

IS4837: REGULATORY COMPLIANCE FOR FINANCIAL SERVICES TECHNOLOGIES

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Regulatory Compliance for Financial Services Technologies

Subject Code

IS - Information Systems

Course Number

4837

Academic Unit

Information Systems (IS)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course will provide students with the understanding of financial services technologies and compliance and regulatory issues in financial services industries. In particular, students will become familiar with different information systems used in banks and other financial institutions in their provision of financial services. These may include internet banking systems, stock trading systems, transaction processing systems for deposits, loans and electronic fund transfer (EFT) systems, etc. Students will examine the use of these technologies in facilitating core functions of the financial services, and assess the risks involved. The course will also cover compliance and regulations for financial services technologies. The course will discuss the co-evolution of information technology and financial services industries, and the enabling role of IT in service innovation and value creation. Students will acquire skills to think critically about the economic and managerial concerns in implementing IT initiatives in a financial institution through case studies.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe and gain insight into FinTech compliance and regulations for different financial services in banks and other financial institutions.	40	x	x	
2	Generate synthesis value of financial information systems and regulatory compliance to the effectiveness of management and the efficiency of transaction processing in financial services.	30	x	x	
3	Apply analytical skills to investigate and critically evaluate financial services innovations as results of key enabling technologies from the perspectives of value proposition, alternative technologies, competition, risks and risk management, etc.	30	x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	LTA1: Lecture	Students will learn various systems and FinTech compliance for financial services in banks, financial institutions and regulators from the perspective of technology development by using real life examples, accompanied by in-class discussions and activities.	1, 2, 3	Seminar:3 Hours/ Week (Lecture + Case Discussion)
2	LTA2: Case Discussion	Students will discuss and analyse how information technologies could be applied and contributed to the efficiency of financial services industries through case analysis.	1, 2, 3	Seminar:3 Hours/ Week (Lecture + Case Discussion)
3	LTA3: Drill and Practice	Students will investigate an IT enabled financial services innovation in groups applying analytical skills learned during the course.	1, 2, 3	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	AT1: In-Class Discussion Students are encouraged to discuss and reflect on the materials covered in lectures and tutorials.	1, 2, 3	10	-	Yes
2	AT2: Individual Assignments Assignments will be given to assess student' s understanding of contents covered in the lectures.	1, 2, 3	10	-	Yes

3	AT3: Group Project A group project, which includes a written report and an oral presentation, will be assigned to students to explore, investigate and critically evaluate a financial services innovation using the knowledge and analytical skills learned.	1, 2, 3	30	-	Yes
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Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Assessment Rubrics (AR)**Assessment Task**

AT1:In-Class Discussion

Criterion

CILO1 - 3Demonstrate evidence of active learning through participating in the class discussion, asking critical questions and completing extra-credit activities.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT2:Individual Assignments

Criterion

CILO1 - 3Demonstrate good understanding of content (technology, system and business concepts) and analytical skills taught in the class through accomplishing individual assignments.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT3:Group Project

Criterion

CILO1 - 3Demonstrate good understanding of basic system concept and the capability to synthesis value of financial information systems and regulatory systems in enabling innovative financial services and create value interactions.Demonstrate capability to apply analytical skills to investigate and critically evaluate financial services innovations as results of key enabling technologies from the perspectives of value proposition, alternative technologies, competition, risks and risk management, etc.Demonstrate great team working spirit and collaboration skill (peer evaluation and presentation).

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT4:Final Examination

Criterion

CILO1 - 3Demonstrate good understanding of content (technology, system and business concepts) and analytical skills taught in the class through accomplishing individual assignments.Demonstrate good analytical skills in applying business analysis frameworks in answering questions.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Information technology for finance; Banking services; Banking organization; Transaction processing; Electronic fund transfer systems; Internet banking; Security; Payment System; Mobile banking; Financial market; Integration and data sharing; Stock trading systems; Regulatory technology; FinTech compliance; Interface design; and Risk management.

Reading List**Compulsory Readings**

Title	
1	Cases listed in the tentative schedule.

Additional Readings

Title	
1	Duran, R. E., Financial Service Technology: Processes, Architecture, and Solutions, 2nd Edition, Cengage Asia, 2017.
2	Arslanian, Henri, Fabrice Fischer. The Future of Finance: The Impact of FinTech, AI, and Crypto on Financial Services. Springer, 2019.
3	Barberis, J., Douglas, W. A., Buckley, R., The REGTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries in Regulation, John Wiley & Sons, 2019.
4	Madir, J., FinTech: Law and Regulation (Elgar Financial Law and Practice), Edward Elgar Pub., 2019.
5	Kim, K., Electronic and Algorithmic Trading Technology: The Complete Guide, Academic Press, 2007.
6	King, B., Bank 4.0: Banking Everywhere, Never at a Bank, John Wiley & Sons, 2019.
7	Philippon, T., The FinTech opportunity. National Bureau of Economic Research, 2016.
8	McAfee, A., Brynjolfsson, E., Machine, platform, crowd: Harnessing our digital future. WW Norton & Company, 2017.