

What is P.E.?

Licensure for Engineers (Professional Engineer: P.E.)

- Many jurisdictions require engineers to be licensed in order to practice
- Provides additional career options and opportunities
 - You decide to start your own company
 - You decide to be a consultant
- National Council of Examiners for Engineering and Surveying (NCEES: www.ncees.org)
 - Pennsylvania Licensing Board (www.dos.state.pa.us/eng)

How Do I Get Licensed?

- Step 1: Graduation
 - Graduate with an ABET accredited B.S. degree in Engineering or Engineering Technology
- Step 2: FE (Fundamentals of Engineering) Exam
 - Most engineering students take this exam right before or soon after graduation
 - Once you pass the FE exam, you are classified as an **Engineer-in-Training (EIT)**
 - Also known as *Engineering Intern (EI)*

How Do I Get Licensed? (cont....)

- Step 3: Work Experience

- Four (4) or more years of progressive experience in engineering work earned after the issuance of the EIT certificate
- Experience shall be under the supervision of a P.E. or similarly qualified individual
- You may obtain one year of experience credit for each post-baccalaureate degree (not to exceed two years)
 - Shall be full time student in the same engineering field

How Do I Get Licensed? (cont....)

- Step 4: PE Exam
 - Principles and Practice of Engineering
 - After completing the required work experience, you can take this second exam in the licensure process
- Step 5: Now you are a Professional Engineer!
 - John Smith, P.E.

What is **Fundamentals of Engineering** **(FE)** Exam?

- Eight hour long exam: Two four hour sessions
 - Closed book (Reference material supplied)
 - AM session
 - General exam common to all disciplines
 - 120 multiple choice questions
 - Mathematics, Probability/Statistics, Chemistry, Computers, Ethics/Business Practice, Engineering Economics
 - Engineering Mechanics (Statics/Dynamics), Strength of Materials, Material Properties, Fluid Mechanics, Electricity and Magnetism, Thermodynamics

What is FE Exam? (cont.....)

– PM session

- Discipline specific (e.g., Electrical Engineering)
- 60 multiple choice questions
- Circuits, Electronics, Power, Electromagnetics, Control Systems, Communications, Signal Processing, Digital Systems, Computer Systems

What is Principles and Practice of Engineering (PE) Exam?

- Exam length: 8 hours (Two 4 hour sessions)
- 40 multiple choice questions per session
- Open book exam
 - Hardcopy of your own reference material is also allowed
- **Electrical and Computer Engineering**
 - **Breadth Exam (AM)**: This exam contains questions from a broad area of electrical and computer engineering
 - Basic electrical engineering, Electronics, Control and Communication Systems, and Power
 - **Depth Exam (PM)**: This exam focuses on a **single area** of practice in electrical and computer engineering
 - Computers
 - Power
 - Electronics, Controls and Communications

Additional Information

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