#### ADVANCES IN FINANCIAL TECHNOLOGY

Credits: 6

Schedule: See lecture time in SISU

Teacher in charge (valid 01.08.2023-31.07.2024):

Timo Penttilä

Teaching Period (valid 23.04.2024-30.05.2024):

(Fall/Spring 2024) Otaniemi campus

### Learning Outcomes (valid 01.08.2023-31.07.2024):

Course is designed to give student wide perspective to advances in Financial Technology and their relation to rapid changes in Financial Services Industry. Course gives both practical and theoretical insides to digital transformation, change in regulation and emerging technologies in Financial Services Industry. Course gives insight into how financial companies are adopting and using financial technology innovation and the potential for partnerships between incumbents, start-ups and investors.

After the course student have better understanding in Financial Technology Industry and better capabilities to work in FinTech startups and technology driven assignments in banking, insurance, and investment management industry.

### Content (valid 01.08.2023-31.07.2024):

Topics covered in lectures and by visiting industry experts include

- Digital transformation of Financial Services Industry
- Emerging technologies in Financial Services Industry
- Fintech (financial industry) regulation
- Responsible Innovation
- Academic research in Fintech

### Assessment Methods and Criteria (valid 01.08.202-31.07.2024):

- 1. Assignments (individual) (60%)
  - a. Term-papers on quest lectures
  - b. Book summary
- 2. Case study (group) (40%)

See attached instructions for assignments

#### Workload (valid 01.08.2023-31.07.2024):

Contact teaching, 24 h Independent study and case work, 136 h

#### **Study Material (valid 01.08.2023-31.07.2024):**

Lecture notes, academic articles, and textbooks:

- 1. Fintech entrepreneurship
  - a. FinTech Founders: Inspiring Tales from the Entrepreneurs that are Changing Finance By Agustín Rubini and Susane Chisti **or**
  - b. Fintech, Small Business & the American Dream: How Technology Is Transforming Lending and Shaping a New Era of Small Business Opportunity by Karen G. Mills
- 2. Emerging technologies and regulation
  - a. Bank 4.0: Banking Everywhere, Never at a Bank by Brett King or
  - b. Blockchain Bubble or Revolution: The Future of Bitcoin, Blockchains, and Cryptocurrencies by Neel Mehta, Aditya Agesha, and Parth Detroja **or**
  - c. A Guide to Financial Regulation for Fintech Entrepreneurs by Stephan Loech
- 3. Selected academic articles (see samples with good literature reviews below)

Kavuri, Anil & Milne, Alistair. (2019). Fintech and the Future of Financial Services: What Are the Research Gaps?. SSRN Electronic Journal. 10.2139/ssrn.3333515. https://www.researchgate.net/publication/331244922\_Fintech\_and\_the\_Future\_of\_Financial\_Services\_What Are the Research Gaps

Breidbach, Christoph & Keating, Byron & Lim, Chiehyeon. (2020). Fintech: research directions to explore the digital transformation of financial service systems. Journal of Service Theory and Practice. 30. 79-102. 10.1108/JSTP-08-2018-0185. <a href="https://www.researchgate.net/publication/338785310\_Fintech\_research\_directions\_to\_explore\_the\_digital\_transformation\_of\_financial\_service\_systems">https://www.researchgate.net/publication/338785310\_Fintech\_research\_directions\_to\_explore\_the\_digital\_transformation\_of\_financial\_service\_systems</a>

# Prerequisites (valid 01.08.2023-31.07.2024):

The course is an advanced level course for MSc students in business, engineering, and related field of study.

# **Grading Scale (valid 01.08.2023-31.07.2024):**

0-5

# **Registration for Courses (valid 01.08.2023-31.07.2024):**

Course registration via SISU. See the registration time in SISU.

For any registration related matter, please contact the department study coordinator.

# Further Information (valid 01.08.2023-31.07.2024):

A maximum of 70 students can be accepted to the course.