

Changes to the Civil Engineering Principles and Practices Examination

The Board of Directors of the National Council of Examiners for Engineering and Surveying (NCEES) has made a significant change to the Principles and Practices Examination for Civil Engineers. Starting with the next exam being offered April 11, 2008 you may now choose Construction Engineering as your in-depth module for the exam. This new in-depth module is being offered in addition to the four previous in-depth areas of Water Resources/ Environmental, Geotechnical, Transportation, and Structural. (Water Resources and Environmental have been combined into one module starting in April). It is also important to point out that the Breadth module (morning portion) has also changed to reflect the additional material covered by Construction Engineering. For those that have qualifying engineering experience in the field of Construction Engineering, and also meet the requirements for sitting for the exam, this is a great opportunity to pursue Licensure. Below is a list of helpful contact information regarding the path to Licensure:

General Questions about the New Construction Module:

What is the new construction module?

The new Construction Module is one of the five in-depth portions of the Principles and Practices examination pertaining specifically to the field of Construction.

What information is covered by the new Afternoon (in-depth) construction module?

NCEES has posted an outline of the Construction Module that can be found at:

http://www.ncees.org/exams/professional/pe_civil_construction_exam_specs.pdf

What work experience qualifies for the new module?

The Florida Board of Professional Engineers makes the final determination if you have sufficient relevant work experience. Generally, Florida requires that you demonstrate 4 years of relevant experience after receiving your degree. Florida requires you to submit a detailed work history in addition to references from 3 Licensed Engineers that are familiar with your work. You also must submit a reference from the Professional Engineer(s) who have had responsible charge over your work. ASCE has offered the following list of some of the experience that would be appropriate when documenting your work experience in their pamphlet *Guide to Professional Engineering Licensure for the Construction Engineer*:

- Design of Equipment Fleet Operations and Productivity
- Design of temporary support systems
- Design of formwork systems
- Design and optimization of project schedule
- Economic analysis of construction equipment replacement and maintenance alternatives
- Quality Control
- Materials testing and review of test results
- Review of Shop Drawings
- Design and inspection of safety systems
- Establishing and implementing horizontal and vertical control for location
- Design, control, and safety of blasting operations
- Design of tunneling systems
- Design of safe demolition systems for constructed facilities
- Estimating and budgeting construction costs
- Review and processing change orders
- Constructability reviews
- Specification review and interpretation
- Value engineering analyses
- Modeling installation procedures
- Analysis of construction failures
- Coordination among professional disciplines
- Feasibility analysis
- Inspection of construction
- Review and evaluation of vendor submissions
- Design and control of construction operations for environmental hazards
- Review of operations for conformance with specifications
- Design of Rigging and conveying systems
- Feasibility studies for engineered projects
- Design-Build coordination
- Design and inspection of site drainage and sedimentation control
- Design of storage and lay-down facilities
- Haul road design
- Contract Review
- Progress reports and project Communications
- Progress payment quantification and certification

To get a copy of the brochure written by ASCE, send an email to Johnston@eos.ncsu.edu. In the subject of your email type in Construction PE Guide. In the body of the email type in your name and address **
LEFT JUSTIFIED.

General Questions about the exam:

What is the format for the exam?

The Principles and Practices Examination for Civil Engineers offered by NCEES is an eight hour multiple choice examination divided into 2 parts consisting of a breadth module, and an in-depth module. Everyone must take the same breadth portion of the exam and then select one of the five in-depth modules. There are 40 questions pertaining to the Breadth portion, and there are 40 questions pertaining to the In-depth portion. In Florida, the exam is administered by Engineering and Land Surveying Examination Services (ELSEES), an affiliate of NCEES.

What references are needed for the exam?

NCEES has posted the latest list of references for the Construction Module here:

http://www.ncees.org/exams/professional/pe_design_standards/construction_design_standards.pdf

If I am taking another discipline other than construction, do I still need to buy the Construction references?

NCEES has designed the morning breadth portion of the exam so that if you have a working knowledge of the subject area covered, you should not need any references in the morning. (See the link to the morning breadth outline below). However, you may find the references helpful.

