NCEES exams are administered in either a computer-based format (CBT) or a pencil-and-paper format. Click on the appropriate section below for your exam.

COMPUTER-BASED EXAMS (CBT) ................................................................. 2

Fundamentals of Engineering (FE)
Fundamentals of Surveying (FS)
Principles and Practice of Surveying (PS)
Principles and Practice of Engineering (PE)
  Agricultural and Biological Engineering
  Architectural Engineering
  Chemical
  Civil: Construction
  Civil: Geotechnical
  Civil: Structural
  Civil: Transportation
  Civil: Water Resources and Environmental
  Control Systems
  Electrical and Computer: Computer Engineering
  Electrical and Computer: Electronics, Controls, and Communications
  Electrical and Computer: Power
  Environmental
  Fire Protection
  Industrial and Systems
  Mechanical: HVAC and Refrigeration
  Mechanical: Machine Design and Materials
  Mechanical: Thermal and Fluid Systems
  Metallurgical and Materials
  Mining and Mineral Processing
  Naval Architecture and Marine Engineering
  Nuclear
  Petroleum

PENCIL-AND-PAPER EXAMS .................................................................. 21

Principles and Practice of Engineering (PE)
  PE Structural Engineering

APPENDIX .................................................................................................... 36
CONTACT INFORMATION

NCEES computer-based exams are administered exclusively at approved Pearson VUE test centers.

CONTACT PEARSON VUE REGARDING:
- Comments about the test center
- Directions to a specific test center
- Inclement weather or power failure on your scheduled exam date
- Rescheduling an exam appointment

Visit: pearsonvue.com/ncees
Call: 888-866-8766
Email: Go to pearsonvue.com/contact/americas/customerservice, and complete the Contact Us form.

Office hours: Monday–Friday
7 a.m.–9 p.m. Central time
Closed on local holidays

CONTACT NCEES REGARDING:
- Acceptable forms of ID
- Admittance requirements
- Contact information for licensing boards
- Evaluation of foreign education
- Exam accommodations
- Exam development
- Exam registration
- Exam scoring
- General information on the licensure process for becoming a professional engineer (P.E.) or professional surveyor (P.S.)

Visit: ncees.org
Chat: Click the chat icon on any page within the ncees.org website.
Call: 800-250-3196
Message: Go to your MyNCEES account.
Write: 200 Verdae Blvd.
Greenville, SC 29607

Office hours: Monday–Friday
8 a.m.–5 p.m. Eastern time
Closed on local holidays

CONTACT YOUR LICENSING BOARD REGARDING:
- Application for engineer intern (E.I.) or surveyor intern (S.I.) certification
- Qualifications for licensure (these vary by jurisdiction)

All NCEES exams are confidential, secure, and protected by the laws of the United States and elsewhere. They are to be used only for valid assessment and licensing purposes.
COMPUTER-BASED EXAMS

REGISTERING FOR YOUR EXAM
You must complete the following steps to register for an NCEES exam:

1. Review your licensing board’s approval and registration process.
2. Create a MyNCEES account.
3. Register and pay for your exam.
4. Receive an authorization notice to schedule your exam.

Reviewing Your Licensing Board’s Approval and Registration Process
Eligibility to sit for an NCEES exam varies and is determined by each licensing board. It is your responsibility to review your licensing board’s requirements before registering for an exam.

Creating Your MyNCEES Account
You must have a MyNCEES account to register for an exam. To create one, go to account.ncees.org/login and follow the instructions. The information provided during this process will be used to create your appointment confirmation letter. The first and last names you use to register must be in the English alphabet and match the government-issued ID that you will provide for admission to the test center.

Individuals may have only one MyNCEES account.

Registering and Paying for Your Exam
Log in to your MyNCEES account, select Register for an exam, complete the onscreen instructions, and pay for your exam. During registration, you will be required to agree to conduct transactions with NCEES by electronic means, including but not limited to the exam registration process. You will also be required to attest that you have read the rules and policies in the NCEES Examinee Guide and agree to comply with them.

PRACTICE EXAMS
“The NCEES practice exams are an excellent diagnostic tool for examinees to see what technical topics they might need to spend more practice time reviewing. I highly recommend them.”

Robert Koch, Ph.D., P.E.
Federal Chief Research Scientist
Adjunct Professor of Engineering
Exam Fees
Exam fees are payable directly to NCEES during the registration process. NCEES accepts payments online via MasterCard, VISA, and American Express. Fees for each attempt are as follows:

- Fundamentals of Engineering (FE) $175
- Fundamentals of Surveying (FS) $175
- Principles and Practice of Surveying (PS) $300
- Principles and Practice of Engineering (PE) $375

Some licensing boards require examinees to file a separate application and pay an application fee as part of their approval process in order to be qualified for seating for an NCEES exam.

Examinees approved to take an exam through a foreign entity will be assessed a nonrefundable $25 international scheduling fee at the time of registration.

If you have an issue regarding a payment or refund, contact NCEES directly. Fees associated with chargebacks or any form of disputed payment are the responsibility of the examinee.

Exam Accommodations
Accommodations are available for examinees who meet certain eligibility criteria and sufficiently document their request. Examinees who have a documented disability covered under the ADA or a scheduling conflict due to a religious Sabbath or a military appointment may request accommodations. You must indicate your need for accommodations during the registration process. After registration is completed, you will receive an email with instructions on how to complete and submit your request for accommodations.

Email questions related to the accommodations process to NCEES at accommodations@ncees.org.

ADA accommodations—NCEES is committed to ensuring that candidates with disabilities can take the NCEES exams in an accessible place and manner. This will often require reasonable testing accommodations.

To receive ADA accommodations, a candidate must have a physical or mental impairment that substantially limits his or her ability to perform one or more major life activities (such as walking, seeing, hearing, learning, reading, concentrating, or thinking) or a major bodily function (such as neurological, endocrine, or digestive system) that impacts taking an examination, as compared with most people in the general population. NCEES encourages candidates with disabilities to request accommodations.

For more information on how to request ADA accommodations, visit https://ncees.org/exams/ and select Reasonable Accommodations at the bottom of the page.

Military accommodations—If you or your spouse is currently serving as an active-duty member of the U.S. Armed Forces outside of North America, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, or the U.S. Virgin Islands, you can request to take an exam at an NCEES-approved test center located outside of these areas.

Receiving an Authorization Notice to Schedule Your Exam
After you complete the registration process and have been approved by your licensing board, you will receive an email (NCEES Exam Ready to Schedule) from NCEES. This is the authorization notice to schedule your exam.

Once you are approved to test, you have 12 months to take your exam. You will forfeit your registration fee if you fail to take your exam or cancel your registration during this 12-month period.
SCHEDULING YOUR EXAM APPOINTMENT

You must complete the following steps to schedule an exam appointment:

1. Log in to your MyNCEES account.
2. Select the Schedule button and complete the onscreen instructions.
3. Receive an appointment confirmation.

Test centers have limited capacity and seats are reserved on a first-come, first-served basis. Schedule your exam as far in advance as possible for the best scheduling availability. You must schedule an appointment time at least one business day before taking your exam.

North American and U.S. territory examinees may sit for the exam at any NCEES-approved test center located in North America, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, or the U.S. Virgin Islands. However, if you are approved to register for the exam through an international entity other than Canada, you must take your exam at an NCEES-approved test center in that country. Learn more about NCEES exam administration outside of the United States.

Testing Opportunities

Some NCEES computer-based exams are offered only one day a year. This is the only time these exams will be available.

Other NCEES exams are offered in testing windows throughout the year during the following months:

- January–March
- April–June
- July–September
- October–December

NCEES policy states examinees may attempt a particular NCEES exam one time per testing window and no more than three times during any 12-month period. Some licensing boards have a more restrictive policy. Visit your licensing board to review the policy of the board you selected during the registration process.

The table on page 10 shows when each NCEES exam is offered.

Appointment Confirmation

When you have completed the scheduling process, you will receive an email (Confirmation of Your Scheduled Exam) from Pearson VUE. This is your appointment confirmation. If you do not receive this email from Pearson VUE, your exam has not been scheduled. Log in to MyNCEES to complete the scheduling process.

The email confirms your identity, the location of your Pearson VUE test center, the time of your appointment, and the exam you are scheduled to take. Verify that the first and last names printed on the appointment confirmation match your first and last names as they appear on your government-issued ID. Contact NCEES immediately if the names do not match. Bring your appointment confirmation to the test center to avoid delays during the check-in process.

