

## Why Smith?

### **Andrew J. Guswa, Associate Professor, Picker Engineering Program**

In 2001, I was hired as one of the founding faculty members of Smith College's new Picker Engineering Program ([www.science.smith.edu/departments/Engin](http://www.science.smith.edu/departments/Engin)) – the first at an all-women's college. In starting this new program, we took on the challenge of identifying and meeting the goals for engineering education in the twenty-first century and integrating them with the values and strengths of a liberal arts college. The result is a commitment to impart to our students a deep understanding of the scientific, mathematical, and technical principles that underpin all engineering disciplines with an appreciation for the human condition and the societal and ecological contexts in which engineering designs are made manifest.



The choice to join the faculty in launching the Picker Engineering Program at Smith was a significant departure from the traditional academic path in engineering. At Smith, our focus is on undergraduate education with no graduate program, and my colleagues represent all disciplines of engineering. My responsibilities include teaching two undergraduate courses each semester while maintaining a vigorous research program. Personally, I like this particular blend of teaching and research, though the balance is not always easy. Without graduate students, I seek creative ways to engage undergraduate students in my research and carry out much of the work myself. While producing a smaller stack of research papers than my peers at R-1 universities, I am intellectually satisfied by my ability to match the quality of scholarship produced elsewhere.



While the distinctions between the Picker Engineering Program at Smith and engineering departments at traditional universities present some challenges, the opportunity to create and shape an engineering program to prepare the next generation of engineers, to develop and maintain an active research program that engages undergraduates, and to communicate the excitement, creativity, and promise of engineering to a broad audience continues to be stimulating and rewarding for me.

