

CEE Department Calculator Policy for Undergraduate Courses Only NCEES FE/PE Approved Calculators

Applies to all undergraduate CIVE and CNE 1000-5000 level classes and ENGR 2301 Mechanics I (Statics) regardless of student major.

CALCULATOR POLICY

To protect the integrity of its exams, NCEES limits the types of calculators examinees may bring to exam sites. The list of approved calculators is reviewed annually.

The following calculator models are the only ones acceptable for use during the 2023 exams:

- **Casio:** All fx-115 and fx-991 models (Any Casio calculator must have "fx-115" or "fx-991" in its model name.)
- **Hewlett Packard:** The HP 33s and HP 35s models, but no others
- **Texas Instruments:** All TI-30X and TI-36X models (Any Texas Instruments calculator must have "TI-30X" or "TI-36X" in its model name.)

HP 33s and 35s are out of production.

Most FE/PE calculator blogs recommended models below. \$15-\$30.

- Casio fx-991
- Casio fx-115 ES Plus 2nd Ed.
- TI 30 XS Multiview
- TI 36X Pro

Calculator policy can be viewed at <https://ncees.org/exams/fe-exam/>. See link near bottom of page in right sidebar menu.

Engineering Licensure

- A licensed engineer is referred to as a registered engineer or Professional Engineer (PE). (PE is also used to refer to the second licensing exam.)
- Only a licensed engineer may prepare, sign and seal, and submit engineering plans and drawings to a public authority for approval, or seal engineering work for public and private clients.
- In the United States, engineers are licensed at the state level. Each state (or territory) defines what constitutes the “practice of engineering” and exceptions to licensing requirements in that state/territory.
- While each state has its own licensing laws, typically there is a four-step process to obtain licensure:
 1. Earn an engineering degree.
 2. Pass the Fundamentals of Engineering (FE) exam.
 3. Gain acceptable, progressive, and verifiable work experience under the supervision of a PE. [Four years with Engineering Accreditation Commission (EAC) of ABET accredited degree in most states, including Texas.]
 4. Pass the Principles and Practice of Engineering Examination in the appropriate discipline. (Note - in Texas you can take the PE exam before completing your work experience, but you must first complete BS degree and pass FE.)

IMPORTANT - simply passing the FE Exam does not mean you are an Engineer-in-Training (EIT). You won't be an EIT in Texas until you have graduated with your BSCE degree, passed the FE exam, **AND** filed proper forms with the Texas Board of Professional Engineers. Until Texas has given you an EIT Number, don't claim to be an EIT.

In Texas, students in EAC of ABET accredited programs (like the UH BSCE program) become eligible to take the FE exam when they are within one calendar year of graduation. Best time to sit for FE typically right before or right after graduating semester.

For more information:

National Council of Examiners for Engineering and Surveying (NCEES)

- <https://ncees.org/exams/fe-exam/>

Texas Board of Professional Engineers and Land Surveyors (TBPELS)

- <pels.texas.gov/>