

Special Report **Business Education: Financial Training****Blockchain****Business schools race to offer lessons in blockchain and bitcoin**

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Demand: bitcoin volatility has helped drive interest in cryptocurrency courses © Bloomberg
Hannah Murphy JUNE 17, 2018

Business schools and universities are rushing to launch courses on cryptocurrencies and [blockchain](#), as demand for greater understanding of the technologies grows after the crypto boom. But what exactly should be taught and who should teach it? As academics take stock, debate is growing over where the future of cryptocurrency education lies.

Demand from professionals for teaching on cryptocurrencies and the blockchain technology that underpins them had increased steadily. More recently, however, there has been an explosion of interest amid turbulent changes in the price of bitcoin, the most popular cryptocurrency, and the hype around it.

Business schools and universities are racing to train students in a specialism once seen as inhabiting the nerdy fringes of finance and technology but which has been propelled into the mainstream. It is not just banks, central banks and governments assessing how to use the technologies; other sectors, from logistics to mining, want to understand what it means for them.

“This is moving much faster than people expected. Business schools will have no choice but to update curriculums,” says David Yermack, professor of finance and business transformation at the New York University Stern School of Business. He started teaching one of the first courses in cryptocurrencies and blockchain within the university’s MBA programme in 2014. The most recent

course had 230 students, more than double the number the previous year. “We moved to the biggest auditorium in the school so we would not have any limits. The growth is exponential,” he says.

Bitcoin’s value doubled in the space of a month to peak at about \$20,000 in December, before retreating to about \$6,500 last week. The rise spawned excitement about other cryptocurrencies, as well the proliferation of [initial coin offerings](#) (ICOs), a crowdfunding mechanism where entrepreneurs issue their own digital tokens or coins in exchange for services or software.

Blockchain, the shared ledger technology that powers cryptocurrencies such as bitcoin and many ICOs, is also an emerging field. Blockchains allow encrypted data on anything from financial transactions to medical records to be shared instantly in a database that can be public and immutable, or accessible only to permitted parties.

“The increase in value in the cryptos played a large part in the increase in public interest,” says Jens Martin, programme director at the University of Amsterdam Business School, which offers a blockchain and cryptocurrencies course on its master in international finance. “However, we feel that the finance industry is very interested in the technology itself and the possibilities it offers,” he says, citing smart contracts and ICOs. “We see many applications not only from people with a banking background, but a more diverse group who are interested in applying these concepts to finance.”

Robert Wardrop, director and co-founder of the Cambridge Centre for Alternative Finance, part of the university’s Judge Business School, says that demand for knowledge and skills relating to cryptocurrencies is also coming from companies such as Amazon, Google and Microsoft. “The core focus of interest is growing from non-financial firms,” he says. “[These insights] are essential to related projects that these businesses are working on.”

He highlights the growth of “tokenised assets”, which are traded via digital tokens on online exchanges. Here, instead of receiving physical assets, investors receive a digital receipt that represents their holdings.

“Understanding issues like asset tokenisation is quite fundamental . . . in terms of your business model but also to your capital raising,” he says.

Carsten Sorensen, a professor of information systems and innovation at the London School of Economics, is the convener of a short online course, cryptocurrency investment and disruption, coming this summer that costs £1,800. However, he questions if cryptocurrencies are mature enough to warrant an entire specialised masters in finance.

“It is still quite difficult to analyse this market in terms of all the advanced mathematics and statistics you can use in finance,” he says. “The whole idea of bitcoin was [about] creating

fundamentals that were decoupled from the rest of the world.”

The varied approaches highlight the plural nature of cryptocurrencies and their applications, which are in their infancy. Different university departments are waking up to the demand, in what could lead to tussles, some predict.

The topics were all but unheard of . . . it is more difficult than teaching a course from a textbook

David Yermack

Garrick Hileman, a research associate and lecturer at the University of Cambridge, says accounting, economics, business, finance and law departments are increasingly weighing up the space.

“It wouldn’t surprise me to see some turf wars break out over who owns the blockchain curriculum at business schools,” says Mr Hileman, who taught an elective course that covered cryptocurrencies in the university’s master of finance course for two years.

“It’s interdisciplinary,” says Prof Yermack. “The computer science and finance industries have merged and this needs to happen in universities too. But universities are bureaucratic — it will be political and take time.” Universities are also encountering challenges unique to crypto and blockchain. Creating a popular elective course requires not only good teaching but also wooing sought-after names, in what is still a niche field, as guest speakers.

Academics describe the difficulties of keeping pace with a fast-evolving field. In his latest course, Prof Yermack had to adjust his curriculum to add lessons on the creation of new versions of cryptocurrency known as hard forks, as well as on ICOs. “These topics were all but unheard of a year ago,” he says. “This is much more difficult than teaching a course out of a textbook.”

Campbell Harvey, at Fuqua School of Business at Duke University in North Carolina, who teaches a course on innovation and cryptoventures to MBA students, describes a similar experience.

“You could be walking into the classroom and something in your course becomes redundant,” he says. Dealing with inquiries about the field from students and non-students is time-consuming and adds to “the hidden cost of teaching an innovative course”, he says.

Still, Prof Harvey has faith that engaging with the cryptocurrencies is vital. “Schools should be preparing students for the future not the past. Unfortunately most . . . don’t have these courses that are focused on the future.”

This article has been amended to correct the spelling of Carsten Sorensen’s name

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