## The iTunes of Higher Education

The rapid rise of online "certificates" and how they threaten traditional university degree programs.

By Gabriel Kahn



As cheap, single-course certifications edge in on expensive, four-year degrees, ceremonies like this might become less and less common.

It's nearly impossible to get into MIT, very expensive to enroll there, and exceedingly hard to graduate, which are some of the reasons why MIT degrees are so coveted. But very soon you'll be able to take a series of online courses in computer science and earn an official certificate from one of the most prestigious engineering schools in the world, all for only a few hundred dollars—and without having to meet any admissions requirements. MIT will be launching these XSeries Certificate programs in the next few months, including one in "supply chain management."

MIT, in a press release, says the new programs are part of its effort to "reimagine the building blocks" of education as universities begin to deliver more of their content digitally.

Yet the program is also part of something much larger: the beginning of the unbundling of the American university. Much in the way that 12-song albums gave way to 99-cent iTunes purchases, universities are now under pressure to offer more ways to slice off smaller bits of education.

Degrees, the currency of higher education, have traditionally been traded in large denominations: four-year bachelor's degree, two-year master's degree, five-year (or much more) Ph.D. But a variety of forces, from skyrocketing tuition to the proliferation of online classes, are now compelling universities to rethink that approach. High fees are keeping many would-be students from enrolling in conventional degree programs, while universities are under pressure to unlock

Universities are also wary of diluting the value of their traditional degrees, so they are creating smaller coinage: sequences, certificates, and the like. These aren't recognized as formal degrees. Yet, at many institutions, they have a tantalizing appeal: a way to share a little bit of a university's prestige with the masses while bringing in some extra cash. Most universities have already put a chunk of their courses online, so crafting a new certificate program allows them to simply repackage that same content into a smaller bundle, then sell the new format. In MIT's case, it is looking to find an economically sustainable way to deliver its massive open online courses, or MOOCs, which so far have been offered for

Columbia University has offered certificates for years through its School of Continuing Education. Recently it has begun to roll out more of them in areas such as human rights and United Nations studies. Traditionally its certificates were granted to students who attended classes on campus, but the university is now taking some certificate programs it already had, such as business and bioethics, and putting them online in order to reach more students. This fall the engineering school launched a new certification program in data science. Tuition for the four required classes—taken in person, not online — runs about \$20,000. Compare that with about 10 classes and roughly \$50,000 tuition for a typical Columbia engineering master's degree.

Anthony Carnevale, the director of Georgetown University's Center on Education and the Workforce, says much of the growth in these smaller programs comes from schools trying to wring more revenues out of courses they already offer. "They're thinking, 'We've got this content, so let's run the flag up and see if anyone salutes."

Many of these certificate programs have been around for decades and most are linked to moving up the ladder in specific trades, such as construction, real estate, or nursing. But in the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, their number and breadth and the past few years, the past few years and the past few years, the past few years and the past few years are past few years and the past few years and the past few years are past few years and the past few years and the past few years are past few years and the past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and the past few years are past few years and years are past few years are past few years and years are past few years are past few years and years are past few years are past few years and years are past fhave swelled. Drexel University in Philadelphia, which has well-established certificate programs in areas like advanced teaching and engineering management, recently added one in creativity and innovation. The prestigious McCombs School of Business at the University of Texas is considering adding an online business certificate that could be taken by

undergraduates attending other schools, according to a university official.

carrievale co-authored a report last year that found that the number of certificates awarded surpassed the million mark in 2010, a more than threefold increase from 1994. Certificates are now more common than associate or master's degrees.

Few schools have marketed certificates as aggressively as the University of California-Los Angeles. UCLA's Extension division already had been offering them, but two years ago the university partnered with a for-profit company to ramp up enrollment. The company, **Empowered**, began migrating UCLA's certificate programs onto the iPad, where they are delivered through a specially built app.

The marketing is aggressive. Empowered runs television ads, and anyone who visits the website is invited to a live chat. Certificates range from global sustainability to, oddly enough, college admissions counseling. They take about a year to complete and cost between \$6,000 and \$9,800.

Empowered is backed by several venture capital firms, and its chief executive, Steven Poizner, is a tech entrepreneur who lost the 2010 Republican nomination for California governor to Meg Whitman. The idea behind the company was to tap into people already in the workforce who needed fresh skills to jump-start their careers. But the company is also betting that universities couldn't resist an opportunity to resell online classes they already had on their books.

"Universities have all kinds of intellectual property that can be packaged and delivered by exploiting technology," Poizner says.

But it's not clear that certificates are going to be an economic boon for higher education. Other industries that have been forced into a process of unbundling have met with disaster. The music industry was crippled when consumers went from buying \$15 CDs to digital downloads of single songs, or, worse still, trading them online for free. Newspapers have been unable to arrest a slide in revenue that began when consumers began trading daily subscriptions for à la carte articles on the Web.

Higher education is facing the same threats. In some cases the institutions themselves have accelerated the process. Big universities have pushed out online versions of some of their most popular courses on platforms such as **Coursera**, **Udacity**, and **edX**, and offered them for free in a move eerily reminiscent of how newspapers rushed to make their content available digitally. These universities didn't think to charge for the courses because their stated goal was to increase access to education.

Earlier this year, however, Coursera began charging up to \$100 for providing an official **certificate** that verifies Advertisement someone completed one of its courses.

EdX, which also counts Harvard University, Rice University, and others among its consortium, is not far behind. It, too, is now considering charging for official recognition of completing a single course. "We've been giving these things away for free, but we've always talked about putting a price on it," says Anant Agarwal, edX's president. "Every survey tells us that people are willing to pay."

Platforms like edX are caught between wanting to make their courses accessible to all and the need to generate revenue. Agarwal, who is also a professor at MIT, says edX could charge somewhere between \$50 to \$100 for those who want an official badge that certifies they've completed a course. "In some countries \$50 might not be such a large sum; in other places it's a king's ransom," he says. But edX has the advantage of scale: Often more than 100,000 people will enroll in a class, though only a fraction complete it. Still, a \$100 price tag for an official badge could produce significant revenues. Coursera says it has brought in more than \$1 million from its course certificates so far.

These moves create an even smaller unit of academic currency: a single course. It's unclear what kind of value employers might place on that, though Agarwal notes that many people have begun to list edX classes on their resumes and LinkedIn profiles. "It is definitely serving as a currency already," he says.

What's also unclear is how all the new and smaller academic credentials might ultimately impact the value of traditional degrees. A certificate in business doesn't carry the same weight as a two-year MBA. But does a \$20,000 business certificate make it more difficult for schools to charge as much as \$130,000 for an MBA?

"The dilemma is how not to eat your own lunch," says Anshuman Razdan, a computer science professor at Arizona State University. "All the institutions are struggling with this. Like with airlines, once one starts cutting prices, the rest are forced to do the same."

Razdan is betting that as edX and other online platforms offer formal recognition for completing their classes, they will need better systems to prove that students aren't cheating their way through. He started a company called **VProctor** that allows for remote proctoring of tests taken online. Indeed, MIT won't start charging for its XSeries until it can work the kinks out of its online verification software.

What was once a straightforward marketplace of well-recognized degrees is now giving way to a more intricate menu of qualifications. "Schools are toying with all sorts of different things, from badges, to laddering certificates that eventually add up to a degree," says Rovy Branon, an associate dean at the University of Wisconsin-Extension. "All of that's on the table. All of it challenges our current business models."