South Bend Tribune

Teaching technology for the workplace

IUSB offering informatics as a minor field of study

PERSONAL TECHNOLOGY

By ASHLEY McCALL
Tribune Staff Writer

SOUTH BEND -- By the time Joyce Forman enrolled at Indiana University South Bend she had years of work experience.

And that experience translated to first-hand knowledge of the need for technological savvy in the workplace.

"These days, no matter where you are, you're using a computer," the 49-year-old Elkhart woman said.

With that in mind, Forman declared a major in computer science. It wasn't the major she wanted, but at the time, IUSB didn't offer the multidisciplinary computer technology classes she sought.

Now, however, it does. And Forman, a senior, is planning to prolong her college experience in order to pursue a minor in that new program, known as informatics, the study and application of information technology.
Informatics is off to a running start at IUSB, where it debuted as a minor this fall. Plans to expand the program are under way, with a major and undergraduate and post-baccalaureate certifications in the works. Those programs should be available by fall 2004, according to Ruth Schwartz, associate professor of computer science and interim informatics director.

"The impetus for establishing the program is that in the Michiana area we have a lot of businesses which base their work on technology," Schwartz said. "Often, they're faced with the dilemma of hiring someone in the field they want and training them in technology or hiring a computer science person and training them in the field they want."

Indiana University at Bloomington, which has established one of the country's first schools dedicated to informatics, defines the subject as the "art, science and human dimensions of information technology. It is information technology applied to human problems."

That makes it "more general, basic and applied" than fields like computer science or information science.

It is more general, according to the university, because of the attention to a number of subjects, including social and ethical issues, more basic because it addresses foundational questions about technology and more applied because the goal is to educate tech professionals to serve regional employers.

Indeed, a recent state of the work force report by the Northern Indiana Workforce Investment Board shows that local employers demand high-tech skills.

"We've found that many students are interested in tech but they don't want to take the computer science route," Schwartz said. "But nobody is going to graduate from college and go into the work force these days without having to use technology."

Sophomore Jaime Maitland is well aware of that reality. She decided to sample the program by enrolling in Schwartz's introductory class this semester.

After just a couple of months into the course, Maitland, 24, is considering an informatics minor.

"This is something you can take with you no matter what your major is," she said. "I know eventually I'm going to be working, and the technology will be changing. I want to be able to keep up with the changes, and I think you need a basic understanding (of technology) to do that."
Still, Maitland is interested in supplementing her business major and human resources concentration with computer skills, not supplanting it. The five-course minor consists of three lower-level courses and two upper-level or elective informatics classes. The choice of lower-level classes is narrow -- the four options are introduction to informatics, social informatics and two levels of information infrastructure. But the upper-level and elective courses indicate the program's multi-disciplinary approach, featuring topics like multimedia arts and technology, sociology of science, philosophy of technology and cognitive psychology.

The major, according to Schwartz, will be the mirror image of the minor. It will be heavier on core informatics courses and lighter on electives.

The opportunity to study technology in the context of the humanities attracts sophomore Garth Mason, 30, a liberal arts major considering an informatics minor.

"I'm not looking to be the IT (information technology) or computer guy," he said. "But I know that having computer knowledge gives you a leg up."

By the time the major program is launched, IUSB will dedicate two labs to informatics. The classrooms will feature sophisticated equipment and will operate independently of the campus server, Schwartz said.

"Students in informatics have to be able to play with the equipment and have no fear of hitting a key and wiping out a network," she explained. "The students, with rare exceptions, will be able to do anything (in the lab)."

Then, Schwartz said, they will be better-equipped for the computer problems thrown at them when they leave IUSB.

"Now we're an information society," she said. "Knowing about technology, how it's going to serve your needs better and how to use it appropriately is going to make them better members of society."

Staff writer Ashley McCall:

amccall@sbtinfo.com

(574) 235-6467