RESCHEDULING YOUR EXAM APPOINTMENT

You must complete the following steps to reschedule an exam appointment:

1. Log in to your MyNCEES account.
2. Select the Manage Appointment button.
3. Select your exam from the dashboard.
4. Select the Reschedule link and complete the onscreen instructions.
5. Pay the rescheduling fee.
6. Receive an appointment reschedule confirmation.
All applicable rescheduling fees are payable directly to Pearson VUE ($50 online; additional fees may apply if you contact Pearson VUE to reschedule your exam). **You must reschedule your exam appointment at least 48 hours in advance of your scheduled appointment time.**

If, on the day you are scheduled to test, you are unable to attend the exam for any of the following reasons, you may be allowed to reschedule without paying a rescheduling fee or may be allowed to cancel with a full refund:

- Illness, either yourself or immediate family member
- Death in the immediate family
- Disabling traffic accident
- Court appearance or jury duty
- Military duty

To avoid any monetary penalty in such situations, you must provide reasonable documentation to NCEES within 14 days of your originally scheduled appointment confirming why you were unable to test as scheduled.

**Reschedule Confirmation**

When you have completed the rescheduling process, you will receive an email (Appointment Reschedule Confirmation) from Pearson VUE. This is your reschedule confirmation. If you do not receive this email from Pearson VUE and you have not yet paid a rescheduling fee, your exam has not been rescheduled. Log in to MyNCEES to complete the rescheduling process.

**CANCELLING YOUR EXAM APPOINTMENT**

If you are not ready to reschedule, you may cancel your exam appointment through your MyNCEES account. You must complete the following steps to cancel your exam appointment:

1. Log in to your MyNCEES account.
2. Select the Manage Appointment button.
3. Select your exam from the dashboard.
4. Select the Cancel link and complete the onscreen instructions.
5. Pay the cancellation fee.
6. Receive a cancellation confirmation.

All applicable fees ($50 online; additional fees may apply if you contact Pearson VUE to cancel your exam) are payable directly to Pearson VUE. **You must cancel your exam appointment at least 48 hours in advance of your scheduled appointment time.**

**Cancellation Confirmation**

When you cancel your exam appointment, you will receive an email (Cancellation Confirmation) from Pearson VUE. This is your cancellation confirmation. If you do not receive this email from Pearson VUE and you have not yet paid a cancellation fee, your exam appointment has not been cancelled. Log in to MyNCEES to complete the cancellation process.

**CANCELLING YOUR REGISTRATION**

If you do not plan to schedule your exam, you may cancel your exam registration. You must complete the following steps to cancel your exam registration:

1. Log in to your MyNCEES account.
2. Select the Cancel button and complete the onscreen instructions.

You will be eligible for a refund of the NCEES registration fee less a $50 administrative fee. If you cancelled an exam appointment and paid Pearson VUE a cancellation fee, NCEES will waive the $50 administrative fee.

When you cancel your exam registration, that exam will be removed from your MyNCEES Dashboard. This is confirmation that your registration has been cancelled.
## Changing Your Exam Discipline or Licensing Board

If you decide to change your exam discipline or select a different licensing board after registering, you must cancel your existing registration and re-register for the new exam. You will be eligible for a refund of the NCEES registration fee less a $50 administrative fee.

## Test Center Closure

If your test center is unable to deliver your exam (for reasons such as inclement weather, property maintenance, technical issues, or utility outage), Pearson VUE will cancel your exam appointment and notify you to reschedule your exam. You must schedule a new exam appointment or cancel your registration.

If a test center is open during inclement weather, neither NCEES nor Pearson VUE will make exceptions to refund and fee policies for examinees who cancel, reschedule, or fail to attend their scheduled appointment because of weather conditions.

## The Day of Your Computer-Based Exam

### Arrive at the Pearson VUE Test Center

Arrive at the Pearson VUE test center 30 minutes before your scheduled appointment.

### What to Bring

You must present one of the following physical photo IDs upon arrival at the test center. Digital IDs will not be accepted.

- ID issued by a government entity in the country in which you are testing
- International travel passport in roman characters from your country of citizenship
- U.S. military ID

IDs must be current and include an expiration date, your name and date of birth, a recognizable photo, and your signature. Valid U.S. military IDs must be current and include an expiration date, your name and date of birth, a recognizable photo, and your signature. Valid U.S. military IDs that do not include a signature will be accepted. Student IDs will not be accepted.

The first and last name on your appointment confirmation letter and your ID must match. To help speed up the process while checking in, bring a printed copy of your appointment confirmation letter.

You are allowed to bring one NCEES-approved calculator into the testing room. You may store spare calculators and covers with your personal belongings. To review the list of approved calculators, visit ncees.org/exams and select Calculator Policy at the bottom of the page.

Only the following items are allowed into the testing room:

- The ID used during the admission process
- Calculator (without the cover) that complies with the current NCEES Calculator Policy
- Key to your test center locker
- Reusable booklet and marker supplied by Pearson VUE
- Eyeglasses (without the case)
- Light sweater or jacket
- Items included in the Pearson VUE Comfort Aid List

Items not permitted in the testing room include but are not limited to cell phones, handheld computers/personal digital assistants (PDAs), and other electronic devices.

### Day of the Exam

- Appointment confirmation letter
- NCEES-approved calculator
- Acceptable form of identification
- Approved comfort items
or other electronic devices, fitness trackers, pagers, watches, wallets, purses, hats and other head coverings (unless they qualify as religious apparel), bags, coats, books, notes, pens, pencils, erasers, food, and beverages.

You must store all belongings not permitted in the testing room in designated areas outside the testing room. Most test centers have small lockers. You must turn off all electronic devices before storing them in a locker. The test center is not responsible for lost, stolen, or misplaced personal items.

**Approved Comfort Items**

The test center will provide items included on the Pearson VUE Comfort Aid List, such as earplugs, noise-canceling headphones, and tissues. These items do not require preapproval. Other comfort aids—such as braces (e.g., neck, back, ankle), hearing aids, eye drops, and mobility devices—will be allowed in the testing room upon visual inspection by test center staff. Test center staff will conduct the visual inspection by examining the item but will not physically touch you or the item.

Any items that do not appear on the Pearson VUE Comfort Aid List must be requested as a testing accommodation during the exam registration process and approved prior to scheduling your exam.

**Reference Materials**

The current version of the appropriate NCEES reference handbook will be supplied onscreen as a searchable PDF. All NCEES examinees will use a 24-inch monitor while testing to allow sufficient space to display both the exam question and the reference handbook. You can access the current version of the handbook from the dashboard of your MyNCEES account.

If codes, standards, or other references are being supplied, they will be listed on the last page of the exam specifications.

Typically, references are best viewed in the exam software at 100%. If additional clarification is needed, zooming to a higher or lower percentage may be helpful.

**Testing Environment**

All NCEES-approved Pearson VUE test centers provide a consistent testing environment for all examinees. To ensure a high level of security throughout the testing experience, you will be monitored at all times. Both audio and video may be recorded.

You are prohibited from eating, drinking, chewing gum, smoking, and making noise that creates a disturbance for other examinees during the exam.

Other individuals taking non-NCEES exams are likely to be testing at the same time as you, and neither NCEES nor Pearson VUE has control over keyboarding noises that may be associated with such exams if they include essay questions. A test proctor can provide you with noise-canceling headphones or earplugs if you encounter such a situation.

**CHECK-IN PROCESS**

Upon arrival at the test center, you will be provided a copy of the NCEES CBT Exam Rules and Agreement to review. You must indicate your agreement to comply with these rules by providing a digital signature before testing begins.

A Pearson VUE representative will confirm that the only items in your possession are ones allowed into the testing area. These items include your ID, an NCEES-approved calculator.
(without the cover), the key to your test center locker (if applicable), eyeglasses (without the case), a light sweater or jacket, and any approved comfort items.

Once you have placed any unapproved items in a test center locker (if available), the representative will take a digital photo of you and you will be directed to provide a palm vein scan. The palm vein scan will collect your palm vein image to digitally verify your identity and to protect the security and integrity of the exam. Your signature, palm vein scan, and photo will be securely transmitted and stored with your exam results.

After completing the check-in process, you will be escorted into the testing area, where a proctor will confirm your identity and ask you to provide another palm vein scan. You will be required to provide a palm vein scan each time you enter and exit the testing room.

After verifying your identity and the exam you will be taking, the proctor will answer any questions you might have, provide you with a reusable booklet and marker for scratch work, escort you to your workstation, and launch the exam. Upon entering the testing room, you may not communicate with other examinees.

THE EXAM APPOINTMENT
Prior to beginning an exam, you will be given 2 minutes to review and agree to comply with the mandatory CBT Nondisclosure Agreement. If you do not accept the terms within 2 minutes or if you click “No,” the exam will end and you will forfeit your appointment and exam fees.

After agreeing to comply with the CBT Nondisclosure Agreement, you will be provided an 8-minute tutorial to review how to advance through the exam questions, flag items for review, access the reference handbook, and do other exam-related tasks.

