Digital Finance (Lecture+Tutorial)

Summer semester

Institute:	Institute for Financial Innovation & Technology
Lecturer:	Prof. Dr. Ryan Riordan
Assistant:	Andreas Wittmann, M.Sc. & Florian Schuchardt, M.Sc.
Weekly hours:	2+2 SWS
Credits	6 ECTS
Examination:	Exam at the end of the semester
Prerequisites:	None
Course Material:	Will be provided via Moodle

Course Description & Main Objectives

Substantial parts of the financial value chain are continuously being disrupted by technology-based innovators. The course offers a comprehensive exploration of modern securities markets, trading mechanisms, and market microstructure. It addresses both theoretical and practical aspects of financial markets and provides insights into market dynamics. Special focus is placed on algorithmic trading and the role of technological innovation.

Lectures Overview/ Course Outline

Lecture 1	Modern Securities Markets I	Tutorial 1	Modern Securities Markets
Lecture 2	Modern Securities Markets II	Tutorial 2	Alternatives to Limit Order Markets
Lecture 3	The Basics of Trading	Tutorial 3	Information & Efficiency
Lecture 4	Alternatives to Limit Order Markets	Tutorial 4	Market Microstructure
Lecture 5	Market Microstructure	Tutorial 5	Algorithmic Trading
Lecture 6	Information & Efficiency I	Tutorial 6	Coding Session
Lecture 7	Information & Efficiency II		
Lecture 8	Algorithmic Trading Theory		
Lecture 9	The Basics of Algorithmic Trading		
Lecture 10	Crypto Markets		

Literature

Harris, L. (2003). Trading and Exchanges - Market Microstructure for Practitioners. Oxford University Press.

Hasbrouck, J. (2021). Securities trading: Principles and procedures.

O'Hara, M. (1994). Market Microstructure Theory. Blackwell Publishers, Malden, MA.