

IT School to Watch: University of Pennsylvania

The curriculum is geared toward computer science neophytes.

By Thomas Hoffman



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Like many IT professionals, Nora Apstel doesn't have a background in computer science. After graduating with a bachelor's degree in biology from Emory University in 2004, Apstel, 25, started working for a nonprofit antihunger organization, and her involvement in database management and Web development stoked her interest in IT.

So when Apstel decided to pursue IT graduate studies, the program at the [University of Pennsylvania](#) was a natural fit. Penn's master's in computer and information technology (MCIT) program is specifically designed for people who don't have an undergraduate degree in computer science.

"This program is really geared toward people who have no background in technology," says Apstel, who is slated to graduate from Penn this fall.

"I wanted to be able to use this degree and enter any field I wanted to and not necessarily be tied to my biology degree and have to enter science," she adds.

In the late 1990s, university officials decided "there was too much homogeneity in the computer science program," says David Matuszek, director of Penn's MCIT program. Instead, the school wanted to draw graduate students from a variety of backgrounds, including chemistry, law and history. "We've even had a classical pianist major in our program," he says.

Since students enter the program with varying degrees of computer science knowledge, Penn provides extra help for neophytes to ensure that all students "are on the same page by the end of the first semester," says Matuszek.

Saajan Patel, a 2007 MCIT graduate who's currently pursuing a master's degree in computer science at Penn, says he learned the basic concepts of object-oriented programming and Java in the MCIT program, as well as "the things you're expected to do in a job," such as documenting code. Patel, who graduated from [Georgetown University](#) in 2002 with a double major in mathematics and economics, has worked in Penn's phonetics lab, and he hopes to begin a career in computational linguistics and language processing after he obtains his second master's degree in the fall of 2009. "I had considered pursuing a bioterrorism degree at Georgetown, but I decided that I wanted to pursue [IT] studies that wouldn't box me in career-wise," he says.

At a Glance

- Location: Philadelphia
- www.cis.upenn.edu/grad/mcit
- Department: Computer and Information Technology
- Program: Master of computer and information technology
- Key administrator: David Matuszek, director
- In-state and out-of-state tuition: \$33,356
- Overall grade: A
- Value: A
- Positive career impact: A+
- Relevance to actual career activities: A-
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Ashley Emmons, another Penn MCIT student, says she's been able to apply best practices she's learned at the school, such as systems documentation and writing test methods, while participating in an internship this summer. She is working on a development team at Primavera Systems Inc., a provider of project and portfolio management tools.

"I've been very happy with the program. It's a great learning environment," says Emmons, who obtained a bachelor's degree in mathematics in 2006 from Haverford College in Pennsylvania.

Even though Penn's MCIT program caters to non-computer-science majors, it doesn't pamper them.

"What's very important about this program is how challenging it is," Apsel says. "The program doesn't baby you. [The faculty] expect you to take the initiative to teach yourself. It forces you to stand on your own."

Source: Computerworld/Dice.com survey of 13 University of Pennsylvania graduate-level alumni

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