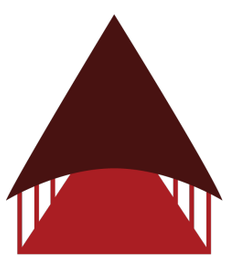
# BECOMING A PROFESSIONAL ENGINEER

Florida Board of Professional Engineers



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# Why become a licensed Professional Engineer?

- Allows you to call yourself a Professional Engineer, or PE
- Demonstrates that you have technical competency in your area of practice
- Gives you authority to sign and seal engineering plans and drawings
- Allows you to qualify an engineering company
- Allows you to practice engineering under your own name
- Enhances your career options; sets you apart during hiring
- Boosts income; can put you on a faster track to management
- Allows you to act as a consultant
- Gives you credibility as an expert witness

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# About FBPE & FEMC

- Florida Board of Professional Engineers
  - Regulatory Board
  - Created in 1917 by the Florida Legislature
  - 11 Board members: 9 are licensed PEs; 2 are laypersons; all appointed by the Governor
  - Over 45,000 active licensed engineers in Florida
- Florida Engineers Management Corporation
  - Established in 1998 by Legislature (Section 471.038, Florida Statutes)
  - Non-profit, single-purpose corporation contracted with the Department of Business and Professional Regulation
  - 7-member corporate board of directors: 5 appointed by FBPE; 2 laypersons appointed by DBPR

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# What is the Florida Board of Professional Engineers?

*"Committed to protecting the interest of public health and safety by properly regulating the practice of engineering."*

- Makes rules for the profession of engineering based on Chapter 471, Florida Statutes, *Engineering Practice Act*
- Reviews applications for licensure
- Takes disciplinary actions against engineers
- Meets 6 times a year in locations around Florida or via Zoom
- All Board meetings are open to the public

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# What is the Florida Engineers Management Corporation?

- Issues licenses to those certified by FBPE as qualified to practice engineering
- Provides administrative services to FBPE
- Provides investigative and prosecutorial services for disciplinary actions by FBPE
- Promotes engineering licensure by outreach to prospective engineers and information to the public

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# What is NCEES?

- The National Council of Examiners for Engineering and Surveying
- National, nonprofit organization dedicated to advancing professional licensure for engineers and surveyors
- Develops, administers, and scores the examinations use for engineering and surveying licensure in the United States
- Provides central licensure recordkeeping for engineers
- Provides credentials evaluations for non-U.S. or non-accredited degrees

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# The path to licensure: The 3 E's

- Education — Degree from an EAC/ABET-accredited engineering, an ETAC/ABET-accredited engineering technology program, or their equivalent
- Exams — Fundamentals of Engineering, and Principles & Practice of Engineering
- Experience — Must earn engineering experience that is progressive in nature under the supervision of a licensed Professional Engineer

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# Fundamentals of Engineering (FE) exam

- Developed and administered by NCEES
- Focuses on academics, not the practice of engineering
- 7 discipline-specific exams, based on math, science, and engineering coursework
- 6-hour, computer-based test
- Given at Pearson VUE Centers six days a week, in exam windows year-round
- Results in about a week

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# FE exam registration

- Register and schedule directly with NCEES
  - Costs $225 (exam fee)
- Engineer Intern (EI) certificate in Florida
  - Pass FE exam
  - Hold ABET-accredited bachelor's degree in engineering or engineering technology
  - Submit Application for EI Certification to FBPE
  - Costs $100

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# FE exam tips

- Visit NCEES.org and carefully read all material about the FE exam
- Have a valid I.D. and NCEES-approved calculator when going to take the exam
- Take exam around your senior year or just after a graduation

*Remember: The FE exam is based on coursework.*
*You want to take it while that information is still fresh in your mind.*

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# Principles & Practice of Engineering (PE) exam

- Developed and administered by NCEES
- 27 discipline-specific exams, based on the practice of engineering
- One-day, computer-based exams
- Most exams are given in year-round exam windows, but some are single-day
- PE Structural (a four-section/multi-day computer-based exam)
- Eligibility varies by state/territory

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# PE exam registration

- Must have passed the FE exam
- No engineering experience required, but…
  - NCEES statistics show that first-time examinees are more likely to pass the exam after two years of engineering experience
- Register and schedule directly with NCEES
  - $400 for exam
  - $350 for each part of PE Structural exam ($1,400 total)

