

Blockchain (BKCH) Minor

This minor lays the foundation for gaining a competitive advantage in the blockchain ecosystem by providing an understanding of the implications and business opportunities associated with how blockchain and digital assets are affecting global industries. Blockchain, most famous for its application for cryptocurrency, is changing the way we think about money, impacting traditional financial systems and supply chains, and transforming the landscape of legal contracts. The minor will prepare a range of students from different backgrounds to work in any industry that would likely be impacted by blockchain. The flexible nature of the minor allows the student to tailor the program to their primary program of study.

15 credit hours (9 credits required courses, 6 credits elective courses)

Required Courses

Course Code	Course Name	Prerequisites	Credits
BKCH 3021	Fundamentals of Blockchain	Junior class standing	3
BKCH 4021	Business Applications of Blockchain	BKCH 3021	3
BKCH 4121	Case studies in Blockchain	BKCH 3021	3
Total			9

Electives

Course Code	Course Name	Prerequisites	Credits
See Below	Any Approved Elective Course	Varies	3
See Below	Any Approved Elective Course	Varies	3
Total			15

Approved Electives (Any two from the list)

Course Code	Course Name	Prerequisites	Credits
FIN 4910	Blockchain and Banking	9 hours in finance including FIN 3250, IMGT 1400 and ABS	3
MGT 2030	Business Ethics	Sophomore class standing	3
DSCI 4260	Project Management	ACCT 2010, MATH 2350 and STAT 2050 or equivalents in each, grade of C or better in each, junior class standing (EN majors: MATH 2200, ES 1060 or equivalent, junior class standing)	3
DSCI 4280	Supply Chain Management	DSCI 3210, junior class standing, ABS	3
ES 4920	Entrepreneurship for Engineers	9 hours within an engineering discipline, junior class standing	3
COSC 1015	Intro to Programming for Data Science	Math 1400, 2200, 2205, 1405 or 1450	3
COSC 4010	Blockchain Design/Programming	COSC 3020 concurrently and consent of instructor	3

Blockchain Minor

Program Learning Objectives

Student completing the blockchain Minor will:

- Be knowledgeable of various blockchain systems, digital assets, and cryptocurrencies
- Understand how this technology is used to solve real-world problems
- Understand how blockchain technology disrupts legacy systems
- Comprehend the competitive applications and opportunities of blockchain in various industries

Core Program Course Descriptions

1. BKCH 3021 -- Fundamentals of Blockchain

The purpose of this course is to provide a fundamental understanding of blockchain technologies and their implications. Topics will focus on understanding how blockchain systems are changing the way we think about money, disrupt traditional financial institutions, and eliminate costly intermediaries. The course aims to uncover opportunities that bring value to society, shrink the settlement time of financial contracts, and transform the landscape of legal contracts. Students should leave the course with a thorough understanding of the global competitive landscape and core concepts of how blockchain can impact a company's future.

2. BKCH 4021 -- Business Applications of Blockchain

This course provides advanced concepts underpinning the applications of global blockchain technologies for business and their use cases. Students will learn about the overall blockchain landscape—the investments, the size of markets, major players, and the global reach—as well as the potential business value of blockchain applications and the challenges that must be overcome to achieve that value. Students will gain a deeper understanding about the underlying technologies and become well-prepared to develop blockchain applications in the business world.

3. BKCH 4121 – Case Studies in Blockchain

This experiential learning focused course is targeted toward understanding the creation and development of blockchain ventures. Besides course lecture materials, students will study and support new blockchain ventures in a real-world setting. Case studies and term projects will be in the areas of marketing, selling, developing product offerings, as well as designing improved business processes. Students will gain managerial and work experience that will enhance their marketability in the blockchain/digital asset industry.