Is there an Engineering Forum that is relevant to the P.E. Exam?

Although the website is not endorsed by NCEES or by FES, many people preparing for the Exam have found Engineer boards to be a helpful resource in exam related topics, as well as engineering topics in general. There is also a section of the forums to purchase used reference materials. Here is the link:

<http://engineerboards.com/>

What other materials might be helpful in preparing for the Exam?

Although it is not endorsed by NCEES or by FES, Many people preparing for the exam have found the Civil Engineering Reference Manual for the PE Exam 10th Edition, Michael R. Lindeburg, PE, 2006 to be helpful. However, the publisher will not have an updated version corresponding to the new exam format until after the April Exam. Here is a link to the book.

<http://ppi2pass.com/ppi/PPIShop?ct=CIVIL>

What is the calculator policy for the exam?

NCEES has posted the latest requirements for calculators here:

<http://www.ncees.org/exams/calculators/index.php#approved>

When and where is the exam offered?

NCEES has posted the Exam dates on their website:

<http://www.ncees.org/exams/schedules/>

ELSEES has posted the latest exam sites on their website:

<http://www.els-examreg.org/florida.php#report>

Does FES offer PE review classes?

Yes, currently classes are only offered in Almonte Springs. To find out more information:

http://www.fleng.org/seminars.cfm?event_id=305

What is ELSEES?

Engineering and Land Surveying Examination Services (ELSEES) administers the Principles and Practices Examination for NCEES in Florida. **REMEMBER TO REGISTER WITH ELSEES** after the Florida Board of Professional Engineers has approved your application. You may do so at:

<http://www.els-examreg.org/florida.php>

Where can I find a sample examination?

NCEES offers a solved sample examination that has 20 breadth portion questions as well as 20 questions from each of the 5 in-depth portions. You may purchase this from NCEES at the following:

https://commerce.ncees.org/study_materials/details.php?ProductCode=1J

What information is covered by the morning (breadth) portion of the exam?

NCEES has posted an outline of the Breadth Module that can be found at:

http://www.ncees.org/exams/professional/pe_civil_breadth_exam_specs.pdf

General Questions about Licensure:

Where can I get an application for Licensure?

You may download an application for Licensure from the Florida Board of Professional Engineers from here:

<http://www.fbpe.org/applications/index.php>

Note: you should also print out the study guide from the above link. You are required to answer and pass several questions regarding the study guide when you submit your application.

What are the deadlines for Licensure?

The Florida Board of Professional Engineers has posted the deadlines here:

http://www.fbpe.org/applications/Application_Due_Dates.htm

What is the contact information for the Florida Board of Professional Engineers?

The following is a list of contact information for the Florida Board of Professional Engineers:

The Florida Board of Professional Engineers
2507 Callaway Road, Suite 200
Tallahassee, Florida 32303-5268
850-521-0500 (Telephone)
850-521-0521 (Fax)
<http://www.fbpe.org/>

What is the contact information for NCEES?

Address: P.O. Box 1686 (280 Seneca Creek Road)
Clemson, SC 29633-1686 U.S.A.
Phone: (800) 250-3196, (864) 654-6824
Fax: (864) 654-6033
<http://www.ncees.org/>

Who is eligible for Licensure?

Generally, the main requirements to qualify for licensure in the State of Florida are:

1. Graduate from an Accredited ABET Engineering Program
2. Pass the Fundamentals of Engineering Exam (FE)
3. Work under a Licensed Professional Engineer for 4 years on relevant engineering experience.
4. Submit an application with the proper documentation to the Florida Board by the required deadline, including the fee. (don't forget the answer sheet to the study guide!)
5. Register with ELSSES and pay for the Examination. After you have been approved.
6. Pass the Principles and Practices Examination.

Please check the Florida Board for Professional Engineers for a more detailed list of qualifications and eligibility requirements.

Where can I verify if the University I attended is an ABET accredited institution?

ABET Accreditation can be verified at the following site:

<http://www.abet.org/>