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# PE exam tips

- Visit NCEES.org and carefully read all material about the PE exam
- Have a valid I.D. and approved calculator when going to take the exam
- Know which discipline-specific exam to take

*The PE exam is based on experience.*

*You want to take it based on*
*the field of engineering you have been working in,*
*not necessarily in the field you majored in.*

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# PE licensure in Florida

- Must be 18 years of age in Florida
- Submit an *Application for Licensure as PE* and $230 fee to FBPE
- Florida does not license by discipline
  - Must be competent in the fields in which you practice
  - Can be restricted by the Board from practicing in certain fields
  - Can be required by the Board to take a PE exam in another field
- Florida restricts use of "professional engineer" and similar titles to licensed professionals (Chapter 471.031(1)(b)1., Florida Statutes)
  - Restricted titles include "architectural engineer," "building engineer," "plumbing engineer," "software engineer," "systems engineer," "transportation engineer," etc.
- Must be licensed in each state where you practice engineering

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# Experience required for PE licensure in Florida

- When applying for licensure as a Professional Engineer, you must have:
  - 48 months of experience for those with ABET-accredited engineering degrees
  - 72 months of experience for those with ABET-accredited engineering technology degrees
- Experience must be:
  - Under the supervision of a Professional Engineer
  - Progressive in nature, assuming more responsibility
  - Engineering experience (not construction, construction management, etc.)
- Keep a log of your experience
  - Who you worked for
  - Who your supervising PEs were
  - Contact information for supervisors
  - Types of jobs you worked on, descriptions of duties

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# Exceptions to experience

- Undergraduate internship
  - In last two years of bachelor's program
  - Must be full time
  - Counts at 50 percent
- Earning a master's degree or a doctorate in engineering
  - Reduces work experience required by a maximum of 12 months each
    - Does not apply if the graduate degrees fulfill requirements for foreign or non-ABET accredited bachelor's degree
  - If enrolled 12 hours or more per semester, engineering work experience does not count
  - If enrolled fewer than 12 hours per semester, engineering work experience can be counted

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# Maintaining your PE license

- Keep your contact information up to date so that FBPE can contact you
- Renew your license every 2 years
- 18 hours of continuing education every 2 years, including:
  - 1 hour of Florida laws and rules of professional engineering
  - 1 hour of professional ethics
  - 4 hours in area of practice
  - 12 hours on any topic pertaining to the practice of engineering
- Use NCEES CPC Tracking to record your continuing education credits and keep tabs on multiple state requirements

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# Use NCEES Records

- Create an account at NCEES.org, allowing you to record and track:
  - Official college transcripts
  - Exam results
  - Engineering experience (which is reviewed and verified by NCEES)
  - Licensure verifications
  - Licensure renewals from state to state
- No charge to set up or maintain a NCEES Records account
  - $100 for first initial licensure transmittal/$175 for first comity licensure transmittal
  - $100 for all subsequent transmittals
- Continuing Professional Competency (CPC) Tracking
  - No charge for CPC Tracking
  - Used to report your continuing education courses to FBPE
  - Monitor CE requirements across multiple states

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# Mobility of licensure

- Each state has its own regulations regarding licensure
- Florida offers endorsement applications for those licensed in other states
- FE/PE exams are national exams
  - NCEES develops and administers the exams
  - Consistent from state to state
  - Accepted in all states
- NCEES Records program can help with multi-state licensure
  - Free to set up; charges to transmit records
  - 7-10 days to get a license vs. 30 days for traditional paperwork

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# Examinee Resources

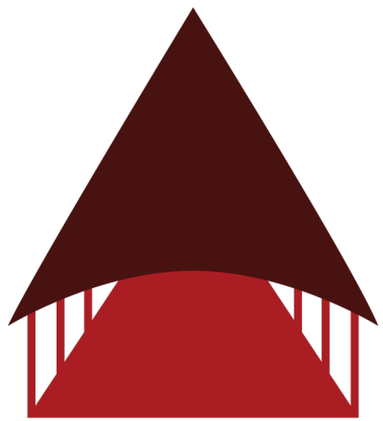
Online at:

fbpe.org/examinee-resources/

Quick links to useful info:

- Why you should become a licensed Professional Engineer
- The steps in the licensure process
- How 2019 statute changes made it easier to earn your license
- NCEES exam specifications, exam guide, and reference handbook
- FBPE's *Connection* newsletters and how to subscribe
- Facebook and LinkedIn
- PDF of this presentation

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