

To all the moms who wrote me asking: Why, if engineers are in such demand and there's a scary shortage, can't my son or daughter get hired? - let me try to explain.

Like most of life's ordeals, there's no simple answer. But educators and recruiters in the field offer insight, and I might add, hope.

First, some inconvenient facts. Recruiting and hiring for entry-level degree-earning engineers was at record highs in 2007-2008, says Kevin Hewerdine, director of career services and employer relations at Rose-Hulman Institute of Technology.

Then came the worst recession in 30 years. A slump in manufacturing, layoffs and more people with experience willing to accept less pay for fewer jobs.

As **Matt Murray**, a Washington, D.C., Management Recruiters franchise owner put it, "Why hire Junior when you can get Senior for not much more."

So it's not that employers are unwilling to hire new grads. They're just more cautious, says Scott Gearig, managing director of recruiting firm The Mergis Group, in Toledo, Ohio.

"The job market in all engineering disciplines is cyclic and current market appears to be at the bottom of a down' cycle," offers Harvey Palmer, dean of Kate Gleason College of Engineering at Rochester Institute of Technology.

Now for some better news: There will be more hiring this spring, with graduates coming out of the best schools and solid internships getting hired first, says Gearig. He adds that "energy, biomed and medical device industries are the hottest, but traditional industries like consumer goods, automotive and infrastructure will be returning."

Associate professor Ron Hira of Rochester Institute of Technology is betting on electric power and aerospace. "Both industries have been predicting a crisis' as a large share of their work forces retire in the next 10 years," he says.

Even better news: Sectors still actively hiring for entry-level jobs, according to Hewerdine, include energy/power (from utility to alternative energy firms such as wind, solar and battery technology), oil and gas, food/agriculture, government, transportation - where projects are supported by the stimulus package, defense, consulting/contract services, information technology and software development.

Students who majored in electrical engineering seem to have a plethora of opportunities, with oil and gas industries definitely hiring, says Stacy Klein-Gardner, associate dean at Vanderbilt University.

Focus on healthcare, says **Murray** (maybe renewable energy) since 80 million baby boomers will need something on their body replaced or enhanced. And learn SolidWorks, a 3D computer-aided design program used extensively by engineers and designers. Engineering students learn valuable analytical skills that Hira and others say are applicable to problems outside engineering.

With the next wave of jobs more quantitative in nature and requiring complex reasoning skills, engineering graduates need to recognize that these skills are transferable to many nontraditional contexts, says Palmer.

Those close to the field can't say enough about the need for great engineers. "Engineers create something from nothing and that creates value," says Avichal Garg, former product manager at Google and co-founder of PrepMe. "Economies need lots of people creating value, not just extracting more value by making things slightly more efficient."

"There are dozens of other avenues to pursue that are only enhanced with a design/engineer background," says **Murray**. His company looks for engineers with marketing experience and to interface with surgeons and communicate ideas to decision makers. There are plenty jobs, he says, you just need to know where to cast your net. Yes, we're going through a rough hiring patch. Companies are demanding more bang for their buck. But challenging economic times haven't stopped them "from seeking engineers, scientists and mathematicians to develop new products, streamline production processes and answer problems," says Hewerdine. And that shouldn't stop you (or your son or daughter) either.

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