

Dr. Faisal Al Marzooqi: Masdar Institute PhD Pioneer

Two things drew Faisal Al Marzooqi to Masdar Institute in 2013—the young technology university's new interdisciplinary PhD program and its multifaceted relationship with MIT.

Two years later, in May 2015, Al Marzooqi made history, becoming one of the first two students, along with Aamena Alshamsi, to earn a doctorate from Masdar Institute, the now seven-year-old graduate-level research university in Abu Dhabi, United Arab Emirates.

Al Marzooqi, who is originally from Dubai, had high praise for Masdar Institute's highly flexible PhD in Interdisciplinary Engineering program. "It's unique not just to the UAE, but globally," says Marzooqi, who received a master's degree in chemical engineering from Imperial College London before coming to Masdar Institute. "I was not limited to just one department. When I created my research advisory committee, I was able to get professors from every department that would help me with my research," including chemical engineering, microsystems engineering, and materials science, he says. "This mix was really valuable."

Al Marzooqi's research focused on one of the region's most critical issues: meeting demand for more fresh water than is naturally available in its desert climate. (In fact, the UAE's leaders have said publicly that water has become more important to the nation's future than oil, and they included water as one of the nation's top innovation priorities for the coming years.) For his thesis, Al Marzooqi used nanotechnology to produce a device that can efficiently and sustainably desalinate sea water—a product for which he's seeking a U.S. patent.

Equally important in his decision to attend the new, but fast-growing, university: Its ongoing MIT partnership. MIT helped the UAE launch Masdar Institute in 2007; the two institutions have collaborated on both [research projects](#) and [academic programs](#) ever since. "The exposure to MIT was very important to me," says Al Marzooqi, who worked with several MIT professors, including advisor John H. Lienhard V, Abdul Latif Jameel Professor and director of the Abdul Latif Jameel World Water and Food Security Lab at MIT.

Masdar Institute expressed pride in its first successful PhD candidate. In a published commentary, Youssef Shatilla, Masdar Institute's dean of academic programs, called Al Marzooqi "an ambitious young Emirati who intends to use his doctorate to help his country reach the next level of its prosperity." Al Marzooqi says he hopes to achieve that goal by embarking on an academic career, teaching and conducting research at Masdar Institute or another university.