

# UE7 FINTECH (CHOIX COURS 6 ECTS)



ECTS  
6 crédits



Composante  
Ecole  
d'économie  
de la  
Sorbonne  
(EES)



Période de  
l'année  
Printemps

## Liste des enseignements

À choix11ChoixObligatoire00ChoixÀ choix11Matière2.018.0Summary: The objective of this course is to show, through the realization of a practical use case, the reality of a project in machine learning in real world and the difficulties encountered. The project will consist of implementing AI explainability methods to counter the black box effect of machine learning methods in a credit risk calculation context. In addition, the students will have to: import data from the Kaggle website, pre-process, implement classical Machine Learning methods and analyze the results succinctly. The next step will be to implement different methods of explicability to best interpret the results obtained. Finally, as all work is intended to be reused, students will have to produce documentation (redaction, git, readme) allowing the reuse of their work. During this course, in addition to the technical aspects, we will quickly address the problems of project management. The main language use for the course is Python.Course prerequisites: Python programming basics, Machine learning and credit scoring course, Risk Management courseLecturer: Etienne Gay (Data Science Director - VO2 Group)Student assessment: Final project in PythonMatière2.018.0Matière2.018.0Summary: This course will explore different perspectives regarding the regulation of fintech and address challenges faced by regulators whose objective is to preserve financial stability, protect consumers and prevent excessive market power.Globalization and new decentralized peer-to-peer business models create unprecedented challenges for effective regulation. Case studies will present different regulatory responses to fintech innovation. These include the application of the traditional regulatory framework to fintechs, forbidding certain kinds of activities, creating sandboxes and designing a new regulatory framework specifically suited for new fintech business models. In particular, students will learn from the French and European experience of designing new regulations for crowdfunding, crypto-exchanges and ICOs as well as discuss the EU fintech action plan.Given the multiplicity of regulatory approaches, fintech players will need to design regulatory strategies depending on their business objectives. Students will be also invited to take the players' perspective and learn to navigate around various regulatory models. Professors: Janos Barberis (Co-Founder - SuperCharger Ventures) and Olena Havrylchuk (Professor in Economics - University Paris 1 Panthéon-Sorbonne)Student assessment: RegTech Case StudiesMatière4.018.0ChoixObligatoire00Matière2.018.0Summary: The objective of this course is to show, through the realization of a practical use case, the reality of a project in machine learning in real world and the difficulties encountered. The project will consist of implementing AI explainability methods to counter the black box effect of machine learning methods in a credit risk calculation context. In addition, the students will have to: import data from the Kaggle website, pre-process, implement classical Machine Learning methods and analyze the results succinctly. The next step will be to implement different methods of explicability to best interpret the results obtained. Finally, as all work is intended to be reused, students will have to produce documentation (redaction, git, readme) allowing the reuse of their work. During this course, in addition to the technical aspects, we will quickly address the problems of project management. The main language use for the course is Python.Course prerequisites: Python programming basics, Machine learning and credit scoring course, Risk Management courseLecturer: Etienne Gay (Data Science Director - VO2 Group)Student assessment: Final project in PythonMatière2.018.0Matière2.018.0Summary: This course will explore different perspectives regarding the regulation of fintech and address challenges faced by regulators whose objective is to preserve financial stability, protect consumers and prevent excessive market power.Globalization and new decentralized peer-to-peer business models create unprecedented challenges for effective regulation. Case studies will present different regulatory responses