Additional reusable booklets are available at any time during the exam by raising your hand and notifying the proctor. The proctor will take and review your booklet before issuing a new one.

Notify the test administrator immediately if you experience any problems with the computer or software or encounter any other issue. The test administrator is not allowed to answer questions related to exam content.

Exam Format
The exam is divided into two sections. You’ll be given the entire exam time at the beginning of the test. There are no individually timed sections, so manage your time accordingly.

After you see approximately half of the questions, you will be prompted to review and then submit them. You will no longer have access to those questions after you submit them. You will then have the option of taking a scheduled break (see next section). Manage your time accordingly to ensure that you have plenty of time to complete the remaining questions.

The format of each exam is shown on the following page.
Every exam includes an electronic reference handbook. Some PE exams require design standards also. Check the last page of the exam specifications for a list of the electronic material that will be supplied in your PE exam.

<table>
<thead>
<tr>
<th>Exam</th>
<th>Testing Date</th>
<th>Appointment time</th>
<th>Nondisclosure Agreement</th>
<th>Tutorial</th>
<th>Exam time</th>
<th>Scheduled break</th>
<th>Number of questions</th>
<th>Design standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE/FS</td>
<td>Year-Round</td>
<td>5 hr 55 min</td>
<td>2 min</td>
<td>8 min</td>
<td>5 hr 20 min</td>
<td>25 min</td>
<td>110</td>
<td>no</td>
</tr>
<tr>
<td>PS</td>
<td>Year-Round</td>
<td>7 hr</td>
<td>2 min</td>
<td>8 min</td>
<td>6 hr</td>
<td>50 min</td>
<td>100</td>
<td>no</td>
</tr>
<tr>
<td>PE Agricultural and Biological Engineering</td>
<td>October 24, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Architectural Engineering</td>
<td>October 23, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Chemical</td>
<td>Year-Round</td>
<td>9 hr</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr</td>
<td>50 min</td>
<td>80</td>
<td>no</td>
</tr>
<tr>
<td>PE Civil (all disciplines)</td>
<td>Year-Round</td>
<td>9 hr</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr</td>
<td>50 min</td>
<td>80</td>
<td>yes</td>
</tr>
<tr>
<td>PE Control Systems</td>
<td>October 24, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Electrical and Computer: Computer Engineering</td>
<td>October 24, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>no</td>
</tr>
<tr>
<td>PE Electrical and Computer: Electronics, Controls, and Communications</td>
<td>October 24, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>no</td>
</tr>
<tr>
<td>PE Electrical and Computer: Power</td>
<td>Year-Round</td>
<td>9 hr</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr</td>
<td>50 min</td>
<td>80</td>
<td>yes</td>
</tr>
<tr>
<td>PE Environmental</td>
<td>Year-Round</td>
<td>9 hr</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr</td>
<td>50 min</td>
<td>80</td>
<td>no</td>
</tr>
<tr>
<td>PE Fire Protection</td>
<td>October 23, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Industrial and Systems</td>
<td>October 24, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Mechanical (all disciplines)</td>
<td>Year-Round</td>
<td>9 hr</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr</td>
<td>50 min</td>
<td>80</td>
<td>no</td>
</tr>
<tr>
<td>PE Metallurgical and Materials</td>
<td>October 23, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>no</td>
</tr>
<tr>
<td>PE Mining and Mineral Processing</td>
<td>October 23, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>no</td>
</tr>
<tr>
<td>PE Naval Architecture and Marine Engineering</td>
<td>October 23, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Nuclear</td>
<td>October 24, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>yes</td>
</tr>
<tr>
<td>PE Petroleum</td>
<td>October 23, 2023</td>
<td>9 hr 30 min</td>
<td>2 min</td>
<td>8 min</td>
<td>8 hr 30 min</td>
<td>50 min</td>
<td>85</td>
<td>no</td>
</tr>
</tbody>
</table>
COMPUTER-BASED EXAMS

**Breaks**
You may take a scheduled break after completing, reviewing, and submitting approximately half of the questions.

You may take less than the designated amount for your scheduled break. However, any remaining break time will not extend the amount of time allocated for answering the remaining exam questions.

You may exit the building during the scheduled break. It is important to return on time from the scheduled break and to allow time for the exam proctor to readmit you into the exam room. Once the break has expired, the exam clock automatically begins again.

You may also take unscheduled breaks at any time during the exam by raising your hand to notify a proctor. However, the amount of time you take for unscheduled breaks will be deducted from your testing time. You are not allowed to exit the building during unscheduled breaks.

While you are taking an unscheduled break, you are permitted to access only these personal items that you stored during the exam: beverages, food, and items on the Pearson VUE Comfort Aid List. You may also access medication required at a specific time, with the prior permission of the test administrator. You are not permitted to access any other personal items during an unscheduled break.

**Exit Procedures**
Raise your hand to notify the proctor when you have completed the exam. The proctor will confirm that the exam has ended properly, gather your reusable booklet and marker, and escort you to the receptionist area. All exam results will be encrypted and transmitted to Pearson VUE and NCEES, along with your digital signature, photo, and palm vein scan.

You will be given a verification-of-testing letter before leaving the test center. This letter will include your name, digital photo, and candidate ID, current date and time, and name of the exam. It serves as your confirmation of testing.

**Exam Irregularities**
Fraud, deceit, dishonesty, unprofessional behavior, and other irregular behavior in connection with taking any NCEES exam are strictly prohibited. Irregular behavior includes but is not limited to the following: failing to work independently; impersonating another individual or permitting such impersonation (surrogate testing); possessing prohibited items; violating an exam scheduling restriction; communicating with other examinees or any outside parties by way of cell phone, personal computer, the Internet, or any other means during an exam; disrupting other examinees; creating safety concerns; and possessing, reproducing, or disclosing nonpublic exam questions, answers, or other information regarding the content of the exam before, during, or after the exam administration. Evidence of an exam irregularity may be based on your performance on the exam, a report from an administrator or a third party, or other information.

The test administrator is authorized to take appropriate action to investigate, stop, or correct any observed or suspected irregular behavior, including discharging you from the test center and confiscating prohibited devices or materials. You must cooperate fully in any investigation of a suspected irregularity. NCEES reserves the right to pursue all available remedies for exam irregularities, including canceling scores and pursuing administrative, civil, and/or criminal remedies.
If you are involved in an exam irregularity, the following may occur: invalidation of results, notification to your licensing board, forfeiture of exam fees, and restrictions on future testing. Some violations may incur additional consequences, to be pursued at the discretion of NCEES.

**Appeals**

If your exam results are invalidated and you believe NCEES should review that decision, you may appeal to NCEES within 30 days from the date of the decision. You must send your appeal in writing through your MyNCEES account or by mail or fax to the NCEES Manager of Compliance and Security.

In most cases, results are invalidated for one of two reasons. First, there is a good-faith reason to question the validity of the results. Second, you have engaged in activities prohibited by the NCEES Examinee Guide, the NCEES CBT Exam Rules, or the CBT Nondisclosure Agreement. If you decide to appeal, your appeal must provide information that resolves, to the reasonable satisfaction of NCEES, the concerns that led to the invalidation of your exam results. Your appeal should also indicate the specific relief requested. You will be notified of the NCEES action within 60 days after receipt of the appeal.

If you wish to contest a decision to invalidate your exam results, you may also choose to pursue arbitration in accordance with the procedure described in the NCEES Agreement to Arbitrate. Arbitration may be pursued only after appealing a decision to cancel exam results. Arbitration is the final and exclusive remedy for challenging a decision by NCEES to cancel or invalidate exam results.

**Examinee Comments**

Provide any comments or concerns regarding the test center to a Pearson VUE representative before leaving the test center. Provide any comments regarding the exam to NCEES within 48 hours via your MyNCEES account.

Report suspicious activity or an exam irregularity by going to ncees.org/exams and selecting Exam Security Tip Line.

**Exam Results**

Exam results for computer-based exams are typically available 7–10 days after you take the exam. You will receive an email notification from NCEES with instructions to view your results in your MyNCEES account. Results will include information specific to your licensing board regarding how you should proceed based on your performance.

All results are reported as pass or fail. If you fail the exam, you will receive a diagnostic report showing your performance for each of the major topics covered on the exam. The diagnostic report is provided to help identify the knowledge areas where improvement is needed before retaking the exam. The purpose of this report is to provide general information on performance; it is not designed or intended to be used for any other purpose. A sample diagnostic report is shown at the end of this chapter.

