IT 4613: Machine Learning Technology in Banking and Investment

3 Credit Hours

Prerequisite: IT 4603

This course covers applications of different machine learning techniques to a variety of banking and investment problems. Topics include supervised learning for predictive analysis, unsupervised learning for financial data clustering and visualization, and deep learning/reinforcement learning for financial decision making.

IT 4623: Blockchain Technologies Security & Privacy

3 Credit Hours

Prerequisite: IT 4603 and IT 4823

This course provides an overview of security and privacy issues in domain systems. Topics may include, but not limited to, blockchain protocol, security and privacy criteria associated with cryptography techniques, identity management in blockchain, and secure smart contract writing. The course will also cover exploiting systems and developing mitigation approaches and best practices to prevent security breaches.

IT 4633: IT Technology Systems Internship

3 Credit Hours

Prerequisite: IT 4603 and (IT 4613 or IT 4623)

This course helps students gain practical experience in the field of blockchain and related domains. Students will work in a real-world project jointly supervised by an industry sponsor and a faculty advisor. In this project, the students will apply the knowledge acquired in the degree program to solve problems in enterprise settings, demonstrate ethical behavior as computing professionals, and practice soft skills such as communication and leadership skills.

IT 4673: Virtual IT Systems

3 Credit Hours

Prerequisite: (IT 3423 or CS 3502) and IT 4323 and (CSE 3153 or CS 3410)

This course explores the design, implementation and use of virtualization, including desktop and server aspects such as deployment, clustering, storage and security. A high level overview of the various certifications available will be discussed. A project will be completed as part of the course.