PROFESSIONAL ENGINEER LICENSURE & ETHICS

Florida Board of Professional Engineers

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 an expert witness and consultant

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

About FBPE & FEMC

- Florida Board of Professional Engineers
  - Created in 1917 by the Florida Legislature
  - 11 Board members: 9 are licensed PEs; 2 are laypersons; all appointed by the Governor
  - Over 43,000 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 DBPR
  - 7-member Board of Directors: 5 appointed by FBPE; 2 laypersons appointed by DBPR

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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
- Reviews applications for licensure
- Takes disciplinary actions against engineers
- Meets 6 times a year in designated locations around Florida
- All Board meetings are open to the public

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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 recordkeeping for engineers
- Provides credentials evaluations

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Video here.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Principles & Practice of Engineering (PE) exam

- Developed and administered by NCEES
- Discipline-specific exam, based on the practice of engineering
- All PE exams but PE Structural are computer-based test
- Most exams are 8-hour, CBT exams
- Most are given in year-round exam windows, but some are single-day
- PE Structural CBT coming by 2024
- Eligibility varies by state/territory

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

PE exam registration

- Must have passed the FE exam
- No engineering experience required
  - Though 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
  - $375 for PE exams
  - $500 for two-day PE Structural exam
  - Fees increasing Jan. 1, 2024

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

PE licensure in Florida

- Must be 18 years of age in Florida
- Submit *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
  - 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

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Experience required for PE licensure in Florida

- When applying for Licensure as a Professional Engineer, you must have:
  - 48 months of experience for graduates with Board-approved engineering degrees
  - 72 months of experience for graduates with Board-approved engineering technology degrees
- Experience must be:
  - Under the supervision of a Professional Engineer
  - Progressive in nature, assuming more responsibility
  - Engineering experience (not 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

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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 experience required by a maximum of 12 months each
  - No double-dipping (can't also count work experience during that time)

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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 transmittal of licensure information to a state licensing board
  - $75 for all subsequent transmittals
- Continuing Professional Competency (CPC) Tracking
  - No charge for CPC Tracking
  - Record your continuing education courses
  - Monitor CE requirements across multiple states

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Video here.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Why are professional ethics important?

Ethical behavior:

- Ensures the public health and safety
- Upholds the integrity, honor, and dignity of the engineering profession
- Creates credibility
- Promotes responsibility and accountability
- Discourages misconduct

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

What are the basic engineering canons?

- Hold paramount the safety, health, and welfare of the public
- Perform services only in the areas of competence
- Issue public statements only in an objective and truthful manner

Where are these canons found?

- All engineering societies include a restatement of these canons in their codes of conduct
- Some states (but not Florida) include them in their licensure laws

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Some engineering societies have aspirational statements

The Engineer's Creed

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare.

I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

In humility and with need for Divine Guidance, I make this pledge.

– National Society of Professional Engineers

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

How to carry out the basic engineering canons

- Act for each employer or client as faithful agents or trustees, and avoid deceptive acts
- Conduct oneself honorably, responsibly, ethically, and lawfully as to enhance the honor, reputation, and usefulness of the profession

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

What laws and rules govern engineering in Florida?

- Laws: Chapter 471, Florida Statutes, *Engineering*
- Rules: Chapter 61G15, Florida Administrative Code, *Board of Engineers Organization and Purpose*

Links to both can be found under the *Legal* section on the FBPE website: fbpe.org.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

What is Chapter 471, Florida Statutes?

- The Florida Legislature established Chapter 471 to regulate the practice of engineering in the state "in the interest of public health, life, property, and safety."
- Defines engineering
- Defines qualifications for the practice of engineering
- Demonstrates need for licensure and fees
- Establishes FBPE, which has authority for:
  - Licensing Professional Engineers in Florida
  - Taking disciplinary actions regarding the practice of engineering
- Establishes FEMC to administer FBPE

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

How and when is Chapter 471 revised?

- Legislators propose bills, which if passed by both houses of the Legislature and signed by the Governor, become law.
- Florida Statutes are updated annually as laws are created, amended, transferred, or repealed by the Legislature.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

What is Chapter 61G15, Florida Administrative Code?

- Establishes examination, licensing, and continuing education requirements
- Sets signing and sealing requirements
- Defines "Responsible Charge" and "Engineering Design"
- Establishes grounds for disciplinary proceedings
- Establishes fines for violations
- Sets specific requirements for structural, fire safety, electrical and mechanical systems

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

How and when is Chapter 61G15 revised?

- Professional and technical organizations or individuals submit items for consideration.
- FBPE committees meet to consider the proposals.
- Committee decisions are presented to the Board for discussion and vote.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Who enforces the authority of Chapter 61G15?

- Under Rule 61G15-19.004, the Board sets forth a range of disciplinary guidelines from which penalties will be imposed.
- FEMC investigates and prosecutes at the direction of FBPE.
- FBPE disciplines those found in violation of the Rules.

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Violations defined by Rule 61G15-19

(Some engineering societies include similar admonishments in their ethical codes.)

- Practicing engineering when not qualified
- Revealing facts or data without consent of client
- Expressing an opinion publicly without having the facts
- Soliciting/accepting gratuities to influence engineering employment
- Failing to disclose a conflict of interest
- "Plan stamping"
- Failure to use due care (negligence)

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

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

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Online at **FBPE.org**