

## Carolyn Hogan, BE'07

After graduation:  
completed  
Washington  
University  
School of  
Medicine  
MD/PhD  
Program

My decision to major in BEE was an easy one. It was seemingly preordained: my dad majored in engineering and my mom in biology, so it seems right that both my older brother and I are hybrids, choosing a major that spans these two formerly disparate fields. My decision as to a career was more difficult. Since high school, I knew I was interested in both medicine and research, and I couldn't choose whether I wanted to pursue an MD degree or a PhD. Later, having discovered the existence of MD/PhD programs, which bridge the gap between clinical medicine and basic science much like BEE does with biology and engineering, my problem was solved. Furthermore, BEE was just the right major to prepare me for obtaining an MD and PhD, since it emphasizes understanding the basic concepts behind biological processes, not just memorizing them. Two courses that have definitely helped out in medical school so far have been BEE 2600: *Principles of Bioengineering* and BEE 4540: *Physiological Engineering*. Many topics in these courses have popped up in my medical curriculum, from enzyme kinetics and pharmacokinetics to modeling heart physiology, and it's been extremely helpful to have the engineering background on these topics. For me, some of the more environmentally-focused courses I took are not particularly suited to my future career in medicine and research, but if I had to re-do it, I would still take BEE 4760: *Solid Waste Engineering*, affectionately nicknamed "Garbage", purely for some perspective on what actually happens to all the stuff we throw out, and BEE 4730: *Watershed Engineering* for some fun field trips and some so-bad-they're-good jokes by Prof. Todd Walter. Although I still have many years of studying ahead of me (MD/PhD programs average about 7-8 years), my majoring in BEE has provided an excellent framework for medical education so far, and I suspect it will continue to be valuable in my graduate research, clinical years, and beyond.