

## WHERE THE JOBS ARE: 2013 OPPORTUNITIES ARE OPENING UP IN MANUFACTURING



**F**our years after the peak of the financial crisis, the engineering profession continues to rebuild itself. The job growth rate might be modest compared to prerecession numbers, but hiring is increasing, salaries are up, and long-term job prospects look good, most notably in the United States but also in the BRIC countries—Brazil, Russia, India, and China.

Not surprisingly, electrical and computer engineers are still generally in demand at high-tech companies, consulting and finance firms, research institutions, and in government. According to the U.S. Bureau of Labor Statistics, the unemployment rate in the United States for electrical engineers and computer engineers at the end of 2012 was 3.3 percent and 2.8 percent, respec-

tively, compared to the general rate of 3.9 percent for people with bachelor's degrees. (However, there was a sharp spike—to 6.5 percent—in unemployment in the first quarter of this year for U.S. electrical engineers, although still lower than the record-setting level of 8.6 percent in 2009.)

The return of some manufacturing to the United States brought with it high-paying jobs. For newly minted computer engineers hired in manufacturing, the average starting salary was US \$74 900 and for aerospace engineers, \$70 700, according to an April 2013 salary survey conducted by the National Association of Colleges and Employers (NACE), based in Bethlehem, Pa.

"Automotive jobs that were lost a few years ago are making a comeback," says Richard Zambacca, president of Randstad Engineer-

ing, a national technical recruiting firm headquartered in Norcross, Ga. "But there are also jobs for engineers in peripheral companies that support the auto industry."

Zambacca also points to high demand for RF engineers in telecommunications. And electrical engineers should consider that the natural gas boom in the United States has created tens of thousands of jobs, while an aging workforce means that the power industry is desperate for fresh talent, he says.

Hot-button areas like big data and online education are creating demand for information technologists. "Computer science grads are highly sought this year," says Beverly Principal, associate director of employment services at Stanford University. "Pretty much all sectors need candidates with strong programming and Web-building skills, whether it's nonprofit, high tech, or education."

Software developers boast significantly higher salaries than those of other computer science and engineering occupations, and most jobs since the recession have been created for software developers: Since 2010, 70 872 jobs have been added, a growth of 7 percent.

Hiring in the BRIC countries is forecast to be significantly higher than in other regions, according to CareerBuilder's global job forecast. Two-thirds of employers in Brazil and India have listed information technology as one of the top three areas for new hires. The survey also found that employers in the United Kingdom, Germany, Russia, and Japan are having difficulty finding skilled talent to fill engineering and information technology positions.

In the U.K., strong automotive, renewable energy, and aerospace sectors keep engineers employed, says Paul Jackson, the chief executive of the nonprofit EngineeringUK. In addition, he says, Europe's rail system is going through dramatic changes and relying on more electrical and electronic control systems, thereby creating tech jobs. Electronics engineers in the U.K. earn more than \$70 600 on average, and electrical engineers earn more than \$69 000.

Between 2010 and 2020, British engineering companies are expected to have 865 100 job openings for those with engineering diplomas and degrees, a per-year average of 87 000. "Now we just need to attract more young people to the field," says Jackson.

—PRACHI PATEL