**Retaking the Exam**

For exams offered year-round, NCEES policy allows examinees to attempt a particular NCEES examination one time per testing window and no more than three times in a 12-month period. Some licensing boards have a more restrictive policy. Visit our website to determine the policy of the licensing board you selected during the registration process.
COMPUTER-BASED EXAMS

Scoring
Your exam results are based on the total number of correct answers that you selected. There are no deductions for wrong answers. The score is then converted to a scaled score, which adjusts for any minor differences in difficulty across the different exam forms. This scaled score represents an examinee’s ability level and is compared to the minimum ability level for that exam, which has been determined by subject-matter experts through psychometric statistical methods. NCEES does not publish the passing score because it varies slightly based on difficulty. NCEES scores each exam with no predetermined percentage of examinees that should pass or fail. All exams are scored the same way. First-time takers and repeat takers are graded to the same standard.

When an Error Occurs
NCEES and Pearson VUE endeavor at all times to ensure that registrations are properly processed and exams are properly prepared, handled, and scored. In the unlikely event that an error occurs, NCEES will, if possible, correct it.

If NCEES determines corrective action is warranted, you will be permitted either to retest at no additional fee or to receive a full refund of your testing fees.

The remedies described above are the exclusive remedies available to an examinee for errors in registration, exam information, scoring (including reporting of exam results), or testing disruptions not caused by the examinee.

EDUCATION

The NCEES Engineering Education Award recognizes engineering programs that foster collaboration between students and professional engineers. NCEES invites EAC/ABET-accredited programs from all engineering disciplines to submit entries that integrate professional practice and education to compete for

Grand prize: $25,000
5 awards: $7,500 each
Disruptions in Testing and Potential Compromises

The following situations may prompt NCEES to consider invalidating or canceling your exam or exam results even though you may have had no responsibility for the event in question:

- Unanticipated cancellation or interruption of testing or deviation from required testing procedures, due to a weather event or other external cause
- Possible advance access to exam content by one or more examinees
- Other disruptions or compromises to the normal testing process

If NCEES concludes that corrective action is warranted in one of these situations, you may be offered the option to either retest at no additional fee or receive a full refund of your registration fee provided that you did not cause and were not involved in the conduct that resulted in corrective action. These remedies are your exclusive remedies for such disruptions in testing and potential compromises. If you choose to retest, you must retake the entire exam to produce valid exam results.

If you are found to have caused or been involved in the conduct that resulted in corrective action, NCEES may treat the matter as an exam irregularity and may pursue all available remedies as described elsewhere in this guide.

EXAM CONTENT

Current exam specifications are located at ncees.org/exams.

Most questions on exams are in traditional multiple-choice format. However, exams also use common alternative item types such as:

- Multiple correct options—allows multiple choices to be correct
- Point and click—requires examinees to click on part of a graphic to answer
- Drag and drop—requires examinees to click on and drag items to match, sort, rank, or label
- Fill in the blank—provides a space for examinees to enter a response to the question

All questions, including alternative item types, are scored as either correct or incorrect. No partial credit is given.

Videos describing alternative item types and other CBT functions are posted on the NCEES YouTube Channel.

All exams include a limited number of pretest items that will not be scored and will not have an impact on your results. This is common practice within high-stakes testing and allows NCEES to evaluate the pretest items for potential use in future exams. These items are randomly placed within the exam and are not identifiable as pretest items.
NCEES CBT EXAM RULES AND AGREEMENT

Compliance with All Testing Rules: In order to be seated for an exam, all examinees must read and agree to comply with all requirements found in the NCEES Examinee Guide, which is available on the NCEES website. Examinees may request a copy of the guide from the test administrator. Those requirements include but are not limited to those listed here.

Items Permitted in Testing Room: Only the following items are allowed into the testing room:

- The ID used during the admission process
- A calculator that complies with the current NCEES Calculator Policy
- Key to your test center locker (if applicable)
- Reusable booklets and markers supplied by Pearson VUE
- Eyeglasses (without the case)
- Light sweater or jacket
- Items included in the Pearson VUE Comfort Aid List (copy available from the test administrator upon request)

Items Prohibited in Testing Room: Items not permitted in the testing room include but are not limited to: cell phones, hand-held computers/personal digital assistants (PDAs), fitness trackers or other electronic devices, pagers, watches, wallets, purses, hats (and other head coverings, with the exception of those worn for religious purposes), bags, coats, books, notes, pens, pencils, erasers, food, and beverages.

All belongings not permitted in the testing room must be stored in designated areas outside the testing room. Most test centers have small lockers. The test center is not responsible for lost, stolen, or misplaced personal items.

Examinees will be asked to empty their pockets so that the test administrator can verify the pockets are empty. Examinees with hair that covers their ears may be asked to show their ears so that the test administrator can verify that no Bluetooth devices are present. The test administrator may also ask examinees to roll up their sleeves to verify that there is no writing on their arms. Before examinees enter the testing room, they will be asked to pat themselves down (for example, arms, legs, and waistline) to show there is nothing hidden on their body.

Reusable Booklets: Pearson VUE reusable booklets cannot be used until after the exam has started, may not be removed from the testing room at any time during the exam, and must be returned to the test administrator immediately after the exam.

Breaks: After completing approximately half of the questions and clicking “End Review,” examinees may request an optional scheduled break. Examinees must return from their scheduled break on time. Time allocated for the second portion of the exam will be reduced by an amount equal to the time an examinee is late in returning.

Unscheduled breaks may be taken at any time during the exam. The exam timer will not stop for unscheduled breaks. Examinees may not leave the building during an unscheduled break.
NCEES CBT EXAM RULES AND AGREEMENT (CONTINUED)

To leave their seat, examinees must raise their hand and wait for a test administrator to assist them. Only the following items may be accessed during an unscheduled break:

- Beverages
- Food
- Items included in the Pearson VUE Comfort Aid List
- Medication required at a specific time with prior approval of the test administrator

NO other items may be accessed.

Monitoring: To ensure a high level of security throughout the exam experience, examinees will be monitored at all times. Both audio and video may be recorded.

Computer Problems During Testing: Problems with the computer or software must be reported immediately to the test administrator.

Privacy Statement: Exam results, palm vein pattern templates, and digital photographs and signatures will be encrypted and transmitted to Pearson VUE and NCEES. The test center does not keep any information other than when and where your exam was taken. This encrypted information may be used for exam verification purposes and to detect potentially fraudulent or unauthorized activities.

Candidate Statement: By providing a digital signature, I give Pearson VUE my explicit consent to retain and transmit my personal data and test responses to Pearson VUE and NCEES (either of which may be outside the country in which I am testing). I have read and understand the NCEES CBT Exam Rules and agree to follow them. I understand and agree that if I do not follow the NCEES CBT Exam Rules, or if I am suspected of cheating, tampering with the computer, or engaging in any other improper activity, this will be reported to Pearson VUE and NCEES, my exam may be invalidated, I will not be refunded my exam fee, and NCEES may take other action that it deems appropriate, such as pursuing administrative, civil, or criminal remedies.
CBT NONDISCLOSURE AGREEMENT

This exam is confidential and secure, owned and copyrighted by NCEES and protected by the laws of the United States and elsewhere. It is made available to you, the examinee, solely for valid assessment and licensing purposes. In order to take this exam, you must agree not to disclose, publish, reproduce, or transmit this exam, in whole or in part, in any form or by any means, oral or written, electronic or mechanical, for any purpose, without the prior express written permission of NCEES. This includes agreeing not to post or disclose any test questions or answers from this exam, in whole or in part, on any websites, online forums, or chat rooms, or in any other electronic transmissions, at any time.

Please click on the response below to indicate whether you accept the terms of this agreement. Click “Y” to symbolize your signature and to accept these terms. You must click “Y” and then “Exit” to continue with the exam.

If you do NOT accept these terms, click “N” and let the test center staff know that you are finished with the exam. Clicking “N” will end the exam, and you will forfeit your exam fee.

Y. Yes, I accept the terms of this agreement and agree not to disclose any part of this exam at any time.

N. No, I do NOT accept the terms of this agreement.
Diagnostic Report

The purpose of the diagnostic report on the next page is to provide feedback about your exam performance and to help focus your preparations for retaking the exam. The report cannot be used to determine the passing score.

The Your Performance column indicates your result by knowledge area converted to a scaled score of 0–15. The scaled score conversion is necessary to ensure that diagnostic reports are consistent across all computer-based exams. This also allows comparison of results by an examinee on multiple attempts. The number of questions you answered correctly cannot be determined from this scaled score.

The last column represents your performance in a knowledge area compared to the average performance of passing examinees. For each knowledge area, the portion of the bar between your performance (solid line) and the average performance of the passing examinees (dashed line) indicates the relative difference between your performance and the performance of the passing examinees.

Performance in a knowledge area significantly below that of the passing examinees contributed to your failing results. Substantial study of this material is recommended before retaking the exam.

