GUIDE TO:

FE EXAM

FUNDAMENTALS OF ENGINEERING EXAM

BROUGHT TO YOU BY:

Engineering Peer
Academic Advisors



What is the FE Exam?

- First step to become licensed engineer
- Made for recent graduates and students close to finishing degree from EAC/ABET-accredited program
- Computer-based exam offered year-round at approved NCEES Pearson VUE test centers

Exam Format

- 6 hrs, 110 questions in random order
- Divided into 2 sections. After seeing approximately half the questions:
 - You can review & submit first section. Note: you won't have access to those questions after submitting
 - You can take scheduled 25 min break
- Screen will be split to view a searchable FE handbook pdf

Testing Enviornment

- Monitored at all times (audio & video)
- Provided with ear plugs/headphones, blank booklet, and pen
- If available, locker will be given to store unapproved items
- People will be taking non-NCEES exams at the same time which takes away some of the pressure
- Bathroom breaks before/after 25 min break are allowed, but will take away from your test time

What to Bring

- Physical photo ID (government issued ID, passport, military ID)
- Confirmation letter
- NCEES-approved calculator w/out cover
 - Casio: fx-115 & fx-991 models
 - Hewlett Packard: HP 33s & HP 35s
 - Texas Instruments: TI-30X & TI-36X models
- Approved comfort items

Test Taking Tips

- Know your units. They will try to trick you so read the whole question. For example:
 - Know PSI = lbs/in^2, PSF = lbs/ft^2
 - Know gravity units = $9.81 \,\text{m/s}^2$ or $32.2 \,\text{ft/s}^2$
- Recognize what types of questions you're looking at to help you remember equations, strategies, etc
 - Ex: you know it's a statics question if there's no acceleration involved
- Good approach to take: answer the quick ones first, work through medium/hard problems next, finish unsolved problems, and recheck your work at the end
- Make sure to bring some snacks & water for your
 25 min break since you will be sitting for 6 hours

Study Tips

- · Always use the reference manual when studying
 - Practice using the split screen because that's exactly how the test will be like
- Know your calculator and all of its functions
- · Make a study plan and stick with it
 - It might be a good idea to practice 1-2 topics per day and continue this schedule every week
- Review the FE specifications
 - Identify which sections you're less familiar with and which sections have the most questions so you can set aside more time for them
- Don't push yourself too hard the night before the test. The tiredness will catch up to you

Resources

Disclaimer: The following resources were not created by UCI

Free Resources:

- YouTube reviews
 - <u>Gregory Michaelson</u> (Civil): provides the fundamentals for each section and does
 5-6 problems in each video
 - <u>DIRECTHUB FE Exam Prep</u> (Civil): provides videos for each section and overall test advice
 - enGENIEer (Civil): has good videos that target specific types of problems
- Georgia Tech FE Course (Civil)

Paid Resources:

- NCEES FE Practice Exam (all disciplines): good starting point; shows format/style of questions you might see
- Lindeburg Practice Book (Civil): provides tougher/more complex practice questions
- PrepFE (all disciplines): provides good practice tests by category

Other Resources

- Exam Reimbursement for CAMP students: https://www.camp.uci.edu/fe-exam/
- PearsonVUE computer-based testing demo: http://www.pearsonvue.com/demo/
- How to use onscreen line tool for charts & graphs: https://youtu.be/yv0wECVrm7k