

## Financial Technology

Financial Technology (FinTech) is at the intersection of big data and financial services. Many disruptive technologies such as cryptocurrency, blockchain, mobile banking, machine learning, and robo-advising have been applied in the financial services sector to create new and improved products and to increase efficiency.

This minor provides advanced classes in both financial concepts and allows the student to choose classes from different areas of computer and information technology. The course of study culminates in a capstone class is intended to expose the student to a real-world problem in FinTech.

The FinTech minor is composed of 4 courses (12 credits), and is open to all College of Business students with a declared major, CSB, and IBE students. The prerequisite courses for the minor are the same as for the finance major: FIN 125, FIN 323, and FIN 328. Depending on the electives chosen, there may be additional prerequisites. Note College of Business majors and College of Business minors cannot overlap and therefore, any courses taken for a minor cannot also count for the major.

The course of study consists of :

1. FIN 337 Financial Market Regulation
2. FIN 388: FinTech Capstone
3. Two electives from the following list (only one of which may be taken concurrently with the Capstone)
  - a. Data Analytics
    - i. FIN 377 Data Science for Finance (Spring, Prerequisites: FIN 323, FIN 328)
    - ii. ACCT 330 Accounting Data and Analytics (Prerequisites: ECO 45)
    - iii. BUAN 348 Predictive Analytics in Business (Prerequisites: BIS 111 and (ECO 45 or MATH 012 or MATH 231))
    - iv. BUAN 352 Business Analytics and Modelling (Fall, Prerequisites: BIS 111 and (ECO 45 or MATH 012 or MATH 231))
  - b. Artificial Intelligence
    - i. BUAN 357 Artificial Intelligence for Business
    - ii. CSE 127 (COGS 127) Survey of Artificial Intelligence (Prerequisites: CSE 002 or CSE 004 or CSE 007)
    - iii. CSE 327 (COGS 327) Artificial Intelligence Theory and Practice (Prerequisites: CSE 017 and CSE 140)
  - c. Natural Language Processing
    - i. CSE 325 Natural Language Processing (Prerequisites: (MATH 231 or ECO 045) and CSE 017)
  - d. Data Mining
    - i. ISE 365 Applied Data Mining (Prerequisites: ISE 121 or IE 121 or ISE 328 or IE 328)
    - ii. ISE 367 Mining of Large Datasets (Prerequisites: ISE 111 and CSE 002)
  - e. Machine Learning
    - i. ISE 364 Introduction to Machine Learning (Prerequisites: CSE 002)
    - ii. CSE 326 Fundamentals of Machine Learning (Prerequisites: (CSE 002 or CSE 012) and (MATH 205 or MATH 043) and (MATH 231 or ISE 121 or ECO 045))
    - iii. MATH 365 Statistical Machine Learning (Prerequisites: (MATH 205 or MATH 241 or MATH 242) and (MATH 264 or MATH 312) and (MATH 263 or MATH 309))
  - f. Blockchain
    - i. CSB 242 Blockchain Concepts and Applications (Prerequisites: ECO 001 and (BIS 111 or CSE 001 or CSE 002 or CSE 012) and (CSE 017 or MKT 111 or FIN 125 or SCM 186))
    - ii. CSE 242 Blockchain Algorithms and Systems (Prerequisites: CSE 017 and (CSE 241/341 or CSE 109 concurrent))