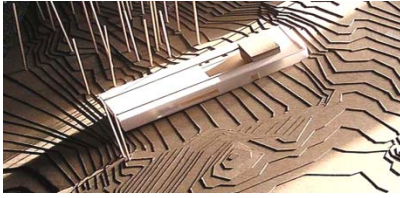


ARCHITECTURAL DESIGN MAJOR



School of Engineering/
Stanford University

Dept. of Civil and
Environmental Engineering

The most innovative architectural
designs require the latest
advances in engineering.....

<http://www.stanford.edu/dept/archdesign/> - Program website
<http://stanfordarchitecture.blogspot.com/> - Program blog
<http://www.archdesign.stanford.edu/intro.mov> – Program video clip
or <http://www.ughb.stanford.edu> – Handbook for Undergraduate Engineering Programs

Program Overview

This undergraduate major in architectural design grants a degree of Bachelor of Science in Engineering with a specialization in Architectural Design. The major offers a wide variety of engineering courses with hands-on architectural design studios and fine arts courses. Students can choose from electives that develop additional depth in either architectural design or engineering. Architecture has become increasingly technical, and our graduates are well prepared to interact with a range of specialists. In addition to preparing students for advanced studies in architecture, the program's strong math and science requirements prepare students for graduate work in other fields, such as civil and environmental engineering, law, and business. Many students choose to take jobs directly after graduation as intern architects while others go on to graduate studies in architecture, structural engineering, or construction management. This pre-architecture undergraduate program is not a degree that leads directly to professional licensure in architecture or engineering. In order to become a licensed architect or engineer, additional graduate training is required.

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Course Requirements Architectural Design

08-09 (Total Units = 100)

1. MATHEMATICS and SCIENCE (36 units minimum)¹

Including Math 19, 20, 21 (or 41 & 42)

1 course required in Statistics

Physics 21 or 41. (Mechanics is required) [*21-Aut or 41-Win*],
3-4 units (Recommend Physics 22)

(Specially Approved Science Courses: EARTHSYS 101, EARTHSYS
102) [*101-Win, 102-Spr*] 3 units each

(Recommended Math and Science Courses: CEE 101D, CME 100,
CEE 64, CEE 70, GES 1, Physics 23 or 43) [*101D-Aut, 100-Aut,
64-Win, 70-Spr, 1-Aut, Spr, 23-Win, or 43-Spr*] 3,5,3,3,4,3,4
units respectively

2. TECHNOLOGY IN SOCIETY - One course required¹

3. ENGINEERING FUNDAMENTALS and DEPTH¹

Engineering Fundamentals – 9-11 units

ENGR 14. Applied Mechanics [*Aut, Spr*], 3 units

ENGR 60. Engineering Economy [*Aut, Win, Sum*], 3 units

One other fundamentals elective, 3-5 units¹

Required Depth – 38 units

CEE 100. Managing Sustainable Building Projects [*Spr*], 4 units

CEE 101A. Mechanics of Materials [*Win*], 4 units

CEE 110. Building Information Modeling [*Aut*], 4 units

CEE 31Q(31). Accessing Architecture Through Drawing

[*31Q-Aut & Spr*], 4 units, [*31-Not offered -take 134B*],

CEE 130. Architectural Design [*Win*], 4 units

CEE 136. Green Architecture [*Not Offered- take 137B*], 4 units

CEE 137B. Intermediate Architecture Studio [*Win*], 5 units

CEE 156. Building Systems [*Spr*], 4 units

ARTHS 3. Intro to Architecture History [*Win*], 5 units

DEPTH ELECTIVES - see other side

¹Choose from approved list of courses in SoE undergraduate handbook (<http://ughb.stanford.edu>).

DEPTH ELECTIVES – At least one of the following CEE 111, CEE 115, CEE 138A or CEE 131A.
(*Note:* the number of units of Depth Electives must be such that courses in Engineering Fundamentals, Required Depth, and Depth Electives total at least 60 units.)

