

MIT–Singapore University of Technology and Design Collaboration

The fourth cohort of students at the Singapore University of Technology and Design (SUTD) began their 3.5-year journey on May 11, 2015. Forty percent of the 386 students were female, a percentage that has held steady since SUTD's doors opened in 2012. While MIT and SUTD are heartened by the increase in student numbers in the past two years (the 252 who matriculated in May 2013 was the low), both universities continue to see student recruitment as a top priority. To assist, MIT agreed to develop a winter program offered to SUTD students over Independent Activities Period (IAP). This program kicked off in January 2015. For three weeks, 40 students from SUTD joined MIT students in taking approximately 25 classes funded by the collaboration. This program was a win-win for both institutions, since SUTD students were invited to the campus for three weeks to participate in IAP courses and experience the unique MIT environment, and MIT faculty, postdocs, and other personnel received funding to develop new IAP classes or significantly improve existing ones. An important report from the Ministry of Education is due out in early 2016 that will detail the employment statistics for the first cohort set to graduate at the end of August 2015. It is expected that positive numbers in this report will significantly impact recruitment for the 2016 cohort.

Faculty and lecturers at SUTD now number around 130, among whom 87 are either tenured or on a tenure track. Recruiting world-class faculty is a top priority of the university, and recruiting continues on an ongoing basis.

All 87 of the contracted courses for development at MIT have been completed and transferred to SUTD. Exceeding the contract, MIT has plans to develop an additional eight courses, for a total of 95.

To date, approximately 40 MIT faculty have participated in short-term (two- or four-week) residencies in support of SUTD classes, and 13 faculty have participated or are currently participating in the 4.5-month pillar head residency set out in their contract. MIT is on track to complete its co-teaching obligation by the end of summer 2016, when MIT faculty will have taken part in 40 two-week and 40 four-week residencies at SUTD assisting with the teaching of classes as well as mentoring faculty and students.

Four SUTD faculty participated in the MIT-SUTD Faculty Development Program. Faculty in this program are in residence at the MIT campus for six to nine months. Originally, it was envisioned that 70 faculty would participate in the program over the seven-year contract; however, it is unlikely that SUTD will be able to send the full complement of faculty to MIT by the end of the contract because of resource issues. To date, 31 faculty have participated in the program.

Each June, the entire senior leadership team of SUTD, including the president, the provost, three associate provosts, and the four pillar heads along with the Humanities, Arts, and Social Sciences (HASS) lead, comes to MIT to participate in a two-day curriculum review. This event provides a forum for MIT and SUTD to focus on curriculum, educational innovation, and pedagogy.

In 2015, for a fourth summer, the MIT International Science and Technology Initiatives (MISTI) Singapore program will send 23 MIT students to SUTD to engage in collaboration and leadership training. This summer will also mark the arrival to MIT of 30 students from SUTD for the third offering of a 10-week Global Leadership Program (GLP). These students, chosen from approximately 200 applicants, participate in a wide variety of activities, including a summer-long electric boat design challenge, art and communication courses, a wilderness experience, and visits to local industry. SUTD student evaluations of this program remain overwhelmingly positive. Both the GLP and the MISTI program will be offered again in 2016.

Current budgets for research at MIT in the MIT-SUTD collaboration run about \$2 million per year, for a total of \$20 million over the 10-year research component contract. In February 2012, the SUTD-MIT International Design Centre (IDC) was opened at MIT. The IDC serves as a hub for the study of technologically intensive design. Nearly 60 faculty researchers and students at MIT are working on IDC-associated projects. To date, more than 1,000 conference/journal publications and presentations have resulted from the combined efforts of the IDC at both MIT and SUTD. Professor John Fernandez (architecture) and Professor of the Practice Chris Magee (Engineering and Systems Division) are co-directors of the IDC. They along with Professor Kris Wood, SUTD co-director, conducted a research summit in January 2015 in Singapore to encourage more collaborative research between the two universities. A new state-of-the-art IDC opened in December 2014 in Singapore at the Changi district campus. An inauguration ceremony was held at the end of May.

The IDC co-directors and the collaboration director, John Brisson, used the past year to plan for the long-term sustainability of the IDC after the end of the collaboration research funding in 2020. Two important hires were made to address the IDC's future: Deb Payson, director of strategy and outreach (February 2015), and Dr. Lennon Rodgers, research scientist (June 2015). It is hoped that both hires will result in a more outward-facing IDC. Future plans for the IDC's sustainability include developing an industry partnership and targeting more outside research funding as a means to attract faculty and students.

In 2014, MIT and SUTD began a discussion to extend the education component of the contract, which is set to end June 30, 2017. Efforts to reach a satisfactory agreement will continue in the coming months. The research component of the contract ends in 2020.

Martin Schmidt, Philip Khoury, and Ian Waitz serve on the governing board. Thomas Magnanti is on leave from MIT to serve as SUTD's founding president. John Brisson is the collaboration director at MIT.

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