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My Long Road To Becoming a PE

BY DAVID CLEMENTS, P.E.



I studied civil engineering at the University of Brighton in England, having been born and bred in Brighton. As is standard in the U.K., I graduated with a bachelor's degree in three years.

While I was at university, I met and fell in love with an American, who lived in Florida. Since I was a little more easy-going than her, I made the trek to the U.S. and I found myself, recently graduated, living in the States.

After finding a job as a civil engineer with Black & Veatch, it wasn't long before I started investigating the requirements to become a professional engineer in Florida. After all, it's kind of a necessary step to get anywhere in your career (as is becoming chartered in the U.K.).

As I have a foreign degree, the Florida Board of Professional Engineers requires an education evaluation. Transcripts from my university, and even my A-level (preuniversity) exam boards, were sent to an evaluator. Several weeks later, I got a letter from the board describing all the courses I had taken and how they compare to an ABET-accredited degree, which requires 32 credit hours in higher mathematics and basic sciences, 48 credit hours in engineering science and engineering design, and 16 hours in humanities and social sciences.

As is typical in the U.K., when you go to university, you strictly study the course you enroll for. So as a civil engineer, I studied engineering. Not philosophy. Not English. Not history. And certainly not religious studies.

My evaluation essentially noted that I had more than enough hours in mathematics and engineering, but that I was slightly deficient in basic science (this is the stuff we learned in secondary school, which doesn't count in your accreditation) and deficient in humanities and social sciences. Apparently, history really is an important aspect of becoming an engineer!

After doing some research, I found out that you can take the Fundamentals of Engineering Exam if your only educational deficiency is in the humanities and social sciences area. So, I bit the bullet and took the three basic science classes that I needed to at least make myself eligible to take the FE, and thankfully, I passed first time around.

(I had looked at other states, particularly Texas, to see if they had the same education requirements, and most states did. Texas also requires residency to take the FE.)



My main motive for getting the PE was career advancement—I couldn't get promoted any more without getting my PE....

With my EIT designation and appropriate work experience, I was now hell-bent on getting my PE. I started looking at all different states. Florida will not let you take the PE exam unless you fully meet their educational requirements, including the humanities and social sciences, which I really wanted to avoid.

The Texas PE board, I found, is quite forward-thinking. When evaluating candidates who don't have a U.S. degree, Texas abides by the Washington Accord, which recognizes degrees from accredited engineering programs in each signatory's respective country, one of which is the U.K. That means that any engineering course of study accredited by the U.K.'s Engineering

Council is as good as a U.S. degree in the eyes of the Texas PE board. Result!

Since my course of study was accredited, I was now eligible to sit for the PE exam in Texas, having met all of the other application criteria.

With that, I immediately applied to the board, and did a little dance when the e-mail came in, telling me that my application had been approved.

While I probably didn't study as much as I should have, after a six-week wait, I finally got the good news that I had passed. I was now a professional engineer, licensed in Texas. My main motive for getting the PE was career advancement—I couldn't get promoted any more without getting my PE, and my company didn't care that my PE was from a different state than the state I work in, so I have no particular need to go any further, at least for now.

Others may need to get licensed in their own state so that they can actually sign and seal documents; and I can tell you that as far as Florida goes, they don't care how much work experience you have. If you're a PE in another state, or if you designed the Aswan Dam, you cannot apply for a PE in Florida unless you meet their education requirements. This is something of a joke. I had a colleague who was a chartered engineer in the U.K. for 20 years and was a respected heavy-civil engineer, but none of that mattered—he had to go back to school to pass trigonometry, take the FE, and then take the PE. The system really is broken, and while my experience could have been made worse by having to take humanities and social sciences courses to get licensed in Florida, it still was quite an effort to get licensed at all.

After my long road to becoming a PE, I remain eternally thankful to the Lone Star State.

David Clements, P.E., resides in Florida with his wife and newborn daughter and works as a civil engineer in the water/wastewater industry.