**UNDERGRADUATE MAJORS AND MINORS, SCHOOL OF ENGINEERING**

**Bachelor of Science in the School of Engineering**

Departments within the School of Engineering offer programs leading to the Bachelor of Science degree in the following fields:

- Aeronautics and Astronautics (http://exploredegrees.stanford.edu/soe-ug-majors/aeroastro)
- Bioengineering (http://exploredegrees.stanford.edu/soe-ug-majors/bioengineering)
- Chemical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/chemeng)
- Civil Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/civilengineering)
- Computer Science (http://exploredegrees.stanford.edu/soe-ug-majors/cs)
- Electrical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/ee)
- Environmental Systems Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/ese)
- Management Science and Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/msande)
- Materials Science and Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/matsci)
- Mechanical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/mechengl)

The School of Engineering itself offers interdisciplinary programs leading to the Bachelor of Science degree in Engineering with specializations in:

- Architectural Design (http://exploredegrees.stanford.edu/soe-ug-majors/archdesign)
- Atmosphere/Energy (http://exploredegrees.stanford.edu/soe-ug-majors/atmos-energy)
- Biomedical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/bioengineering)
- Biomechanical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/biomechanicalengineering)
- Biomedical Computation (http://exploredegrees.stanford.edu/soe-ug-majors/biomedicalcomputation)
- Civil Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/civilengineering)
- Computer Science (http://exploredegrees.stanford.edu/soe-ug-majors/cs)
- Electrical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/ee)
- Engineering Physics (http://exploredegrees.stanford.edu/soe-ug-majors/engrphys)
- Environmental Systems Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/ese)
- Materials Science and Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/matsci)
- Mechanical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/mechengl)

In addition, students may elect a Bachelor of Science in an Individually Designed Major in Engineering.

**Bachelor of Arts and Science (B.A.S.) in the School of Engineering**

This degree is available to students who complete both the requirements for a B.S. degree in engineering and the requirements for a major or program ordinarily leading to the B.A. degree. For more information, see the "Undergraduate Degrees (http://exploredegrees.stanford.edu/undergraduatedegreesandprograms/#bachelorstext)" section of this bulletin.

**Undergraduate Honors in the School of Engineering**

The following bachelor's programs in the School of Engineering offer an honors option for qualified students:

- Aeronautics and Astronautics (http://exploredegrees.stanford.edu/soe-ug-majors/aeroastro)
- Architectural Design (http://exploredegrees.stanford.edu/soe-ug-majors/archdesign)
- Atmosphere/Energy (http://exploredegrees.stanford.edu/soe-ug-majors/atmos-energy)
- Bioengineering (http://exploredegrees.stanford.edu/soe-ug-majors/bioengineering)
- Biomechanical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/biomechanicalengineering)
- Biomedical Computation (http://exploredegrees.stanford.edu/soe-ug-majors/biomedicalcomputation)
- Civil Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/civilengineering)
- Computer Science (http://exploredegrees.stanford.edu/soe-ug-majors/cs)
- Electrical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/ee)
- Engineering Physics (http://exploredegrees.stanford.edu/soe-ug-majors/engrphys)
- Environmental Systems Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/ese)
- Materials Science and Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/matsci)
- Mechanical Engineering (http://exploredegrees.stanford.edu/soe-ug-majors/mechengl)

**Additional Information**

Additional information on core requirements for the B.S and B.A.S. in the School of Engineering is available on the Bachelor's tab (http://exploredegrees.stanford.edu/schoolofengineering/#bachelorstext) of this section of this bulletin.

**Minor in the School of Engineering**

An undergraduate minors in some Engineering programs may be pursued by interested students; see the Handbook for Undergraduate Engineering Programs, or consult with a department’s undergraduate program representative or the Office of Student Affairs, Huang Engineering Center, Suite 135.

Minors are offered in the following programs:

- Aeronautics and Astronautics (AA) Minor (http://exploredegrees.stanford.edu/schoolofengineering/aeronauticsandastronautics/#minortext)
- Chemical Engineering Minor (http://exploredegrees.stanford.edu/schoolofengineering/chemicalengineering/#minortext)
- Civil Engineering (CE) Minor (http://exploredegrees.stanford.edu/schoolofengineering/civilandenvironmentalengineering/#minortext)
- Computer Science (CS) Minor (http://exploredegrees.stanford.edu/schoolofengineering/computerscience/#minortext)
- Electrical Engineering (EE) Minor (http://exploredegrees.stanford.edu/schoolofengineering/electricalengineering/#minortext)
- Environmental Systems Engineering (EnvSE) Minor (http://exploredegrees.stanford.edu/schoolofengineering/civilandenvironmentalengineering/#minortext)

Stanford Bulletin 2018-19
• Management Science and Engineering (MS&E) Minor (http://exploredegrees.stanford.edu/schoolofengineering/managementscienceandengineering/#minortext)
• Materials Science and Engineering (MATSCI) Minor (http://exploredegrees.stanford.edu/schoolofengineering/materialsscienceandengineering/#minortext)
• Mechanical Engineering (ME) Minor (http://exploredegrees.stanford.edu/schoolofengineering/mechanicalengineering/#minortext)

General requirements and policies for a minor in the School of Engineering are:

1. A set of courses totaling not less than 20 and not more than 36 units, with a minimum of six courses of at least 3 units each. These courses must be taken for a letter grade except where letter grades are not offered, and a minimum GPA of 2.0 within the minor course list must be maintained (departments may require a higher GPA if they choose).
2. The set of courses should be sufficiently coherent as to present a body of knowledge within a discipline or subdiscipline.
3. Prerequisite mathematics, statistics, or science courses, such as those normally used to satisfy the school's requirements for a department major, may not be used to satisfy the requirements of the minor; conversely, engineering courses that serve as prerequisites for subsequent courses must be included in the unit total of the minor program.
4. Courses used for the major and/or minor core must not be duplicated within any other of the student's degree programs; that is, students may not overlap (double-count) courses for completing core major and minor requirements.

Departmentally based minor programs are structured at the discretion of the sponsoring department, subject only to requirements 1, 2, 3, and 4 above. Interdisciplinary minor programs may be submitted to the Undergraduate Council for approval and sponsorship. A general Engineering minor is not offered.