Preparing for the PE Exam
Tips for Success!!

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KSPE Young Engineer’s Roundtable
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WHY LICENSURE ??

➢ Protect Public Health & Safety
➢ Establish Minimal Competence
➢ Expand Your Career Options
➢ Promote Professional Development
SESSION AGENDA

➢ Exam Format
➢ Test Taking Strategies
➢ Exam Preparation
➢ Panel Discussion
PE EXAM FORMAT

CBT or Pencil/Paper Examinations

- Exams developed by: (National Council of Examiners for Engineering & Surveying)
- Questions developed by technical society volunteers
- Administered for each State/Territory by a local testing agency
- Results are licensed state by state
2021 Pencil & Paper Disciplines

➢ Civil (all modules)
➢ Control Systems
➢ Metallurgical & Materials
➢ 16 Hour Structural Engineering

➢ All other disciplines are CBT (Computer Based Testing)

Go to www.ncees.org for details
CBT Disciplines

➢ Some disciplines are year-round: ChE, EECE-Power, Environmental & ME (all modules)

➢ Other disciplines on a specific date: BAE, ARE, Computer Engineering, Fire Protection, IMSE, Mining, NE & Petroleum

Go to www.ncees.org for details
PE EXAM FORMAT

All Examinations: ~8 to 8.5 hours

➢ Two Sections - AM & PM
  with a 50 min break

➢ 80 to 85 Multiple Choice Questions
  May Include Multiple Correct, Point & Click, Drag & Drop, Fill-in-the-Blank
  - Each Question ~ 2.5 points each
  - Manage your time
    - don’t get trapped
4 HOUR AM & PM SESSIONS

USE THE 10 – 50 – 20 RULE:

➢ First 10 Minutes - Look Over the Entire Exam & Prioritize Topics

➢ Work in 50 Minute Segments
  - ~2 Minutes per Question
  - Work Easiest Segments First
  - Save Hardest Until Last

➢ Use the Last 20 Minutes to Finish
  - No Penalty for Guessing !!
  - Don’t Second Guess Yourself
EXAM TOPICS (Example EECE)

17 Different Topic Areas:

- Mathematics (11 Questions)
- Probability & Statistics
- Ethics & Professional Practice
- Circuit Analysis (11 Questions)
- Electric Materials, Linear Systems
- Signal Processing, Electronics
- Power Systems, Electromagnetics
- Control Systems, etc., etc.
GRADING THE EXAM

The Exam is “Pass/Fail”

➢ Machine Graded – Fill in the Oval
➢ Red/White Mechanical Pencils Issued
➢ Not Graded on the Curve
➢ Angoff Procedure to Determine Cutoff Point
➢ Equating subtest is used
➢ Most States Use NCEES Suggested Pass
➢ Pencil/Paper Takes 12 – 14 Weeks
➢ Not Given Passing Score – only Failing Score
STUDY TECHNIQUES

➢ Look at Calendar & Prioritize Exam Topics
➢ Use Study Books/Do Practice Problems
➢ Use NCEES Reference Handbook
➢ Be Selective about Problems
   - Work all Types in all Topics
   - Don’t Just Start Working Problems 1 – 60
     (e.g., Select 1, 6, 15, 35, 44, & 56)
➢ Practice Speed – Use a Timer
➢ Use English or SI to Check Answers
WHAT TO TAKE

➢ Arrive on Time (Early)
➢ Approval Letter & ID Number
➢ Govt. Issue Photo ID (Names Must Match)
➢ Calculator & Extra Battery (quiet/no keyboard – see list)
➢ Extra Car Keys!
➢ Lunch/Snacks/Water (Clear Bag)
DO NOT TAKE

➢ Writing Instrument / Eraser
➢ Reference Materials
➢ Post-its, Paperclips, etc.
➢ Purses / Backpacks
➢ Communication Devices
  (i.e., pagers & cell phones)
➢ Hats & Inappropriate Clothing
➢ Cologne or Perfume
SUMMARY

Introduction Included:

➢ Exam Format
➢ Test Taking Strategies
➢ Exam Preparation

Questions ???

➢ Panel Discussion