Why become an Engineer Intern: Its Value and the Steps to Take

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OVERVIEW

- Why Become an Engineer Intern, i.e. its VALUE?
- Registration Process, i.e.
  steps you will need to take FE Exam
  - FE Examination Specifications
  - Strategies for Passing the FE Exam
  - Study Materials
  - Answers to Common Questions
But first, what is a professional engineer?

- A professional engineer (P.E.) is a person who is licensed to practice engineering in a particular state or U.S. territory (jurisdiction) after meeting all requirements of the law. To practice in multiple jurisdictions, the P.E. must be licensed in each in which he or she wishes to practice.
What are the reasons for becoming licensed as a P.E.?

- There are many reasons, but here are a few.
  - Legal necessity.
  - Improved employment security.
  - Better opportunities for advancement.
  - Personal satisfaction.
LEGAL REQUIREMENTS

- All Jurisdictions have Registration Laws governing the Practice of Engineering (starting in 1907)
- Most Jurisdictions prohibit persons who are not registered PE’s from:
  - advertising, using a business card, or otherwise indicating to the public that they are an engineer
  - assuming the title of engineer
  - practicing, offering to practice or holding themselves out as qualified to practice as an engineer
- Current Exemptions for Industrial Practice (UCC)
What are the requirements to become licensed as a P.E.?

- Education (ABET/EAC)
- Fundamentals of Engineering Exam (FE)
- Experience (4 years minimum but with allowance for graduate degrees)
- PE Exam (Principles & Practice of Engrg.)
What is an “accredited” degree?

- Most colleges or universities that award an engineering degree are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.
- If you do not have a degree accredited by EAC/ABET, additional experience requirements may apply.
When should I take the FE?

- Offered:
  - Spring (usually April)
  - Fall (usually October)

- Take it as soon as possible...even while still in school, if you've not graduated yet. Otherwise, apply sooner than later....

- Understand Application Process
<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td><strong>Total</strong></td>
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AFTERNOON SECTION

- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Environmental
- Industrial Engineering
- Mechanical Engineering
- General
EAC/ABET First Timers Pass Rate Comparison (Discipline PM vs General PM)
Comparative Pass rates for FE Exam

- Within last 3-5 years: 40%
- Within last 2 years: 80%
- Still Enrolled: 0%

Average Pass Rate Drops from 75% to 52%

BUILDING STRONG®
FE EXAM STRATEGIES

- Watch the time
- THINK before you start
- Eliminate incorrect choices
- Answer all questions
- Prepare for the test
STUDY MATERIALS

▪FE Sample Questions Book
▪FE Exam Supplied Reference Book

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Clemson, SC  29633-1686

Phone:  (800) 250-3196
Fax:  (803) 654-6033
Internet:  www.nceees.org
FREQUENT QUESTIONS

- Can I transfer my EIT Registration?
- Will graduate school count for the 4 years experience requirement?
- What score is required to pass the test?
- If I fail, can I take the test again?
Enjoy the Journey

- You may not see licensure as relevant now, but you may change your mind down the road.
- You will likely change careers 6-8 times before you retire. How sure are you that you won’t need to get licensed at some point?
- You got an engineering degree. Why wouldn’t you want to celebrate it with E.I. after your name?
... And One More Reason

Median Income of Engineers

- EIT
- Not Licensed
- PE
- PE, Environ.
- PE, Forensic

Income Levels:
- $0
- $10,000
- $20,000
- $30,000
- $40,000
- $50,000
- $60,000
- $70,000
- $80,000
- $90,000
This is your Career!!!!!