

FIN382 Risk Management for Finance and Technology

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

FIN382 Risk Management for Finance Technology provides students with a broad overview of the different types of risk that markets, institutions and individuals can face in the financial world operating in a digital economy. Recent developments in FinTech has opened up the business of providing financial services to new players in addition to the traditional banks and financial institutions. The need to manage risk, especially technology risk, and to ensure system reliability persist and sound risk management principles and tools for assessment are required. Realtime responses to customer request will require risk to be assessed automatically in digital banks in providing new services to a broader base of customers, including the underserved. Cyber risk will become more critical. New algorithms will be used for financial services, monitoring and fraud detection. Students will learn about these risks as evolving in the financial system, methods and tools of risk analysis, frameworks for managing risk, as well as important aspects of technology risk such as information and transaction security. As technology, ethics and regulation continue to evolve, FIN382 Risk Management for Finance and Technology will continue to introduce new perspectives.

Topics:

- Financial services industry and evolving risk
- Regulatory and compliance framework
- Types of risk: market, credit, liquidity, operational
- Risk assessment methods and tools
- Risk management principles/framework
- Basel Framework
- Information security
- Cyber security
- Transaction security
- Systems reliability, availability and recoverability
- Automation
- Testing and review

Textbooks:

Kouns, J. & Minoli, D.: Information Technology Risk Management in Enterprise Environments: A Review of Industry Practices and a Practical Guide to Risk Management Teams. NIL Wiley-Interscience
ISBN-13: NIL

Monetary Authority of Singapore: Technology Risk Management Guidelines NIL Monetary Authority of Singapore
ISBN-13: NIL

Learning Outcome:

- Discuss risk management principles and frameworks for the financial services industry with sound knowledge.
- Analyse and assess different types of risks.
- Show an appreciation of risk as evolving and affecting system reliability.
- Demonstrate understanding of operational risk for finance in a digital economy.
- Calculate with risk measures and models.
- Construct testing and review plans or algorithms.

Assessment Strategies (Daytime Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-COURSE QUIZ 1	2
	PRE-COURSE QUIZ 2	2
	PRE-COURSE QUIZ 3	2
	TUTOR-MARKED ASSIGNMENT 1	18
	GROUP BASED ASSIGNMENT 1	20
	PARTICIPATION 1	6
Overall Examinable Components	Written Exam	50
Total		100