

*Getting down to business  
with*  
**BITCOIN**



# Price College offers a new course to prepare its students for the evolving world of FinTech and cryptocurrency.

By *SUSAN GROSSMAN*  
PHOTOS BY *LYNETTE LOBBAN*

**N**ot that long ago people wrote checks, made purchases with cash and went to a bank to manage their accounts. Now, we click a button to make an online purchase, use peer-to-peer smartphone technology to reimburse friends for dinner, and use an app to make a bank deposit.

While we conduct these seemingly simple transactions without much thought, behind these functions is a host of complex algorithms and broadband networks. Financial technology, or FinTech, is everywhere and it has transformed the way we live our lives and do business. Broadly defined, FinTech can be any innovation used in financial transactions.

The advent of mobile internet and smartphones has propelled FinTech into new realms, including the classroom. To prepare its students for this continuously growing and evolving world, the Price College of Business at the University of Oklahoma is offering a first-of-its-kind class this spring. Housed in the Department of Finance, the senior-level course will provide an overview of the many components of FinTech, including applications of cryptocurrency, big data, artificial intelligence (AI) technology, crowdfunding, investing and blockchain.

Finance doctoral candidate Peter Mueller developed and teaches the course. He believes in the continuing proliferation and acceptance of FinTech and cryptocurrency so much that he is staking his academic career on it. He wants his students to learn how technology is being applied and how it is changing the world of finance.

“We will take a broad, surface-level approach to FinTech and how technology is impacting and disrupting traditional finance and institutions,” Mueller says of the class. “Students

will come away with a better understanding of how technologies are going to continue to change the way we do business.”

Chitru Fernando, Rainbolt Chair and Professor of Finance at Price College, says students must be prepared for this new, rapidly developing reality. He expects the course taught by Mueller to do just that.

“Financial technology is proliferating at an unprecedented pace, disrupting the traditional delivery of financial services in many areas,” he says. “I wanted to offer a FinTech course because our students need to gain a good understanding of these changes so they can be at the cutting edge of finance when they enter the workforce.”

Pre-med major Caleb Cochell is one of those students. He wants to learn more about what he thinks will be the future of financial management and investment.

“My understanding of FinTech and cryptocurrency is pretty basic, and I am taking this new class to develop a higher level of thinking about it,” he says. “I have a long-term investment in cryptocurrency and it has doubled since last February. It will be interesting to learn about how this technology works, along with understanding blockchain.”

While FinTech is the umbrella term for a host of innovations and applications to conducting business, a headline-grabbing component of the sector is the development and use of cryptocurrencies such as Bitcoin and Ethereum. Crypto is an old technology, originating in the 1950s as cryptography, and refers to a secure validator. Messages were encrypted with characters rather than letters, which then needed to be decoded for secure communications. While this technology is not new, its application with cryptocurrency is. ▶



## CRYPTOCURRENCY

is digital money or an electronic cash system that is exchanged virtually and operates independently of government regulation. Bitcoin, perhaps the most well-known, was first introduced in a 2008 white paper by Satoshi Nakamoto, a pseudonym for a person, or persons, who created and deployed the first Bitcoin and blockchain in 2009. This action is often believed to be a response to the distrust of banking institutions in the wake of the 2008 global financial crisis.

Anyone can now buy or sell Bitcoin online. Financial technology has enabled a proliferation of cryptocurrencies and has been described as the “Wild West,” largely because it is not overseen by a centralized institution, bank or government. Checking the daily value of a Bitcoin can look more like an EKG reading than a safe financial statement.

### Underlying cryptocurrencies is the blockchain.

“The blockchain is a record of all transactions,” explains Mueller. “If I send someone \$35, it goes on the blockchain and that transaction is verified. It is a recursive ledger which

means if someone were to tamper with a transaction in the past, it would be immediately apparent in all the blocks, or entries of transactions. You would know immediately.”

John Paul Broussard, OU professor and assistant director of finance, predicts a continuation of the democratization of finance where consumers will be in control of all their financial decisions and assets.

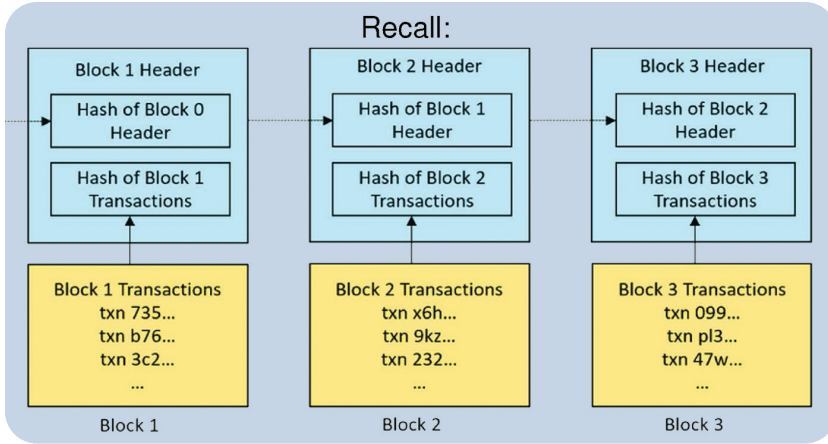
“Two things are already in place in the world of FinTech, which is nothing other than technology allowing for transactions to happen more efficiently and effectively,” he says. “Those are: Being able to use technology to manage your finances and using FinTech tools to achieve financial goals. The third component is the use of cryptocurrency.”

To understand how the cryptocurrency blockchain works, Broussard began mining the cryptocurrency Ethereum in 2017. Miners use computer software to solve complex mathematical problems and uncover small, leftover units of digital currency, which will appear on the blockchain or ledger and are awarded to miners as a finder’s fee.

