

**1 What are the benefits of taking the P.E. exam? What is the ideal time in one's career to take it?**

Passing the P.E. exam gives you the designation of a professional engineer, which enables you to stamp your work, and it conveys the message that the work has been done by a professional. It is a symbol of your experience and competency. If you plan to start your own engineering company, then having a P.E. designation validates your company and is definitely a selling point that will bring in business. For many jobs and in government organizations—specifically state departments of transportation—a P.E. license is one of the requirements for advancement.

My recommendation is to take the exam as soon as you qualify to take it. This is usually after passage of the Fundamentals of Engineering exam and four years of employment. Some states allow applicants to take the P.E. exam when they are still graduate students, but they do not become P.E.'s until they gain enough work experience. The benefits of taking the exam sooner are that the material is fresher in your mind and that the longer you wait, the more difficult it will be to carve out the time to prepare.

**2 What are the best ways to prepare for the exam? How long should the prep process take?**

A person should plan at least three to four months in advance of the exam and should have a regular schedule of study. The formula that I use is 10 hours each week; it could be 2 hours every weekday or 5 hours every Saturday and Sunday, but you need to be strategic and consistent. My recommendation is to take a review course. ASCE provides a live, interactive online P.E. review webinar series that is available on demand and has expanded review sessions for each of the civil exam's five depth topics, and there are other organizations, for example, the School of PE and Professional Publications, Inc., that offer in-person review courses. There are also some very good review books available, but most are very comprehensive and also cover concepts that are not on the test. A review course exposes you to exactly what topics are on the exam and narrows down the subjects to a more manageable list. You can also use reference books and

# Questions

WISDOM AND GUIDANCE FOR  
SUCCESSFUL CAREER BUILDING

*An interview with J.P. Mohsen, Ph.D., F.ASCE,  
on taking the Principles and Practice of  
Engineering exam* •••• By DAVID HILL

J.P. Mohsen, Ph.D., F.ASCE, is a professor in the University of Louisville's J.B. Speed School of Engineering, where he chairs the civil and environmental engineering department. He is also the director of the review courses ASCE offers for the P.E. Civil, P.E. Environmental, and Structural Engineering (S.E.) exams.



old textbooks to expand upon what you learned during a review class.

**3 How does the preparation process differ for midcareer engineers, who are further removed from college than are younger engineers?**

The P.E. exam has two parts—principles and practice—and if a person is in midcareer and further from college, then the principles part of the exam is going to be challenging. I would recommend that he or she concentrate on reviewing more fundamental topics of engineering that might be covered during sophomore- and junior-level classes or on the Fundamentals of Engineering exam. P.E. review courses address these issues. Midcareer engineers don't necessarily need to spend more time preparing, but they should skew their study more toward the fundamentals than toward the practice part of the exam, which addresses the experience that they have gained in their career.

**4 What kinds of resources do employers offer to help employees who plan to take the exam?**

Some employers will pay for P.E. review courses for their employees, and many will allow time for employees to attend review courses during the day. Some companies will also provide a conference room and resources for employees to prepare for the exam, and some will pay for the exam registration. Many companies will even set up their own review courses where exam candidates can meet with people on the staff who have taken the exam years ago or recently to exchange ideas and get pointers and guidance.

**5 What are the most common mistakes that engineers make when studying for the exam?**

One mistake is not to enroll in a review course. Another is that some engineers spend all of their time on general information and end up studying the wrong things rather than concentrating on the specific topics that

will be covered by the exam. It is also important to make sure that you take the right exam. The P.E. Civil exam is eight hours, with a morning session that covers general breadth and fundamentals that every civil engineer should know and an afternoon section that addresses a specific discipline. I have seen some people choose the discipline based on their job title rather than their knowledge and qualifications. For example, somebody might work in construction and automatically choose the construction depth exam, but his or her experience might be closer to the geotechnical or water exams. I recommend to all of my students that they consult the NCEES [National Council of Examiners for Engineering and Surveying] website, review the topics within each of the depth exams, and then try to find the best match between exam topics and their experience.

**6 How should one approach the actual exam? Is there an ideal test-taking strategy?**

On the day of the test, you should read every question very carefully. You will find that some questions are very familiar, and you should concentrate on those first. However, you must allow enough time to go back to answer the less-familiar questions. There is a belief that every question should take no more than six minutes because you have eight hours to answer 80 questions, but I don't agree. Some questions can be answered in 30 seconds or one minute, so there will be questions that take more than six minutes. If you are not sure of the solution, then you should eliminate the answers that are most obviously wrong, and you should answer every question because there are no negative points.

I get a very common question of how many books one should take to the exam. My recommendation is to take as many books or reference materials as you feel you will need, but that

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you should know exactly why you are taking each material. You should know what you will find in each book and where you will find it, because the last thing that you want to do is start paging through different books trying to find something and wasting your time. And of course you should wear comfortable clothes and dress in layers. The night before the exam, I would recommend that you stop studying and go do something fun, but that you get plenty of rest.

**7 Are there ways to keep P.E. exam concepts fresh in your mind even if you don't have immediate plans to take the exam?**

I would recommend that you only take a P.E. review course if you are closer to the date of the exam, but other refresher courses are a good option. On an ongoing basis, you can also refer to some of your old textbooks that you used in college and review some of the concepts. If you are wondering what concepts to review, then you should go to the NCEES website and look at the lists of topics for each test. **CE**

*David Hill is the senior writer of Civil Engineering.*

