

Civil and Environmental Engineering

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Preparing for the FE

U. Iowa



FE is administered by NCEES

National Council of Examiners for Engineering and Surveying

Become familiar with their website:

<http://ncees.org/exams/fe-exam/>

And, the NCEES Guide:

**NCEES
EXAMINEE
GUIDE**

DECEMBER 2014

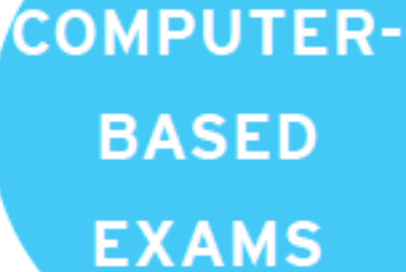


COMPUTER-
BASED
EXAMS

Fundamentals of Engineering (FE) Exam

- 50,000 students take FE annually
- pass-fail exam for minimum technical competence
- 110 Questions, 5 hours and 20 minutes for exam
- Computerized – have only reference manual as pdf.
- \$225





**COMPUTER-
BASED
EXAMS**

REGISTRATION PROCESS

1. Register and pay for the exam.
2. Receive authorization notification from NCEES to schedule an exam.
3. Schedule the exam.
4. Receive the appointment confirmation letter from Pearson VUE.

Nearest Test Center to Ulowa

Pearson Professional Centers-Coralville-Iowa City
327 2nd Street
Suite 370
Wells Fargo Building
Coralville, Iowa 52241

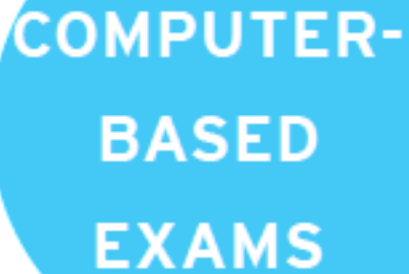


COMPUTER- BASED EXAMS

THE EXAM APPOINTMENT

- Nondisclosure agreement—2 minutes
- Tutorial—8 minutes
- Exam—5 hours 20 minutes
- Break—25 minutes
- Survey—5 minutes





**COMPUTER-
BASED
EXAMS**

DAY OF THE EXAM

- Appointment confirmation letter
- NCEES approved calculator
- Acceptable form of identification
- Approved comfort items



New Computerized Based Test Format

Also NEW CONTENT

CIVIL *Exam*

	Percent
Mathematics	6 to 10%
Probability & Statistics	4 to 5%
Computational Tools	4 to 5%
Ethics & Professional Practices	4 to 5%
Engineering Economics	4 to 5%
Statics	6 to 10%
Dynamics	4 to 5%
Mechanics of Materials	6 to 10%
Materials	4 to 5%
Fluid Mechanics	4 to 5%
HH Systems	7 to 11%
Structural Analysis	6 to 8%
Structural Design	6 to 8%
Geotechnical Engineering	8 to 13%
Transportation	7 to 11%
Environmental	6 to 8%



New Computerized Test Format

Also NEW CONTENT

ENV *Exam*

	Percent
Mathematics	4 to 5%
Probability & Statistics	3 to 4%
Ethics & Professional Practices	5 to 7%
Engineering Economics	4 to 5%
Materials Science	3 to 4%
Environmental Science and Chem	10 to 15%
Risk Assessment	5 to 7%
Fluid Mechanics	8 to 13%
Thermodynamics	3 to 4%
Water Resources	9 to 14%
Water and WW	13 to 19%
Air Quality	9 to 14%
Solid and Haz. Waste	9 to 14%
Groundwater	8 to 13%



Test Strategies

- make sure your calculator is an approved calculator (check NCEES website)
- Become an expert in the subject areas that you are most familiar with and know the basics of all other subjects.
- Work the topics you know best first, then work the rest.
- Take an educated guess on the rest, eliminate 1 or 2 and then **Guess**.
- Do not neglect studying for the technical area questions even if it is your focus area – you want to get ALL of those right!
- Become very familiar with the Reference Handbook. You will only have it as a pdf on the screen so become familiar with searching the pdf file. It is free to download.
- Attend review sessions. The schedule is on our website.



Will I Pass?

If you study, you should pass.

Do not underestimate it. You need to prepare.

Year	# Students	% PASS
Apr-08	23	90
Oct-08	4	75
Apr-09	28	100
Oct-09	9	78
Apr-10	33	94
Oct-10	11	91
Apr-11	37	95
Oct-11	11	100
Apr-12	30	77
Oct-12	12	50
Apr-13	53	90.6
Oct-13	12	100
Jan-May 14	19	63
Jul-Nov 14	14	57

New computerized format



New Computerized Based Test (CBT) Format

Students have done poorly in these areas on the CBT last year

CIVIL ***Exam***

Mathematics,	7 – 11
Ethics and Professional Practice,	4 -6
Materials (not Mechanics of Materials)	4 - 6
Structural Analysis,	6 – 9
Construction,	4 - 6



When to Take FE

With the new FE format you can schedule your exam during the following periods:

- January–February
- April–May
- July–August
- October–November

We recommend two windows for you to take the exam – January (during your winter break or after you graduate in Dec) or April-May. In addition to the reviews provided during Design Seminar, we will offer evening FE review session in **November** and **March each year to help you prepare.**

We will provide you with a one time reimbursement of up to \$60 towards the registration fee, **but we will only do so if you take the exam while you are still in school (we will include through May if you graduate in May) AND you attend at least 5 of the review sessions.** You need to sign up for the review sessions ahead of time. Faculty will take attendance and turn the sheets into Kim.