Performance in a knowledge area near or just above that of the passing examinees indicates your understanding may be improved by further study, thus improving your chances of passing the exam.

Each exam includes a limited number of pretest items that will not be scored and will not have an impact on your results. This is common practice within high-stakes testing and allows NCEES to evaluate the pretest items for potential use in future exams. These items are randomly placed within the exam and are not identifiable as pretest items.
NCEES provides a diagnostic report to all examinees who do not pass to help them identify the knowledge areas in which they need to improve before retaking the exam. The purpose of this report is to provide general information on the performance of the examinee; it is not designed to be used for any other purpose.

The report shows the knowledge area, along with the number of items in each knowledge area and the examinee’s performance in terms of a scaled score from 0–15. The report also provides information showing the examinee’s relative performance in each knowledge area compared to the average performance of the passing examinees. The performance comparison chart is not shown to scale and simply indicates the relative performance to assist the examinee in preparing to retake the exam.

Please see the sample diagnostic report for the FE Electrical and Computer exam on the following pages. In reviewing the report, here is how the examinee should interpret the results. Colors shown are for illustrative purposes only. Actual reports are grayscale.

- **Ethics and Professional Practice, Properties of Electrical Materials, and Electromagnetics:** My performance in these areas ranged from 5.3–7.1, significantly lower than the average score of passing examinees. These are areas where I need to focus before retaking the exam.

- **Mathematics, Probability and Statistics, Power, and Computer Networks:** My performance in these areas ranged from 7.4–8.2, consistently lower than the average score of passing examinees. There is definite room for improvement in these areas.

- **Engineering Economics, Circuit Analysis, Linear Systems, Signal Processing, Electronics, Control Systems, Communications, Digital Systems, Computer Systems, and Software Development:** My performance in these areas ranged from 8.1–15 and was very close to the average performance of passing examinees—a little lower in some areas and higher in others. I should review these areas before retaking the exam to try to improve, but there are other areas that need more of my focus.

My study priorities before retaking the exam need to be as follows:

1. **Ethics and Professional Practice, Properties of Electrical Materials, and Electromagnetics**—strong focus
2. **Mathematics, Probability and Statistics, Power, and Computer Networks**—very strong focus. Even though my performance was closer to the passing examinees than the green topics, there are 26 questions in these areas versus 18 in the blue topics, therefore giving me more opportunity to improve.

For more information on the knowledge areas included in each of the FE and FS exams, download exam specifications at ncees.org/exams.
# Sample Diagnostic Report

Examinee Name - ID Number  
Exam Date MM/DD/YYYY

## FE Electrical and Computer

<table>
<thead>
<tr>
<th>Knowledge Area</th>
<th>Number of Items</th>
<th>Your Performance (on a scale of 0-15)</th>
<th>Average of Passing Examinees = 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mathematics</td>
<td>11</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>2 Probability and Statistics</td>
<td>4</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>3 Ethics and Professional Practice</td>
<td>4</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>4 Engineering Economics</td>
<td>5</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td>5 Properties of Electrical Materials</td>
<td>4</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>6 Circuit Analysis (DC and AC Steady State)</td>
<td>11</td>
<td>8.3</td>
<td></td>
</tr>
<tr>
<td>7 Linear Systems</td>
<td>5</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td>8 Signal Processing</td>
<td>5</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td>9 Electronics</td>
<td>7</td>
<td>8.9</td>
<td></td>
</tr>
<tr>
<td>10 Power Systems</td>
<td>8</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>11 Electromagnetics</td>
<td>4</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>12 Control Systems</td>
<td>6</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>13 Communications</td>
<td>5</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>14 Computer Networks</td>
<td>4</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>15 Digital Systems</td>
<td>8</td>
<td>11.0</td>
<td></td>
</tr>
<tr>
<td>16 Computer Systems</td>
<td>5</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td>17 Software Development</td>
<td>4</td>
<td>15.0</td>
<td></td>
</tr>
</tbody>
</table>
CONTACT INFORMATION

CONTACT NCEES REGARDING:

- Acceptable forms of ID
- Admittance requirements
- Contact information for licensing boards
- Evaluation of foreign education
- Exam accommodations
- Exam development
- Exam registration
- Exam scoring
- General information on the licensure process for becoming a professional engineer (P.E.) or professional surveyor (P.S.)

Visit: ncees.org
Chat: Click the chat icon on any page within the ncees.org website.
Call: 800-250-3196
Message: Go to your MyNCEES account.
Write: 200 Verdae Blvd.
       Greenville, SC 29607

Office hours: Monday–Friday
8 a.m.–5 p.m. Eastern time
Closed on local holidays

CONTACT YOUR LICENSING BOARD REGARDING:

- Applications for licensure
- Qualifications for licensure (these vary by jurisdiction)
- Renewal and continuing education requirements
- State-specific exams

All NCEES exams are confidential, secure, and protected by the laws of the United States and elsewhere. They are to be used only for valid assessment and licensing purposes. You can review the exam administration schedule for pencil-and-paper exams at ncees.org/exams by clicking on PE exam.
REGISTRATION FOR A PENCIL-AND-PAPER EXAM

Eligibility
Eligibility to sit for an NCEES exam varies and is determined by each licensing board. It is your responsibility to review your licensing board’s requirement at ncees.org/boards before registering for an exam.

MyNCEES Account
You must have a MyNCEES account to register for an exam. To create one, go online to account.ncees.org and follow the instructions. The information provided during the registration process will be used to create your exam authorization, which will be used for admission to the exam site. The first and last names you use to register must be in English and match the government-issued ID that you will provide for admission to the exam site. Individuals may have only one MyNCEES account.

REGISTRATION PROCESS
1. Review your licensing board’s approval and registration process.
2. Create a MyNCEES account.
3. Log in to your account, click REGISTER, and follow the instructions.
4. Receive a confirmation email.
5. Receive an exam authorization about two weeks before the exam.

How to Register
To register with NCEES for your exam, log in to your MyNCEES account, select the REGISTER button, and follow the onscreen instructions.

During registration, you will be required to agree to conduct transactions with NCEES by electronic means, including but not limited to the exam registration process, and to attest that you have read the rules and policies in the NCEES Examinee Guide and agree to comply with them.

Once NCEES registration closes, you will not be permitted to make any changes to your exam or exam location.

Exam Fees
Most licensing boards require PE examinees to file an application and pay an application fee. In addition to application fees, PE examinees will be required to pay actual test fees directly to NCEES during the registration process. NCEES accepts payments online via MasterCard, VISA, and American Express. Review the policies and procedures of your licensing board to determine specific fees, policies, and procedures.

Exam Confirmation
You will receive a confirmation email from NCEES once you have successfully completed the registration process.

Exam Authorization
You will receive an exam authorization approximately two weeks before the exam. It will confirm your identity, the location of your exam site, the exam administration date, and arrival instructions.
To avoid delays at the exam site, verify that the first and last names printed on the exam authorization match your first and last names as they appear on the government-issued ID that you will use during the exam check-in process. Contact NCEES for assistance before exam day if the names do not match.

You can confirm your registration status and reprint your exam authorization through your MyNCEES account.

**Cancellations and Refunds**

Licensing boards are responsible for administering pencil-and-paper exams in their jurisdiction. Most use a third-party provider, and each has its own policies and procedures for cancellations and refunds. Visit ncees.org/boards to determine the policies and procedures for your licensing board.

If you have an issue regarding a payment or refund, contact NCEES directly. Fees associated with chargebacks, returned checks, or any form of disputed payment are the responsibility of the issuer.

**Exam Accommodations**

Accommodations are available for examinees who meet certain eligibility criteria and sufficiently document their request. Examinees who have a documented disability covered under the ADA or a scheduling conflict due to a religious Sabbath or a military appointment may request accommodations. You must indicate your need for accommodations during registration by the published deadlines. After registration is completed, you will receive an email with instructions on how to complete and submit your requested accommodations.

Email questions related to the accommodations process to NCEES at accommodations@ncees.org.

**ADA accommodations**—NCEES is committed to ensuring that candidates with disabilities can take the NCEES exams in an accessible place and manner. This will often require reasonable testing accommodations.

To receive ADA accommodations, a candidate must have a physical or mental impairment that substantially limits his or her ability to perform one or more major life activities (such as walking, seeing, hearing, learning, reading, concentrating, or thinking) or a major bodily function (such as neurological, endocrine, or digestive system) that impacts taking an examination, as compared with most people in the general population. NCEES encourages candidates with disabilities to request accommodations.

For more information on how to request ADA accommodations, visit https://ncees.org/exams/ and select Reasonable Accommodations.

**Military accommodations**—If you or your spouse is currently serving as an active-duty member of the U.S. Armed Forces, you can request to take an exam at a location outside of the jurisdiction in which you are applying for licensure, including limited NCEES-approved foreign exam sites.

