MIT Professional Education

Academic year 2016 marked the 14th year of operation for the office of MIT Professional Education (MIT PE) under the School of Engineering umbrella. All MIT PE programs (Short Programs, Advanced Study Program, Digital Programs, Custom Programs, and International Programs) are taught by MIT faculty drawn from the School of Engineering or one of the other four schools at MIT. These non-degree certificate programs are aimed at science and technology professionals globally; they draw on research knowledge generated at MIT and deliver practical learning benefits to industry professionals in keeping with MIT's motto, "mens et manus," and its core mission "to advance knowledge in science, technology and other areas of scholarship that will best serve the nation and the world in the 21st century."

Goals, Objectives, and Priorities

With the successful introduction of online programs to its portfolio in 2014, MIT PE's global reach has risen dramatically to several thousand students per year. Digital Programs address most high-demand topics in industry such as "Big Data" and "Internet of Things," and this area will continue to be a high-growth opportunity for MIT PE in the coming years. That said, the demand for traditional in-classroom programs, delivered on campus and in international locations, remains strong as well, giving rise to the overall need to bring in more MIT faculty to teach professional programs. Expanding global outreach and delivering programs in a growing number of international locations, particularly where MIT already has a presence or relationships, will continue to be a priority for MIT PE.

Overall principles that guide MIT PE activities include:

- Meeting the learning needs of industry professionals globally by leveraging the most current MIT expertise
- Extending knowledge from MIT research and discoveries to MIT alumni and other professionals, particularly knowledge related to institute-wide initiatives such as innovation, the environment, health, and energy
- Maintaining a relatively small and nimble organization that is oriented toward customer needs and generates high net revenue

Accomplishments and Program Developments

During academic year 2016, MIT PE focused on expanding the Digital and Short Programs portfolios, added a new certificate program in innovation, created programs in Asia and the Middle East, and delivered custom-designed programs on innovation to government and industry professionals from South Africa and to technical managers at a major a global energy services company.

Digital Programs

MIT PE offered an additional four sessions of the popular online course "Big Data" (developed and taught by researchers in the Computer Science and Artificial Intelligence Lab), totaling eight deliveries since the course's inception in early 2014 and achieving an impressive milestone of 10,000 paid enrollments for a single course. Following the success of "Big Data," MIT PE launched two additional digital courses, one addressing cybersecurity and the other focusing on the internet of things, bringing in an additional 3,700 enrollees to the Digital Programs portfolio and expanding the number of countries represented to more than 125.

Short Programs

In the summer of 2015, Short Programs, which offers two- to five-day courses on campus, marked 66 years of operation at MIT with an enrollment record of 1,500 professionals from over 70 countries. This includes professionals attending courses offered by the Center for Real Estate (CRE), following the integration of CRE programs into MIT PE's Short Programs portfolio. The integration was a major success, as the enrollments for CRE programs grew substantially under the MIT PE banner. For 2016, a certificate program titled "Innovation and Technology" was unveiled, bringing two certificate programs, one on real estate and the other on innovation, into the Short Programs portfolio.

International Engagement

MIT PE penetrated the greater China market this year, delivering its first course in Taiwan. The two-day course, "Beyond Smart Cities," was taught by Professor Kent Larson from the MIT Media Lab, following a high-profile announcement of the "autonomous tricycle" project to be conducted by the MIT Media Lab in conjunction with the Taiwanese government. Course participants, who came from both the government and private sectors in Taiwan, engaged in urban planning and development.

Professor Sanjay Sarma's popular course "Radical Innovation" was delivered for the third time in Dubai, this time to top-level government bureaucrats. The course, which was sponsored by the Prime Minister's office of the United Arab Emirates (UAE), was part of an agreement between MIT PE and the Innovation in Government Centre of UAE, specifying that MIT deliver a series of programs on innovation.

Advanced Study Program

In its 52nd year, the Advanced Study Program (ASP) continued to integrate into its ranks high-performing professionals and students with baccalaureate degrees from around the world. Particularly noteworthy this year was the integration of students from the Skoltech Institute of Science and Technology, with whom MIT has an institutional relationship. Total enrollment in the ASP program in fall 2015 was 128, a 42% increase from the previous year.

Custom Programs

A three-term custom program developed for senior engineering managers at National Oilwell Varco (NOV), a \$20 billion oil and gas production services company based in Texas, ended in March 2016 following the completion of MIT faculty–supervised incompany projects. The graduation ceremony was conducted in Houston with several MIT faculty and NOV company senior executives present.

Custom Programs completed its tenth year of reviewing curriculum and developing examinations for Accenture Technology Academy's certification programs in information technology, offered to Accenture's employees. In addition, MIT PE delivered two training modules on analytics and innovation to the Business Process Outsourcing (BPO) division of Accenture to enable BPO employees and clients to deliver enhanced business results.

Funding

The MIT PE program continues to be fully self-supporting and contributes significant net revenue both to the School of Engineering and to the Provost's Office. No external funding was needed or received this year.

Future Plans

MIT PE plans to expand its online offerings in high-demand technology topics with the addition of blended learning programs (i.e. online instruction combined with hands-on, in-classroom learning). Professional Education will also expand its international offerings, particularly in Asia, and will continue to work with the Industrial Liaison Program (ILP) as its education partner with the aim of promoting educational programs to ILP's member companies. Finally, new group certificate programs, based on the existing programs in real estate and innovation, will be explored for future implementation.

Personnel

There were several staff appointments at MIT PE this year. Marsha Gordon was recruited to fill the position of director of Short Programs, vacated by retiring Anna Mahr. Patricia Casey joined as associate director of finance, administration, and human resources. Lily Fu filled a new position, that of associate director for international marketing. Ben Reed was promoted to program administrator for the Advanced Study Program and Sarah Smith and Myriam Joseph joined the marketing group as marketing associates.

Bhaskar Pant Executive Director