

Calculator Policy for Undergraduate Courses

The only calculators that can be used during exams, quizzes, etc. in undergraduate courses taught by the Department of Civil and Environmental Engineering are those approved by the National Council of Examiners for Engineering and Surveying (NCEES) for the Fundamentals of Engineering (FE) and Principles and Practice of Engineering (PE) exams.

This policy applies to all CIVE and CNE undergraduate courses (1000 – 5000 level) and ENGR 2301 Mechanics I (Statics).

The approved calculators are:

- **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.)

FE Blogs Typically Recommend:		
Brand	Model	Approximate Price
Casio	fx-115 ES Plus 2nd	\$15-\$20
	fx-991EX	\$15-\$20
HP	35S	Discontinued (used \$200-\$300)
TI	36X Pro	\$20-\$30
	30XS Multiview	\$15-\$20

Note – TI-30XS IIS Scientific Calculator is available digitally on exam

NCEES calculator policy website: ncees.org/exams/calculator/

Engineering Licensure

- A licensed engineer is referred to as a registered engineer or Professional Engineer (PE).
- 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” in that state. Each state also defines the 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 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.

For more information:

National Council of Examiners for Engineering and Surveying (NCEES)

- ncees.org/engineering/fe/

Texas Board of Professional Engineers and Land Surveyors (TBPELS)

- pels.texas.gov/