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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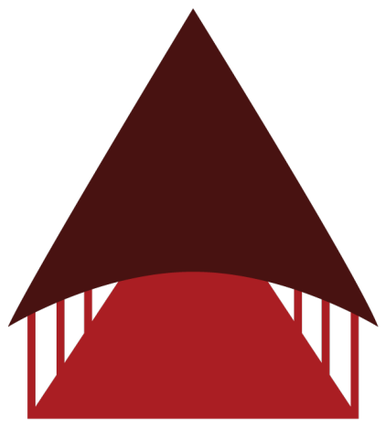

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