**Religious accommodations**—Examinees taking a pencil-and-paper exam may request to take the exam on an alternate date due to Sabbath observance. You will be required to submit supporting documentation from a religious official such as a priest, rabbi, or cleric.

**Test-Site Rules and Regulations**

You must agree to abide by the NCEES Candidate Agreement at all times. The agreement is located at the end of this chapter.
PENCIL-AND-PAPER EXAMS

THE DAY OF YOUR EXAM

Refer to your exam authorization for instructions specific to your exam site.

What to Bring

You must present one of the following physical photo IDs upon arrival at the exam site. Digital IDs will not be accepted.

- ID issued by a government entity in the country in which you are testing
- International travel passport in roman characters from your country of citizenship
- U.S. military ID

IDs must be current and include an expiration date, your name and date of birth, a recognizable photo, and your signature. Valid U.S. military IDs that do not include a signature will be accepted. Student IDs will not be accepted. The first and last name on the examinee’s ID and exam authorization must match.

To avoid delays while checking in, bring a printed copy of your exam authorization.

You are allowed to bring NCEES-approved calculators into the exam room. To review the list of approved calculators, visit ncees.org/exams/ and select Calculator Policy at the bottom of the page.

Reference Materials

Reference materials must be bound and remain bound during the exam. Bound refers to (1) materials permanently bound, as by stitching or glue, and (2) materials securely fastened in their covers by fasteners that penetrate all papers. Loose material inside binder pockets does not qualify as bound. Loose paper may be bound with ring binders, brads, plastic snap binders, spiral-bound notebooks, and screw posts, but not with staples. Writing tablets and legal pads are not allowed. You may tab reference books.

PrACTICE EXAMS

“The NCEES practice exams are a great opportunity for the examinees to view the varied types of questions, and how they are written on the exams.”

Jennifer Williams, P.E.
Bridge and Transportation Engineer
FE Exam Development Volunteer since 2011

Study with NCEES.
ncees.org/PracticeExams
PENCIL-AND-PAPER EXAMS

REFERENCE MATERIALS

Materials Must Be Bound:
Stitched, glued, ring binders, brads, plastic snap binders, spiral-bound notebooks, screw posts

Not Allowed:
Writing tablets, legal pads, stapled paper

before the exam with sticky notes and flags, but pads of sticky notes and flags are not permitted in the exam room. Refer to the NCEES Candidate Agreement to review the policy on references.

Testing Environment

NCEES strives to provide a consistent testing environment for all examinees.

Exam Format

The PE Structural exam is offered in two components (Vertical Forces and Lateral Forces) on successive days. Each day is divided into two 4-hour sessions—a morning session and an afternoon session. Each component contains 40 multiple-choice questions during the morning session and 3 or 4 constructed-response (essay) questions during the afternoon session.

CHECK-IN PROCESS

Upon arrival at the exam site, you will be required to present your exam authorization and acceptable identification to a proctor prior to being admitted into the exam room.

Exam proctors will assist you in locating your assigned seat. Cell phones, smartwatches, fitness trackers, and other electronic devices are not allowed in the exam room at any time. If you have these devices in your possession after the exam begins, you will be dismissed from the exam room, your exam will be invalidated, and you will forfeit your exam registration fee.

Items permitted in the exam room are

• ID used during the admission process
• Exam Authorization (one copy)
• Calculator that complies with the NCEES Calculator Policy
• Wristwatches and small clocks
• Approved reference materials
• Eyeglasses (no case)
• Earplugs
• Two straightedges, such as a ruler, scale, triangle, or protractor
• Handheld, non-electronic magnifying glass (no case)
• Head coverings worn as religious apparel
• Snacks (such as hard candies, candy bars, gum) and nonalcoholic drinks

Items not permitted in the exam room include but are not limited to

• Cell phones, smartwatches, fitness trackers, and other prohibited electronic devices
• Loose paper, legal pads, and unbound or improperly bound notes
• Hats with brims, hoods (on hooded sweatshirts, for example)
• Unapproved calculator
• Slide charts, wheel charts, or drafting compasses
• Non-NCEES writing instruments or erasers
• Weapons of any kind
• Tobacco products
• Personal chairs

Review the NCEES Candidate Agreement for complete information about items allowed or prohibited in the exam room.
ON EXAM DAY

After everyone is seated, a proctor will begin reading the exam instructions. Once the proctor begins reading the instructions, examinees will no longer be admitted into the exam room. You will receive an NCEES pencil with an eraser to use during the exam. Using a non-NCEES writing instrument or eraser to complete any portion of the exam may lead to dismissal from the exam and/or invalidation of your exam results.

Breaks

The amount of time you receive for your lunch break will depend on circumstances at your exam site. The report time for the afternoon session will be announced at your exam site.

You may exit the building during the lunch break. It is important to return on time as late arrivals will not be admitted to the afternoon session.

You may take restroom breaks at any time during the exam by raising your hand and waiting for a proctor to assist you. However, the amount of time you take for restroom breaks will be deducted from your testing time. You are not allowed to exit the exam area during restroom breaks.

Exit Procedures

Raise your hand to notify the proctor when you have completed the exam. The proctor will collect the exam book and answer sheet/solution pamphlets before dismissing you. Once dismissed, you will not be permitted to re-enter the exam room. If you complete the exam within 15 minutes of exam time expiring, you must remain at your seat until the exam ends and all examinees are dismissed from the exam room.

Records

“An NCEES Record makes it fast, easy, and convenient to apply for additional P.E. licenses in other states.”

Alexander Zuendt, P.E.
Zuendt Engineering
Record holder since 2011

Build your NCEES Record today. ncees.org/records
PENCIL-AND-PAPER EXAMS

Examinee Survey
NCEES will email you an online post-exam survey 7–10 days after the exam. This is your opportunity to provide feedback on the exam process and the exam site conditions. If you have feedback specific to an exam question, provide it immediately after the exam through your MyNCEES account.

Exam Irregularities
Fraud, deceit, dishonesty, unprofessional behavior, and other irregular behavior in connection with taking any NCEES exam is strictly prohibited. Irregular behavior includes but is not limited to copying or allowing the copying of exam answers; failing to work independently; possessing prohibited items; communicating with other examinees or outside parties by telephones, personal computers, the Internet, or any other means during the course of an exam; surrogate testing or other dishonest conduct; disrupting other examinees; creating any safety concerns; beginning the exam before instructed to do so; failing to cease work on the exam when time is called; and possessing, reproducing, or disclosing nonpublic exam questions, answers, or other information regarding the content of the exam without authorization, before, during, or after the exam administration. NCEES will conduct an analysis of each exam administration to identify incidents of copying or collusion.

The chief proctor is authorized to take appropriate action to investigate, stop, or correct any observed or suspected irregular behavior, including discharging examinees from the exam site for prohibited activities and confiscating any prohibited devices or materials. Examinees must cooperate fully in any investigation of a suspected irregularity. NCEES reserves the right to pursue all available remedies for exam irregularities, including canceling results and pursuing administrative, civil, and/or criminal remedies. Examinees implicated in an irregularity will be identified to the licensing board, which may invoke additional sanctions. Examinees implicated in an irregularity will not receive exam results and will not be eligible for a refund of exam fees.

Appeals
If your exam results are invalidated and you believe NCEES should review that decision, you may appeal to NCEES within 30 days from the date of the decision. You must send your appeal in writing through your MyNCEES account or by mail or fax to the NCEES Manager of Compliance and Security.

In most cases, results are invalidated for one of two reasons: First, there is a good-faith reason to question the validity of the results. Second, you have engaged in activities that are prohibited by the NCEES Examinee Guide or the NCEES Candidate Agreement. If you decide to appeal, your appeal must provide information that resolves, to the reasonable satisfaction of NCEES, the concerns that led to the invalidation of your exam results. Your appeal should also indicate the specific relief requested. You will be notified of the NCEES action within 60 days after receipt of the appeal.

If you wish to contest a decision to invalidate your exam results, you may also choose to pursue arbitration in accordance with the procedure described in the NCEES Agreement to Arbitrate. Arbitration may be pursued only after appealing a decision to cancel exam results. Arbitration is the final and exclusive remedy for challenging a decision by NCEES to cancel or invalidate exam results.

Examinee Comments
Provide any comments regarding a particular exam question to NCEES within 10 business days via your MyNCEES account. Report suspicious activity or an exam irregularity by going online to ncees.org/exams/security.
EXAM RESULTS
You will be notified when your results are available in accordance with the policies and procedures of the licensing board you selected during the registration process. The method of notification and length of time it takes to receive your results vary by licensing board. Most examinees will receive their notification via email from NCEES within 8–10 weeks with instructions to view your results through your MyNCEES account. Visit our website to review the policies and procedures associated with the licensing board you selected during the registration process.

