Two years ago, John Tackes, 41, was an engineering manager in Carol Stream, Illinois. He enjoyed his job but wanted to learn how to do it better. He looked around at master’s degree programs, but he knew that with a full-time job and three kids, ages 8, 6, and 2, it would be difficult. But then Tackes lucked out. He found a program with the classes he wanted to take, designed for the Internet, so he could get a master’s degree from home. Tackes graduated from the two-year Web-based Master of Engineering in Professional Practice program at the University of Wisconsin-Madison in May. He is currently director of engineering at Delta-Power Company in Rockford, Illinois.

“The Internet has been a huge advantage in terms of scheduling,” Tackes says. “But it really was that the course curriculum tied in to my aspirations and what I was doing at work.”

Another recent graduate, Gary Michalek, 38, instructor of quality control at GE Medical Systems in Waukesha, Wisconsin, also chose the program for its course content. But with a wife who worked full time and an infant, the scheduling flexibility was a big advantage. “I was always home at 5 pm,” Michalek says.

“The curriculum gives you tools that really prepare you to move up in management,” Tim Webster, 29, manager of new technology at John Zink in Shelton, Connecticut, says. “A lot of engineers I work with are considering MBAs. I recommend the MEPP program as a much better alternative to an MBA.”

The MEPP degree is the only UW-Madison graduate degree delivered completely over the Internet. The first class of 22 students graduated in May. In order to get accepted to the program, candidates must have at least four years of engineering work experience and a bachelor’s degree in engineering, although exceptions have been made. All the students work full-time as engineers, which is fortunate because about 90 percent get part or all of their tuition paid by their employers. That isn’t a small thing, considering that the program costs $31,400 not including travel to the week-long summer residency, software, or textbooks.

Before classes begin, students receive a study guide that includes a syllabus, a list of textbooks, readings, software, and lesson notes for each week. In addition to weekly assignments, students participate in discussions online on topics that change weekly. Every week or two, students participate in a conference call with their teacher and fellow students and log onto the Internet at the same time, so presentations can be made with the audio component. There are two opportunities for the conference call in the course of the week, so students can pick the time that best suits their schedules that particular week. Students also work together on long-term group projects.

Because each class goes through a fixed curriculum together, students develop close personal bonds. “You’ve been together for two years, almost like a family, depending on each other,” Oscar Lewis, 50, senior technical consultant at Agilent Technologies in Schaumberg, Illinois, says. “Graduation was kind of hard. You get to the end of something like that and it’s really difficult to break away.”

“Working and living with the other students for two years in an electronic environment was special,” Michalek says. “There were tears shed at graduation because we knew we wouldn’t see each other again.”

One particularly interesting aspect of the program is that the first class of students got to know each other over the Internet before they met in person, and that made for some funny surprises. Tackes had talked to fellow student Paul McDonald, who works at a military base and answered questions with “Yes sir” and “No sir.” Although McDonald was very approachable over the Internet, his height lends him a commanding presence and makes him appear intimidating. “Your perceptions of people are very different when you meet them in person,” Tackes says. After a while, though, Tackes and the other students realized that McDonald was the same person they’d been communicating with all along, and they warmed up to him.

Although many students admit having reservations at first about the respectability of a Web-based master’s degree, none of them do anymore. “Asking if online education is quality education is like asking if campus education is quality education. You have to look at the university, program, and faculty, and talk to the students,” Wayne Pferdehirt, director of the MEPP program, says. Several students feel confident that the University of Wisconsin’s reputation will lend credibility to their degrees. And many of them couldn’t have completed the degree if it weren’t a Web-based program that allowed for a flexible study schedule. Some students, such as Tackes, weren’t confident in their Internet abilities before they started the program, and saw that aspect as a separate learning opportunity. “I think people have perceptions that students who take Internet classes are Internet whizzes, and I think it was just the opposite,” Tackes says. “I had never really owned a personal computer until six months before the program began. I think this program gave me a lot of confidence in using the Internet as a learning tool.”

The hardest part of the program is the discipline and commitment needed to study for 20 hours a week in addition to a full-time job and family commitments. “You’ve got to turn the hobbies off for two years,” Tackes says. “But the education becomes a new hobby.”

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