



Course Description

FIT2000 | Introduction to Financial Technology | 3.00 credits

This course introduces students to the foundations, innovations, and applications of Financial Technology (FinTech). Topics include the evolution of money, core banking systems, digital payments, blockchain, big data, artificial intelligence, cybersecurity, and FinTech regulations. Students will explore how technology is transforming banking, insurance, investment, and other sectors, while developing a framework for ethical and regulatory compliance in digital finance.

Course Competencies:

Course Competency 1: The student will be able to analyze the evolution and foundations of Financial Technology by:

1. Tracing the history of money from barter systems to digital currencies.
2. Describing how traditional banking systems evolved into digital finance.
3. Identifying key FinTech sectors such as InsurTech, PayTech, and RegTech.
4. Explaining how financial innovation supports financial inclusion and economic growth.

Course Competency 2: The student will be able to interpret emerging Financial Technologies by:

1. Defining and differentiating between blockchain, artificial intelligence (AI), and big data analytics.
2. Explaining how AI and machine learning enhance fraud detection, credit scoring, and customer service.
3. Describing blockchain's role in decentralization, smart contracts, and digital asset management.
4. Discussing how Internet of Things (IoT) technologies and digital twins integrate with FinTech systems.

Course Competency 3: The student will be able to describe digital payments, transaction systems, and cybersecurity by:

1. Defining and differentiating between blockchain, artificial intelligence (AI), and big data analytics.
2. Explaining how AI and machine learning enhance fraud detection, credit scoring, and customer service.
3. Describing blockchain's role in decentralization, smart contracts, and digital asset management.
4. Discussing how Internet of Things (IoT) technologies and digital twins integrate with FinTech systems.

Course Competency 4: The student will be able to analyze data-driven financial intelligence and analytics by:

1. Explaining the concept and characteristics of big data and its relevance to finance.
2. Utilizing data visualization and business intelligence tools to interpret financial trends.
3. Discussing predictive and prescriptive analytics applications in FinTech.
4. Assessing how data analytics enhances decision-making, risk management, and service personalization.

Course Competency 5: The student will be able to define FinTech regulation, ethics, and the future of digital finance by:

1. Describing key regulatory frameworks relevant to FinTech, including Dodd-Frank, BSA, KYC/AML, and PCI DSS.
2. Analyzing ethical considerations such as data privacy, algorithmic bias, and financial accessibility.
3. Explaining the role of regulatory technology (RegTech) in promoting compliance and transparency.
4. Evaluating emerging trends such as decentralized finance (DeFi), quantum computing, and digital currencies.

Learning Outcomes

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve Problems using critical and creative thinking and scientific reasoning
- Create strategies that can be used to fulfill personal, civic, and social responsibilities