You will receive a component result for the component(s) attempted. The result will reflect your performance on both the morning and afternoon sections. Your combined performance on both sections must demonstrate minimum competency. If you do not attain acceptable results on a component, you will receive a diagnostic report for the morning and afternoon sections of that component. The diagnostic report is provided to help identify the knowledge areas where improvement is needed before retaking the exam. The purpose of this report is to provide general information on performance; it is not designed or intended to be used for any other purpose. A sample diagnostic report is shown at the end of this chapter.

You are not required to obtain acceptable results on both 8-hour components of the PE Structural exam in a single exam administration. You may sit for and obtain acceptable results on one component, and then sit for and obtain acceptable results on the second component at a later date. You must obtain acceptable results on both 8-hour components within a 5-year period in order to pass the PE Structural exam.

Retaking the Exam
The number of times you are allowed to take an exam varies by licensing board. Visit our website to determine the policy of the licensing board you selected during the registration process.

Scoring
After each pencil-and-paper exam administration, every exam undergoes extensive statistical analysis to determine the minimum level of performance required for entry into the profession. This rigorous process helps ensure an equitable licensure system for examinees while upholding the standards of the profession. The steps are as follows:

1. All answer sheets are scanned as they are received from the exam sites. Scanners are calibrated before and during scoring.
2. A psychometric analysis is performed on a sample of answer sheets from each multiple-choice exam to identify any questions with unusual statistics. These questions are flagged for review.
3. At least two subject-matter experts, who are licensed engineers or surveyors, review the flagged items. In addition, the subject-matter experts consider examinee comments about specific exam questions. If the reviews confirm an error in a question, credit may be given for more than one answer.
4. When the analyses and reviews are completed, NCEES changes the answer keys as necessary. The passing score and final correct answers for each exam are then used to score all answer sheets. A percentage of the answer sheets are manually verified, and the results are compared to the machine score to ensure accuracy.
5. The afternoon sections of both components contain constructed-response (essay) items. These responses are graded by teams of subject-matter experts using an agreed upon solution and scoring plan. Each response is graded by two subject-matter experts. A third expert is used when needed.

6. NCEES releases the results to the licensing boards and testing agencies, who in turn report the results to examinees.

When an Error Occurs

NCEES endeavors at all times to ensure that registrations are properly processed and that exams are properly prepared, administered, handled, and scored. In the unlikely event that an error occurs, NCEES will, if possible, correct it.

In cases where an error occurs and any part of the testing service is not delivered or completed, NCEES may permit you either to retest at no additional fee or to receive a partial or full refund of your testing fees.

The remedies described above are the exclusive remedies available to an examinee for errors in registration, exam administration, exam information, scoring (including reporting of exam results), or other testing-related disruptions not caused by the examinee.

Disruptions in Testing and Potential Compromises

The following situations may prompt NCEES to consider invalidating or canceling your exam or exam results even though you may have had no responsibility for the event in question:

• Unanticipated cancellation or interruption of testing or deviation from required testing procedures, due to a weather event or other external cause

• Possible advance access to exam content by one or more examinees

• Other disruptions or compromises to the normal testing process

If NCEES concludes that corrective action is warranted in one of these situations, you may be offered the option either to retest at no additional fee or to receive a full or partial refund of your registration fee, provided that you did not cause and were not involved in the conduct that resulted in corrective action. These remedies are your exclusive remedies for such disruptions in testing and potential compromises. If you choose to retest, you must retake the entire exam to produce valid exam results.

If you are found to have caused or been involved in the conduct that resulted in corrective action, NCEES may treat the matter as an exam irregularity and may pursue all available remedies as described elsewhere in this guide.

EXAM CONTENT

NCEES conducts a content review for each exam every six to eight years. This process includes developing and administering a content survey and analyzing the survey results. Each step contains checks and balances to ensure that the resulting exams are fair to the examinees and to provide the licensing boards with an adequate measure of each candidate’s competency.

Current exam specifications are available at ncees.org/exams.
NCEES CANDIDATE AGREEMENT FOR PENCIL-AND-PAPER EXAMS

Licensure candidates qualified to take any NCEES pencil-and-paper exam must review this agreement and the NCEES Examinee Guide before sitting for the exam. **Examinees are required to sign their exam answer sheet before the exam starts to affirm that they have been provided this information, have read and understand the material, and agree to abide by the stated policies and procedures, which apply to all NCEES exams.** Full compliance is required.

### Approved Calculators

Only models of calculators listed below are permitted in the exam room.

- **Hewlett Packard**—HP 33s and HP 35s models, but no others.
- **Casio**—All fx-115 and fx-991 models. Any Casio calculator must contain fx-115 or fx-991 in its model name.
- **Texas Instruments**—All TI-30X and TI-36X models. Any Texas Instruments calculator must contain either TI-30X or TI-36X in its model name.

### Admission Requirements

For exam admission, examinees must present their Exam Authorization and one of the following kinds of physical identification: (1) ID issued by a government entity in the country in which you are testing; (2) international travel passport in roman characters from your country of citizenship; or (3) U.S. military ID. All IDs must be current and include an expiration date, your name and date of birth, a recognizable photo, and your signature. Valid U.S. military IDs that do not include a signature will be accepted. Student and expired IDs will not be accepted. Digital IDs will not be accepted. The first and last name on the examinee's ID and Exam Authorization must match.

For the morning session, examinees must report to the exam site by the time shown on the Exam Authorization. For the afternoon session, examinees must report to the exam room by the time announced at the exam site. Examinees who do not report at these times may not be admitted. No one will be admitted after the exam instructions begin.

### Grounds for Dismissal from the Exam and/or Invalidation of Exam Results

- Having a cell phone in your possession
- Having loose papers, legal pads, writing tablets, or unbound notes in your possession
- Having a device with copying, recording, or communication capabilities in your possession. These include but are not limited to cameras, pagers, PDAs, radios, headsets, tape players, calculator watches, smartwatches, electronic dictionaries, electronic translators, transmitting devices, fitness trackers, and digital media players such as iPods.
- Having a calculator that is not on the NCEES-approved list
- Using a non-NCEES writing instrument or eraser to complete any portion of the exam
- Copying from another examinee’s answer sheet or colluding with other examinees
CANDIDATE AGREEMENT FOR PENCIL-AND-PAPER EXAMS (CONTINUED)

- Writing on anything other than your exam booklet or answer sheet
- Removing pages from your exam booklet
- Leaving the exam area without authorization
- Violating any other terms stated in this agreement that are cause for dismissal or exam invalidation
- Beginning the exam before the proctor instructs you to do so
- Failing to stop writing immediately when time is called

If any prohibited item is found in an examinee’s possession after the exam begins, the item will be confiscated and sent to NCEES. No refund will be provided to examinees dismissed from the exam.

Exam to Be Scored

On exam day, examinees will receive only the exam listed on their Exam Authorization and will not be allowed to sit for a different exam. NCEES will score only the exam listed on the Exam Authorization.

Reference Materials

Pencil-and-paper exams are open-book. Examinees must bring their own reference materials. All reference materials must be bound and remain bound during the exam. Bound refers to (1) materials permanently bound, as by stitching or glue, and (2) materials securely fastened in their covers by fasteners that penetrate all papers. Loose material inside binder pockets does not qualify as bound. Ring binders, spiral binders, plastic snap binders, brads, and screw posts are acceptable fasteners. Staples are not acceptable fasteners. Writing tablets and legal pads are not allowed. Examinees may tab reference books before the exam with Post-it type notes and flags, but pads of Post-it notes and flags are not permitted in the exam room.

Personal Items

Personal items are the sole responsibility of the examinee. Neither NCEES, the licensing board, exam proctors, or the site facility is responsible for any lost, misplaced, or stolen items.

