Financial Technology (FinTech)

Course Outline
Academic Semester: 2025/26

1. General

School	**School of Finance and Statistics**		
Academic Unit	**Department of Banking and Financial Management**		
Level of Studies	**Undergraduate**		
Course Code	**XPHTE**		
Semester	**6th or 8th**		
Course Title	**Financial Technology (FinTech)**		
	Idependent Teaching Activities	Weekly Teaching Hours	Credits
	Lectures	**4**	**7,5**
Course Type	**Special background, Skills development**		
Prerequite Courses			
Language of Instruction and Examinations	**Greek**		
Is the course offered to Erasmus Students?			
Url (Eclass)	**https://eclass.unipi.gr/modules/auth/courses.php?fc=64**		

2. Learning Outcomes

Learning Outcomes

Students will be using their PCs all the time, allowing them to become more familiar with both the theory and its implementation using the appropriate software (Python, Power BI and sql). Prior knowledge of these programs is not required for attending this course. Goal of the course is to help students understand WHAT they want to develop, WHY they would need to develop it and then actually develop it.

General Competences

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Decision-making
- Working independently
- Teamwork
- Production of free, creative, and inductive thinking

3. Syllabus

- Big Data Analytics και Business Intelligence Tools (Power BI)
- Statistical Learning, Machine Learning και Artificial Intelligence
- Blockchain και Cryptocurrencies
- Algorithmic Trading

Selected material is covered in the following CFA sections:

- CFA Level I: Fintech in Investment Management
- CFA Level II: Algorithmic Trading and High Frequency Trading

4. Teaching and Learning Methods - Evaluation

Delivery	**Face to face at the Computer Lab**
Use of Information and Communications Technology	**Laboratory education, utilizing specialized software and algorithms, all course notes will be shared with students via the university's e-class platform.**
Teaching Methods	

Activity	Semester Workload
Lectures	52
Study and analysis of bibliography	109,5
Laboratory Practice	26
Course total	**187,5**

Student Performance Evaluation	Students will be assigned 4 projects, one per main course unit, prepare a presentation and examined through open-ended questions

5. Attached Bibliography

Suggested Bibliography

- Artificial Intelligence Applications in Financial Services, Oliver Wyman
- An Introduction to Statistical Learning with Applications in R. Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani
- Blockchain Technology Overview, Dylan Yaga, Peter Mell, Nik Roby, Karen Scarfone

Related Academic Journals