 200-level SISP Course, or other Design & Technology focused seminar.

Some of the Minor Concentrations include courses listed among those that will satisfy a gateway course distribution requirement.

- **Concentration Elective A**
- **Concentration Elective B**
- **Concentration Elective C**
- **Concentration Elective D**

**CONCENTRATION**

4 COURSES
Each IDEAS Minor includes a Concentration area from a wide array of areas in Design, Engineering, Arts & Society.

Students will work with an advisor to help them achieve the appropriate depth of study in the concentration.

Related courses that are not offered on a regular basis or course substitutions may be considered for minor credit, subject to review by the minor advisor.

Typically, introductory (100-level) courses may not be counted toward the Concentration elective requirement.

**PORTFOLIO**

All IDEAS minors will assemble a portfolio encompassing work developed within IDEAS courses. Students participating in the minor will begin the development of a digital and/or physical portfolio in the required project-based minor courses. In consultation with an advisor, projects will be added to this portfolio and reviewed before completion of the minor.

**Concentrations Include:**
- Arts and Design
- Applied Math
- Biological or Biochemical Concentration
- Chemical Concentration
- Computer Concentration
- Electrical Concentration
- Environmental Concentration
- Geomechanics/Geosystems
- Materials Science
- Mechanical Concentration
- Performance Design

7 Courses
(3 Core, 4 Concentration) + Portfolio