

Title (Units): **COMP7075 Financial Technology Management (3,3,0)**

Course Aims: To provide students with an in-depth understanding on technologies and management skills used in the Financial Services Industry. Students will gain knowledge about disruptive business models, as well as the latest technologies adopted in the industry. Rules and regulations imposed by the financial regulators will be explained. Real world cases related to financial technology management will be discussed.

Prerequisite: Postgraduate Student Standing

Course Intended Learning Outcomes (CILOs):

Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Explain disruptive business models in the financial industry.
2	Justify the latest technologies used in the financial sector.
3	Reflect the skills to manage financial applications and related personnel.
	Professional Skill
4	Appraise the performance of financial technologies and its operations.
5	Evaluate the real-world case(s) using the design thinking approach.

Calendar Description: This course provides an in-depth knowledge of technology applications and management skills in the financial industry. After completing the course, students will understand the disruptive business models, rules and regulations, and the latest technologies adopted in the industry. Students will be able to evaluate the real-world cases using the design thinking approach.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1-3	Students will attend lectures for the basic financial concepts. They will also get the knowledge about the current applications, and management skills used in the financial industry.
4	Students will appraise selected financial application(s) and its operation(s) via tutorial sessions.
5	Students will work on a project to apply the design thinking approach for financial application implementation.

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Individual Assignment(s)	35%	1-4	Individual Assignment(s) are designed to measure how well the students have learned the knowledge of technology applications, and management skills in the financial industry.
2	Group Assignment	25%	1-5	A project is designed to evaluate students' capability to evaluate real-world cases in the financial industry.
3	Examination	40%	1-4	Final examination questions are designed to see how far students have achieved their intended learning outcomes.

Assessment Rubrics:

Excellent (A)	<ul style="list-style-type: none"> • Achieves all five CILOs, demonstrating a good mastery of both the theoretical and practical aspects of the knowledge and skills associated with financial technology management • Able to develop and present sound arguments and correct solutions to problems in financial technology management, accompanied by in-depth analysis and insight • Demonstrates a thorough understanding and solid knowledge of financial technology management • Able to draw on a variety of techniques and relevant knowledge and appropriately apply them to new situations and problems of implementation and practice of financial technology management
Good (B)	<ul style="list-style-type: none"> • Achieves all five CILOs, demonstrating a good understanding of financial technology management • Able to develop solutions to problems in financial technology management, accompanied by adequate explanations • Demonstrates a competent level of knowledge of financial technology management • Able to make use of appropriate techniques and knowledge and apply them to situations and problems of implementation and practice of financial technology management
Satisfactory (C)	<ul style="list-style-type: none"> • Achieves most of the five CILOs, demonstrating a basic level of understanding of financial technology management • Able to provide acceptable solutions to problems in financial technology management • Demonstrates an adequate level of knowledge of financial technology management • Able to make use of some techniques and knowledge and apply them to familiar situations of implementation and practice of financial technology management
Fail (F)	<ul style="list-style-type: none"> • Achieves less than two of the five CILOs, with little understanding of financial technology management • Unable to provide solutions to simple problems in financial technology management • Knowledge of concepts in the financial technology management falling below the basic minimum level • Unable to apply techniques and knowledge to situations or problems of implementation and practice of financial technology management

Course Content and CILOs Mapping:

Content		CILO No.
I	Introduction to Financial Industry	1-3
II	Technologies Adopted in Financial Industry	2-4
III	Management of Financial Applications and Implementation	3-5

References:

- Oranburg, S.C., A History of Financial Technology and Regulation, Cambridge University Press, New Edition, 2022.
- Phelps, M., FinTech Fundamentals: A Practical Guide to Understanding Financial Technology, Independently Published, 2023.
- Pederson, N., Financial Technology: Case Studies in Fintech Innovation, Kogan Page, 1st edition, 2020.
- Barberis, J., Arner, D.W., and Buckley, R.P., The REGTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries in Regulation, Wiley, 2019.
- Nicoletti, B., Banking 5.0: How Fintech Will Change Traditional Banks in the 'New Normal' Post Pandemic (Palgrave Studies in Financial Services Technology), Palgrave Macmillan, 2021.
- Arslanian, H., and Fischer, F, The Future of Finance: The Impact of FinTech, AI, and Crypto on Financial Services, Springer, 2019.
- Chiu, H.Y., and Linarelli, J., Regulating the Crypto Economy: Business Transformations and Financialisation (Hart Studies in Commercial and Financial Law), Hart Publishing, 2021.
- Satoshi, N., BLOCKCHAIN BASICS BIBLE: Non-Technical Beginner's Introduction to Cryptocurrency: The future of Crypto Technology-Non-Fungible Token(NFT)-Smart Contracts-Consensus ... Protocols-Mining & Blockchain Gaming, Independently published, 2021.

- Gutsche, J., Create the Future + the Innovation Handbook: Tactics for Disruptive Thinking, Fast Company Pr, 2020.
- Lui, A., and Ryder, N., FinTech, Artificial Intelligence and the Law (The Law of Financial Crime), 1st Edition, Routledge, 2021.

Course Content:

Topic

- I. Introduction to Financial Industry
 - A. Types of financial sector, e.g. banking, insurance, and capital market
 - B. Financial concepts
 - Banking services
 - Trading and surveillance
 - Mobile money and payments
 - Cryptocurrency
 - Applications of FinTech
- II. Technologies Adopted in Financial Industry
 - A. Traditional financial information systems
 - Financial electronic communication networks
 - Payment processing systems
 - Clearing and settlement systems
 - Financial decision support systems
 - B. Disruptive technologies
 - Blockchain technologies
 - Data analytics and monetization
 - Other emerging technologies used in financial industry
- III. Management of Financial Applications and Implementation
 - A. Real-world case studies