“I can follow the transactions as they happen,” he says. “It is the coolest thing ever.”



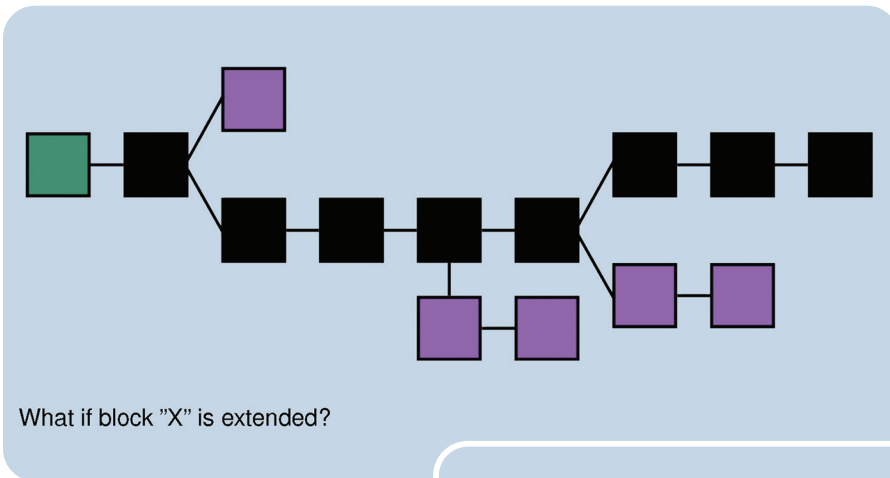
Finance doctoral candidate Peter Mueller developed and teaches OU’s first course in financial technology or FinTech.



Most of us will not create a new digital currency, but we can buy Bitcoin or fractions of a Bitcoin easily, and for as little as one dollar. A central exchange, such as the peer-to-peer smartphone payment application Venmo, sells Bitcoin. A single Bitcoin recently was valued at \$47,031, and anyone can own a portion of Bitcoin by going to a central exchange, opening an account, and buying Bitcoin from someone who has already mined it.

Cryptocurrencies are stored in digital wallets with private keys. Rather than handing someone actual paper money or a plastic credit card, spending takes place from one virtual wallet to another with the exchange of the security keys. This exchange is not tied to a bank or under monetary oversight, often resulting in the wild, daily value fluctuations.

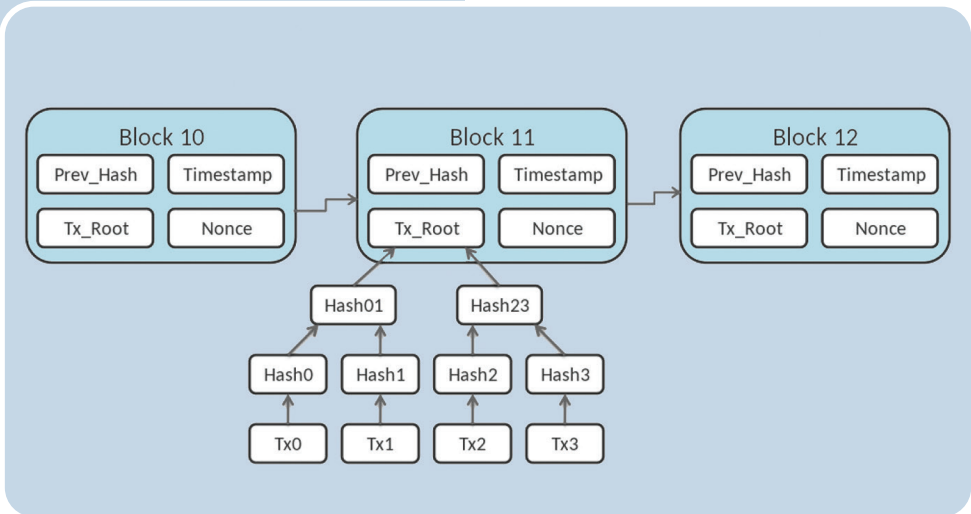
Both Mueller and Broussard say that it is unclear what kind of asset Bitcoin is right now, and what kind of classification it would hold in one's financial portfolio. Is it a long-term capital gain or a short-term profitmaking mechanism? They do agree that cryptocurrencies are becoming an acceptable medium of exchange. ▶



Top: A "general" blockchain graphic. A blockchain is a successive list of individual blocks, starting from block 1.

Above: An unlabeled blockchain fork example.

Right: A more detailed "general," recursive blockchain graphic.





John Paul Broussard, OU Price College professor and assistant director in the Department of Finance, says FinTech allows consumers to manage their finances more efficiently and effectively.

In perhaps a sign of that acceptability, Staples Center, the famed Los Angeles sports and entertainment venue, recently changed its name to the Crypto.com Arena. The naming rights are for 20 years. Headquartered in Singapore, this cryptocurrency app has offices in the Americas, Europe and Asia. The deal makes Crypto.com an official cryptocurrency platform partner of the Los Angeles Lakers and the Los Angeles Kings.

Broussard predicts that FinTech will keep growing and expanding, allowing consumers to be in more control of their financial transactions without traditional intermediaries.

“Finance will continue to become democratized and I think we will see a lot of consolidation among traditional financial institutions,” he says. “They are using FinTech to increase their efficiency, spending a lot of time, effort and money

“When it moves from a unique niche to mainstream, FinTech will have made it.”

to be able to understand and incorporate cryptocurrency into their daily activities.

“When it moves from a unique niche to mainstream, FinTech will have made it. We are providing our students with the tools they are going to use once they graduate, start their careers and contribute to this shift.”

*Susan Grossman is editorial manager for Myriad Botanical Gardens and Scissortail Park in Oklahoma City and a freelance writer who lives in Norman, Okla.*