CEE 111. Multidisciplinary Modeling and Analyses [*Spr*], 3-4 units
CEE 122 A,B. Computer Integrated Architecture/Engr./Construction [*A-Win, B-Spr*], 3/2 units
CEE 131A. Introduction to the Design Professions [*Spr*], 2 units
CEE 134B: Arch Studio: Special Topic [*Spr*], 4 units
CEE 135A. Parametrics: Applications in Architecture and Product Design [*Aut*], 4 units
CEE 137B. Intermediate Studio
CEE 138A. Contemporary Architecture [*Aut*], 3 units
CEE 139. Design Portfolio Methods [*Spr*], 2 units
ME 101. Visual Thinking [*Aut, Win, Spr*], 3 units
ME 110A. Design Sketching [*Win, Spr*], 1 unit
ME 115. Human Values in Design [*Win*], 3 units
ME 120. History and Philosophy of Design [*Spr*], 3-4 units
ARTHS 142. Varieties of Modern Architecture [*Win*], 4 units
ARTHS 143A. American Architecture [*Not Offered*], 4 units
ARTHS 188. Modern & Contemporary Japanese and Chinese Architecture, [*Spr*], 4 units
ARTHS 252A. Place: Making Space Now [*Win*], 5 units
ARTSTUDIO 60. Design I: Fundamental Visual Language [*Aut, Win, Spr*], 3-5 units
ARTSTUDIO 70. Intro to Photography I [*Aut, Win, Spr*], 4 units
ARTSTUDIO 140. Drawing I [*Aut, Win, Spr*], 3 units
ARTSTUDIO 145. Painting I [*Aut, Win, Spr*], 3 units
ARTSTUDIO 148. Printmaking [*Aut, Win, Spr*], 3 units
ARTSTUDIO 271. The View Camera: It's Uses and Techniques [*Win*], 3 units
FILMPROD 114. Introduction to Film and Video Production [*Aut, Spr*], 5 units
DRAMA 137. Drafting and Construction [*Spr*], 2-3 units

CEE 80N. The Art of Structural Engineering [*Not Offered*], 4 units
CEE 101B. Mechanics of Fluids [*Spr*], 4 units
CEE101C. Geo-technical Engineering [*Aut*], 3-4 units
CEE 115. Goals and Methods for Sustainable Design of Buildings [*Win*], 3-4 units
CEE154. Cases in Estimating Costs [*Aut*], 3 units
CEE 172A. Indoor Air Quality [*Spr*], 2-3 units
CEE 176A. Energy Efficient Buildings [*Win*], 3-4 units
CEE 180. Structural Analysis [*Aut, Spr*], 4 units
CEE 181. Design of Steel Structures [*Win*], 3 units
CEE 182. Design of Reinforced Concrete Structures [*Win*], 4 units
CEE 183. Integrated Building Design, [*Spr*], 4 units
ME 222. Beyond Green Theory [*Spr*], 2-3 units

Interested in Graduate Studies in Architecture?

Students intent on applying to architecture graduate school are encouraged to take studio art courses as early as possible in their academic career and to take more than the required number of architecture studios. In preparation for architecture graduate school applications, students should plan on taking the portfolio preparation class. It is also recommended that students take computer-modeling courses that will enable them to pursue summer internships. Internships are extremely valuable since they allow students to test their interest in architecture as a profession.

Architecture Studio Courses: CEE 31, CEE 130, CEE 134B, CEE 136, and CEE 137B.
Portfolio Preparation: CEE 139.
Computer Modeling: CEE 110 and CEE 111.

Interested in Sustainable Architecture?

CEE 100: Managing Sustainable Building Projects (fulfills WIM), CEE 115: Goals and Methods for Sustainable Design of Buildings, CEE 172A: Indoor Air Pollution, CEE 176A: Energy Efficient Buildings, CEE 136: Green Architecture, CEE 70: Environmental Science and Technology, EARTHSYS 101: Energy and Environment, EARTHSYS 102: Renewable Energy Sources, and ME 222: Beyond Green Theory.