- Examinees may bring snacks (e.g., hard candies, candy bars, gum) and nonalcoholic drinks, as long as having them does not disturb other examinees.
- Examinees may wear wristwatches or place them on the floor. Clocks must be placed on the floor.
- Examinees may not wear hoods (on hooded sweatshirts, for example) or hats with brims during the exam. Head coverings that qualify as religious apparel are permitted.
- Examinees may not bring slide charts or wheel charts (handheld cardboard or plastic calculating devices with rotating or sliding pieces) or drafting compasses.
- Examinees may not place crates, boxes, bookends, or bookstands on the desktop.
- Examinees may not bring weapons of any kind.
- Examinees may not bring personal chairs.
- Examinees may not bring tobacco products or electronic or vaping devices.
CANDIDATE AGREEMENT FOR PENCIL-AND-PAPER EXAMS (CONTINUED)

**Items Permitted on the Desktop**

Examinees may have these items on the desktop during the exam:

- Exam Authorization and ID
- Exam booklet, solution pamphlets, and answer sheet
- Approved reference material
- NCEES-approved calculators
- NCEES-issued pencils with erasers
- Small snacks
- Eyeglasses (no case)
- Hand-held, nonelectronic magnifying glass (no case)
- Two straightedges such as a ruler, protractor, scale, or triangle

**Exam Irregularities**

Fraud, deceit, dishonesty, unprofessional behavior, and other irregular behavior in connection with taking any NCEES exam is strictly prohibited. Irregular behavior includes but is not limited to copying or allowing the copying of exam answers; failing to work independently; possessing prohibited items; communicating with other examinees or outside parties by telephones, personal computers, the Internet, or any other means during the course of an exam; surrogate testing or other dishonest conduct; disrupting other examinees; creating any safety concerns; beginning the exam before instructed to do so; failing to cease work on the exam when time is called; and possessing, reproducing, or disclosing nonpublic exam questions, answers, or other information regarding the content of the exam without authorization, before, during, or after the exam administration. NCEES will conduct an analysis of each exam administration to identify incidents of copying or collusion.

The chief proctor is authorized to take appropriate action to investigate, stop, or correct any observed or suspected irregular behavior, including discharging examinees from the exam site for prohibited activities and confiscating any prohibited devices or materials. Examinees must cooperate fully in any investigation of a suspected irregularity. NCEES reserves the right to pursue all available remedies for exam irregularities, including canceling results and pursuing administrative, civil, and/or criminal remedies. Examinees or other persons implicated in an irregularity will be identified to the licensing board, which may invoke additional sanctions. Examinees implicated in an irregularity will not receive exam results and will not be eligible for a refund of exam fees.

**NCEES Response to Testing Errors, Disruptions in Testing, and Potential Compromises**

In the unlikely event that a mistake occurs in printing, handling, or processing test materials or in scoring or reporting scores, NCEES will correct the error, if possible, or permit the affected examinees either to retest at no additional fee (normally on a future national test date) or to receive a refund of the exam fee. These are the sole and exclusive remedies available to examinees for errors in handling or processing registration materials; in printing, handling, or processing exams, answer sheets, and solution pamphlets; and/or in determining or reporting results.
CANDIDATE AGREEMENT FOR PENCIL-AND-PAPER EXAMS (CONTINUED)

NCEES also takes steps that are intended to ensure standardized administration on test day. If events occur that cause testing to be canceled or interrupted, involve a mistiming on any part of the test, result in a deviation from required testing procedures, raise concerns about possible advance access to exam content by one or more examinees, or otherwise disrupt or compromise the normal testing process, NCEES will determine whether corrective action is warranted, which could include canceling results or not scoring answer documents. If NCEES determines that corrective action is necessary, affected examinees may have the option to retest at no additional fee (normally on a future national test date) or to receive a refund of the exam fee, unless the affected examinees caused or were involved in the conduct that resulted in the need for corrective action, in which case NCEES or the licensing board that authorized seating for the exam will have the right to withhold either or both of these options. If NCEES offers a retest and an examinee selects that option, the examinee will be required to retake the entire exam in order to produce a valid result. These are the sole and exclusive remedies available to any examinee who is affected by disruptions in testing or a potential exam compromise.

Exam Accommodations

NCEES must receive accommodation requests by the registration deadline. All accommodations must be approved by NCEES for each exam administration. Information about accommodations and the process for requesting accommodations are posted on the NCEES website.

Intellectual Property Rights and Exam Security

All NCEES exams are copyrighted works. Examinees are strictly prohibited from copying or disclosing any exam questions, problems, or answers, orally or in writing. This prohibition includes not discussing or disclosing any exam questions or problems on Internet blogs or chat rooms or through any other means.

Additional Information

Current exam specifications, preparation materials, scoring methods, and other exam information are available at ncees.org or by calling NCEES at 800-250-3196.
<table>
<thead>
<tr>
<th>Knowledge Area</th>
<th>Number of Items</th>
<th>Your Performance (No. Correct)</th>
<th>Your Performance (% Correct)</th>
<th>Average of Passing Examinees</th>
<th>You vs</th>
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</thead>
<tbody>
<tr>
<td>1 Analysis of Structures: Generation of Loads</td>
<td>5</td>
<td>3</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Analysis of Structures: Load Distribution and Analysis Methods</td>
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<tr>
<td>3 Design and Details of Structures: General Structural Considerations</td>
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<td>4 Design and Details of Structures: Structural Systems Integration</td>
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<td>1</td>
<td>50</td>
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<tr>
<td>5 Design and Details of Structures: Structural Steel</td>
<td>5</td>
<td>2</td>
<td>40</td>
<td></td>
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</tr>
<tr>
<td>6 Design and Details of Structures: Cold Formed Steel</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td></td>
<td></td>
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<tr>
<td>7 Design and Details of Structures: Concrete</td>
<td>5</td>
<td>3</td>
<td>60</td>
<td></td>
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<tr>
<td>8 Design and Details of Structures: Wood</td>
<td>4</td>
<td>4</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Design and Details of Structures: Masonry</td>
<td>3</td>
<td>3</td>
<td>100</td>
<td></td>
<td></td>
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<tr>
<td>10 Design and Details of Structures: Foundations and Retaining Structures</td>
<td>4</td>
<td>1</td>
<td>25</td>
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<td></td>
</tr>
</tbody>
</table>

The purpose of this diagnostic report is to provide feedback about your exam results and to help focus your preparation for retaking the exam. It is neither intended nor designed to be used in determining the passing score.

The last column represents your performance in a knowledge area compared to the average performance of all passing examinees. For each knowledge area, the portion of the bar between your performance (solid line) and the average performance of the passing examinees (dashed line) indicates the relative difference between your performance and the performance average of the examinees who passed.

Performance in a knowledge area significantly below that of the average passing candidate contributed to your failing the exam. Substantial study of this material is recommended before retaking the exam. Performance in a knowledge area near or above that of the average passing candidate indicates your understanding may be improved by further study, thus improving your chances of passing the exam.
### SE Vertical Forces Buildings

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item Keyword</th>
<th>Your Performance (see Notes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>601</td>
<td>Concrete Structure</td>
<td>Improvement Required</td>
</tr>
<tr>
<td>602</td>
<td>Wood Structure</td>
<td>Acceptable</td>
</tr>
<tr>
<td>603</td>
<td>Masonry Structure</td>
<td>Unacceptable</td>
</tr>
<tr>
<td>604</td>
<td>Steel Structure</td>
<td>Improvement Required</td>
</tr>
</tbody>
</table>

1. Acceptable: Achieved or exceeded the standard of minimum competency
2. Improvement required: Some improvement required to achieve the standard of minimum competency
3. Unacceptable: Did not demonstrate the knowledge required to achieve minimum competency
NCEES AGREEMENT TO ARBITRATE (ALL EXAMS)

1. In the event that any legal dispute arises between you and NCEES in connection with your participation in any NCEES examination where that dispute is not resolved by the appeals process, you agree that the exclusive means for resolving the dispute shall be binding arbitration as described by the terms of this agreement. This means that you waive the rights you may have to resolve the dispute in a court of law or by any other means that might otherwise be available to you.

2. NCEES agrees to be similarly bound except that NCEES reserves its full rights to pursue injunctive and other appropriate relief in any court of competent jurisdiction in cases of unfair competition or violations of, or threats to violate, any intellectual property rights of NCEES. With respect to any action filed by NCEES pursuant to this paragraph 2, you consent to submit to the jurisdiction of the state or federal court in which NCEES seeks relief.

3. Arbitration proceedings initiated pursuant to this agreement to arbitrate shall be conducted in accordance with the then current rules of the American Arbitration Association. The arbitration and any proceedings relating to it shall be held in Charlotte, North Carolina. The arbitrator’s award shall be binding and may be entered as a judgment in any court of competent jurisdiction. Information about the American Arbitration Association, its rules, and its forms are available from the American Arbitration Association, 335 Madison Avenue, Floor 10, New York, New York, 10017-4605.

4. In the event of arbitration, the parties shall bear their own costs and attorneys’ fees associated with the arbitration proceedings, unless the arbitrator directs one of the parties to pay the other’s costs, or attorneys’ fees, or both.

5. To the fullest extent permitted by law, no arbitration brought pursuant to this agreement shall be joined to any arbitration involving any other party whether through class-arbitration proceedings or otherwise.

6. This agreement is part of the registration process to take any NCEES examination. Your assent to be bound by it is a requirement for taking the examination, but you may sit for the examination only if you also fulfill all other conditions imposed by NCEES.
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