

Professional Education Programs

Academic year 2005 was the third year of operation of the School of Engineering's Professional Education Programs office (PEP). PEP was established in 2002 under the leadership of the School of Engineering as the umbrella organization for professional education activities at MIT. All PEP programs are delivered by MIT faculty and are designed to promote technical excellence and innovation through ongoing educational engagement with communities of practice.

Offerings include on-campus professional certificate programs, digitally delivered educational briefings, and free streaming videos over the internet. Programs address the needs of science and engineering professionals to keep up to date with latest advances and to remain competitive.

Current Goals, Objectives, Priorities

PEP seeks to establish a leadership position for MIT and the School of Engineering in the area of lifelong learning in engineering and technical fields. It aims to create broad impact through the delivery of highest-quality educational experiences for professionals, utilizing both traditional and emerging delivery methods. Principles that guide PEP include the following:

- Operate on an enterprise model
- Build a small, cost-effective, results-oriented organization
- Respect faculty and other units' ownership and control
- Deliver broad impact and benefits to MIT

During its third year, PEP focused on increasing enrollments in programs, improved service to participants and faculty, and research on mid-career professional education needs. Work included a major initiative to develop a fully articulated web presence for PEP, as well as a relocation to newly renovated offices in Building 35.

Accomplishments and Program Developments

During FY2005, PEP reached the following key milestones:

- Granted IACET authorized provider status, enabling PEP through its Professional Institute to offer continuing education units (CEUs) for classroom and distance courses
- Planned for a relocation of all programs and staff into renovated space in Building 35, scheduled for August 2005
- Developed a completely new website (<http://web.mit.edu/mitpep/>), including a PEP umbrella site and updates and enhancements to the sites for all programs, scheduled to go live in fall 2005
- Increased marketing activities, including eight newly designed subject-area postcards for Professional Institute courses and an increase in online marketing activities.

- Published the first 10 Knowledge Updates, with topics in bioengineering and the life sciences
- Conducted research, including focus groups and surveys, on the professional education needs of mid-career science and engineering professionals, with a special emphasis on the needs of women
- Invited keynote speaker at APEC Conference on Lifelong Learning in Taiwan; presented on PEP activities at UNICON in Los Angeles.

Individual PEP program milestones and developments included the following:

—*Advanced Study Program (ASP)* (<http://web.mit.edu/advancedstudy/>). This program continued to offer professionals the opportunity to attend MIT for a semester or year and pursue a customized academic program of MIT courses. ASP experienced a 15 percent increase in enrollment, with 18 full-time, 5 half-time, and 28 part-time company-sponsored fellows attending MIT through this program. Inquiries are up and enrollments are expected to increase again in FY2006. This year marks the 48th year since the inception of the Advanced Study Program.

—*Professional Institute (PI)* (<http://professional.mit.edu/>). All participating faculty members were surveyed and improved services implemented as a result. Five faculty members were awarded curriculum development grants for new courses. Twenty-six weeklong summer session professional programs were offered to 422 individuals from the United States and around the world between June and August 2004. This marks a stabilization of enrollments, with a higher average enrollment per program. Eighteen programs were canceled. It is predicted that enrollments will increase in summer 2005. This year marks the 55th year of operation for the Professional Institute (formerly the Summer Session).

—*MIT World (MITW)* (<http://mitworld.mit.edu/>). This three-year-old free and open video-streaming website of significant public events added 51 new videos from more than 30 different MIT sources. In total, it hosts 247 videos of major events hosted by more than 50 departments, laboratories, centers, programs, and groups, with new additions monthly. FY2005 marked the first year that MIT World was directly linked on the MIT home page. Use of videos increased 346 percent, an average of 29,166 videos streamed each month. Web traffic increased 203 percent, with an average of 71,750 page hits per month. Site enhancements were made by IS's Web Communication Services. Two AMPS units—MIT Video Productions (MVP) and Digital Technologies and Streaming Operations (DTSO)—continued to provide videotaping and digitizing services. Streaming and hosting of MIT World is now provided by Akamai.

—*Knowledge Updates (KU)* (<http://knowledgeupdate.mit.edu/>). This year marked the second year of a new program to offer Knowledge Updates, internet-based learning modules designed for professionals. Twenty modules were developed, 10 of which were made available for purchase. Knowledge Updates were featured by both ILP and the Alumni Association as part of outreach activities.

—*Custom Programs (CP)*. Two custom programs were offered: a second year of a custom program in IT excellence for Novartis and a program on internal combustion engines for NREL in Colorado. PEP also continued to offer the Projects Academy, a multiyear executive education program for BP offered jointly with the Sloan School of Management. In December, the Projects Academy received a major award from BP for excellence in partnership.

Funding

The School of Engineering provided a second year of support for the three-year effort to launch a full Knowledge Updates program. MIT World received operational support in FY2005 from the five schools, the Office of the Vice President for Research, and the Office of the Provost. Funding for research on midcareer professionals was provided by the Cambridge–MIT Institute (CMI).

Future Plans

Plans for FY2006 include the following:

- *Engage in development of a midcareer program focused on the needs of women in engineering.* Address a gap in professional education offerings through the development of a new program designed to support individuals seeking to reenter the science and engineering workforce.
- *Develop new opportunities for custom educational programs.* Building on the successful Projects Academy experience, develop new custom programs that create opportunities for knowledge sharing between industry and academia and cross-departmental faculty collaboration.
- *Engage in ongoing development of marketing activities and outreach.* Continue to build organizational abilities that increase MIT's exposure and presence in the area of professional education and enhance enrollments in PEP programs.
- *Evaluate extending offerings for enhanced impact in informal science education.* Look at strategic enhancements that make some programs, including MIT World, of greater value and use in informal science education.

Personnel Information

New appointments this year included Tavish Baker as marketing associate for Knowledge Updates and Heather Vigeveno as administrative assistant in the Professional Institute. David Game left the Institute to pursue an opportunity in higher education publishing.

Jennifer Stine
Executive Director

More information about the Professional Education Programs can be found online at <http://web.mit.edu/mitpep/>.