

ON TRACK

Good job outlook straight ahead for rail grads

AS A BOY, JIM BRIX LOVED TRAINS AND DREAMED OF WORKING FOR A RAILROAD WHEN HE GREW UP. By the time he came to UIUC in 1998, however, he had abandoned that idea. He entered the animal science program, intending to follow in the footsteps of his father, a veterinarian. He earned his bachelor's degree but was uninspired by the idea



of veterinary school. What had really excited him during his undergraduate years was a class in railroad engineering that took him back to his childhood interest. Brix decided to go to business school, and during that time he took another of CEE's railroad engineering classes. Eventually the idea of working on the railroad became more than a childhood dream.

Brix earned his master's degree in business administration this year and was hired by CSX Transportation in Huntington, W. Va. As an assistant manager of materials in the railroad's purchasing and materials department, he manages the production of major components used to repair and maintain diesel locomotives. It's a noisy, greasy, hands-on environment, he says, but he's convinced he's chosen the right career.

"I'm happy, I'm making good money, I have great benefits, and I get to hang around trains all day," he says.

What's more, Brix says, the job out-

look is wide open for graduates because of steady growth in the industry and an aging work force. Most of his co-workers are nearing retirement, he says, and there is a critical shortage of skilled workers to replace them.

"You can't swing your arms around without hitting opportunities," the 23-year-old says.

Brix is among recent graduates who are finding that CEE's Railroad Engineering classes have prepared them well to take advantage of expanding opportunities in the rail industry. In addition, they're learning that their formal railroad engineering education is a rare commodity in the job market; at a time when most universities have long since discontinued their railroad programs, UIUC's is stronger than ever and highly respected in the industry.

Universities began phasing out their railroad programs in the 1960s, when people assumed air transportation and the highway system would replace rail transportation, says Associate Professor Chris Barkan, director of UIUC's Railroad Engineering Program, who came to the department in 1998 from a position with the Association of American Railroads (AAR) with the goal of expanding and revitalizing Illinois' program.

"What was lost on people were the efficiencies of rail," Barkan says. "I have a lifelong belief in the value of rail transportation as an efficient and economical form of transportation, and it's in a growth phase right now—dramatically in terms of passenger and transit and steady in terms of freight transportation, as well. And this at a time in our nation's history when energy efficiency, land use efficiency, environmental efficiency and economic efficiency are all increasingly important. This is a transportation that provides all of these things better than its competitors, so from a long-term sustainability standpoint, rail transportation is vitally important. The ironic part is that this is at a time when the educational commitment to it has been declining for 20 to 30 years."

As national interest in

a high-speed rail corridor grows, the amount of freight being transported by rail increases, and the industry's work force approaches retirement, the job outlook for trained engineers in both railroads and the engineering firms that supply them is better than ever, and the importance of educating the next generation of railroad engineers has become increasingly critical. As the top school for railroad engineering in North America for 100 years, Illinois is well-positioned to meet the challenge.

To many, Illinois has long been synonymous with railroad engineering, and while its program was pruned back over the years, it never disappeared entirely. Noted faculty members like Arthur Newell Talbot, Edward C. Schmidt, Harry Wetenkamp, Herbert F. Moore and William W. Hay—who literally wrote the book on the subject (*Railroad Engineering* was published in 1953 and updated in 1982)—helped build a lasting legacy for the program. Hay, who spent 30 years at Illinois, has been credited with keeping railway engineering alive during a time when many programs were increasingly focusing on the highways. He died in 1998 at age 89.

After Hay's retirement in 1977, Professor Ernest J. Barenberg, now emeritus, took over as director, serving until his retirement in 1996. Widely respected by industry colleagues, Barenberg developed a multi-disciplinary focus for the program and helped it achieve its designation as an Association of American Railroads Affiliated Laboratory.



