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EECS Major Upper Division Degree Requirements

Upper division courses give you in-depth exposure to one or more areas of EECS. As such, most students choose to take more than the minimum requirements listed below. Please refer to the [Berkeley Academic Guide \(http://guide.berkeley.edu/\)](http://guide.berkeley.edu/) for detailed course descriptions.

Upper Division EECS Requirements

Students must complete a minimum of 20 units of upper division EECS courses. One course must provide a major design experience, and be selected from the following list:

- EE C106A, C106B, C128, 130, 140, 143, C149, 192 (<https://www2.eecs.berkeley.edu/Courses/EE/>)
- CS C149, 160, 162, 164, 169, 182, 184, 186 (<https://www2.eecs.berkeley.edu/Courses/CS/>), W186 (<https://www2.eecs.berkeley.edu/Courses/CS/>)
- EECS 149, 151 and 151LA (must take both), 151 and 151LB (must take both (<https://www2.eecs.berkeley.edu/Courses/EE/>))
- **CS 161 will fulfill the design requirements for students who took the class in Spring 2019 or later.**

Please note that some upper division courses may not fulfill these requirements. These include EE/CS H196 A or B, 197, 198, 199, and other non-technical courses.

Additionally, no more than two graduate-level courses can be used to fulfill requirements for your B.S. degree. Undergraduate students must submit a petition to the department to use graduate-level courses to fulfill requirements. The following courses have already been approved to count toward the 20 upper division EECS unit requirement and a petition is not necessary: INFO 159 (<http://guide.berkeley.edu/search/?P=INFO%20159>), COMPSCI 270 (<http://guide.berkeley.edu/search/?P=COMPSCI%20270>), COMPSCI C280 (<http://guide.berkeley.edu/search/?P=COMPSCI%20C280>), EL ENG 229A (<http://guide.berkeley.edu/search/?P=EL%20ENG%20229A>), COMPSCI 294-84 (Interactive Device Design), and COMPSCI 294-129 (Designing, Visualizing and Understanding Deep Neural Networks).

EECS Degree Requirement Worksheet (https://engineering.berkeley.edu/sites/default/files/docs/eecs-worksheet-2018.pdf?_ga=2.186594607.707667831.1580760638-1839037553.1580760638)

Ethics Requirement

For Undergrads

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[Academic Support \(/resources/undergrads/support\)](/resources/undergrads/support)

Students must complete one course about engineering ethics or the social implications of technology. Unlike the other EECS major requirements, the ethics requirement may be completed with a "P" grade:

- BioE 100: Ethics in Science and Engineering
- CS 195 or H195: Social Implications of Computer Technology
- ENERES C100: Energy and Society
- ENGIN 125: Ethics, Engineering and Society or 157AC: Engineering, Environment, and Society
- ENGIN 185: The Art of STEM Communication
- History C184D: Human Contexts and Ethics of Data
- Info 88A: Data and Ethics
- IAS 157AC: Engineering, the Environment, and Society
- ISF 100D: Introduction to Technology, Society, and Culture or 100G: Introduction to Science, Society, and Ethics

Technical Engineering Units

Students must complete a minimum of 40 units of technical engineering coursework. This includes the required lower and upper division required courses in EE, CS, and EECS.

The 40 units of engineering courses **CANNOT** include:

- any course taken on a P/NP basis
- courses numbered 24, 39, 84
- BioE 100
- ChemE 185
- **CS 70**, C79, 195, H195
- Des Inv courses except (Des Inv 15, 22, 90E, 190E)
- Engin 125, 157AC, 180, 185
- IEOR 95, 185, 186, 190 series, 191, 192, 195
- ME 191AC, 190K, 191K

College Requirements

Students in the College of Engineering must complete no fewer than 120 semester units and meet other [College, Campus,](#)

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[The CS Minor \(/resources/undergrads/cs/minor\)](/resources/undergrads/cs/minor)

[The EECS Minor \(/resources/undergrads/eecs-minor\)](/resources/undergrads/eecs-minor)

[The EIS Minor \(/resources/undergrads/eis-minor\)](/resources/undergrads/eis-minor)

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[CS Scholars \(/cs-scholars\)](/cs-scholars)

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[Curricular Practical Training \(CPT\) \(/resources/undergrads/cpt\)](/resources/undergrads/cpt)

[EECS Study Abroad Program \(/resources/undergrads/study-abroad\)](/resources/undergrads/study-abroad)

[Accel Scholars \(/resources/undergrads/accel\)](/resources/undergrads/accel)

[Getting into EE Classes \(/resources/undergrads/getting-into-ee-classes\)](/resources/undergrads/getting-into-ee-classes)

and University Requirements. (https://engineering.berkeley.edu/academics/undergraduate-guide/degree-requirements)

(https://eecs.berkeley.edu/)

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