

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

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

- Architectural Design (<http://exploreddegrees.stanford.edu/soe-ug-majors/archdesign/>)
- Atmosphere/Energy (<http://exploreddegrees.stanford.edu/soe-ug-majors/atmos-energy/>)
- Biomechanical Engineering (<http://exploreddegrees.stanford.edu/soe-ug-majors/biomechanicalengineering/>)
- Biomedical Computation (<http://exploreddegrees.stanford.edu/soe-ug-majors/biomedicalcomputation/>)
- Engineering Physics (<http://exploreddegrees.stanford.edu/soe-ug-majors/engrphysics/>)
- Product Design (<http://exploreddegrees.stanford.edu/soe-ug-majors/productdesign/>)

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

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://exploreddegrees.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://exploreddegrees.stanford.edu/schoolofengineering/aeronauticsandastronautics/#minortext>)
- Chemical Engineering Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/chemicalengineering/#minortext>)
- Civil Engineering (CE) Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/civilandenvironmentalengineering/#minortext>)
- Computer Science (CS) Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/computerscience/#minortext>)
- Electrical Engineering (EE) Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/electricalengineering/#minortext>)
- Environmental Systems Engineering (EnvSE) Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/civilandenvironmentalengineering/#minortext>)

- Management Science and Engineering (MS&E) Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/managementscienceandengineering/#minortext>)
- Materials Science and Engineering (MATSCI) Minor (<http://exploreddegrees.stanford.edu/schoolofengineering/materialsscienceandengineering/#minortext>)
- Mechanical Engineering (ME) Minor (<http://exploreddegrees.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.