

THE ENGINEER SHORTAGE

An Excellent Career Choice for the Young

Do you have a young son or daughter with strong analytical, mathematical and problem-solving skills? If they choose engineering as a career, they could become one of the most sought-after job candidates in the world.

In the United States, hiring demands for all types of engineering jobs is rising with the highest in manufacturing, driven primarily by the heavy-truck, semiconductor, medical device, pharmaceutical, and aircraft manufacturing sectors.

According to a recent PRI/Nadcap report, the United Kingdom also needs more engineers, specifically in the aerospace sector. In 2009/10, of the 425 United Kingdom graduates who qualified in aerospace engineering, only 145 went on to work in manufacturing. Instead, they choose jobs in wholesale, retail, construction, finance and insurance. In addition, aerospace engineering as a degree was less popular for young people in the United Kingdom than other engineering fields such as civil engineering.

PRI's Vice President and Chief Operating Officer Joe Pinto commented, "This data only serves to highlight the tipping point of the aerospace industry at the moment: the ability to continually recruit qualified individuals to move the industry forward is becoming a critical concern."

Germany is experiencing an engineer shortage, too. "...young Germans have turned away from engineering. Ten years ago, there were twice as many engineering students at universities in Germany than today, cites the German Association of Engineers. According to the German Institute of Economic, there is a current need for 117,000 engineers, scientists, IT experts and technicians, causing grave concerns for German companies hoping to take advantage of the economic recovery," writes Barb Schmitz, a freelance technical writer.

While the global engineer shortage is well-publicized, the reasons are less clear. Many point to grueling and over-priced educations, the enticement of higher paying careers in fields like finance, and companies that are less willing to provide on-the-job training for new graduates. In the U.S., more women now go to college than men yet few go or stay in engineering careers due to unfriendly academic and work environments. But, as with many critical problems, the opportunities for problem solvers are immense. For example, PRI is working with industry to develop a global industry-managed system for qualifying special process aerospace personnel.

A Second Career for the Not-So-Young

If you're an engineer and you love your profession and would like to work beyond a typical retirement age, you have a better chance than most of continuing in a rewarding career. Not only is there an engineer shortage but you're in a field where experience and maturity count. For example, Chemic Engineers in Texas has this posting at their website:

Chemic Employment for Retired Engineers

"At Chemic we are looking for Engineers who are already retired or about to take that next step in life."

So for all of you that have borne the brunt of engineer jokes over the years, you may get the last laugh. ●



Women students are still the minority in engineering schools. Employers need to improve corporate cultures and salaries to attract bright, talented women to the field, cites a recent study by the University of Wisconsin-Milwaukee.

An optimist says the glass is half full.

A pessimist says the glass is half empty.

An engineer says the glass is twice as big as it needs to be.