

Course Information	
Course title	Financial Technology
Semester	110-1
Designated for	COLLEGE OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE Data Science Degree Program
Instructor	<a href="#">CHE LIN</a>
Curriculum Number	EE5183
Curriculum Identity Number	921 U2610
Class	
Credits	3.0
Full/Half Yr.	Half
Required/ Elective	Elective
Time	Tuesday 7,8,9(14:20~17:20)
Remarks	The upper limit of the number of students: 60.
Course Website	
Course introduction video	
Table of Core Capabilities and Curriculum Planning	<a href="#">Table of Core Capabilities and Curriculum Planning</a>

### Course Syllabus

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Course Description	Financial technology (Fintech) is a broad category that refers to the innovative use of technology in the design and delivery of financial services and products. While many technology innovations play important parts in revolutionizing financial services, this course focuses on deep learning (DL) and its applications in FinTech. Deep learning is form of machine learning that enables computers to learn from experience and understand the world in terms of a hierarchy of concepts with a deep
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	representation of many layers. It has been proven to be highly successful in predictive tasks for applications such as computer vision and natural language processing. In this course, we hope to demonstrate how DL can be applied to achieve superior predictive performance in FinTech applications.	
Course Objective	In this course, we will first provide an overview of how deep learning revolutionizes the financial industry. We will then provide basics for machine learning (ML) and DL. Finally, we will provide several case studies on how to apply ML/DL to solve real-world FinTech problems. Students are expected to learn how to apply ML/DL algorithms in FinTech applications via completing programming homework and final project.	
Course Requirement	Basic python programming skills	
Office Hours	Appointment required.	
References	1. Deep Learning by Ian Goodfellow, Yoshua Bengio, Aaron Courville 2. Advances in Financial Machine Learning by Lopez de Prado, Marcos	
Designated reading		
Grading		
<b>Progress</b>		
Week	Date	Topic
Week 0		<a href="https://meet.google.com/ptr-qamf-gcw">https://meet.google.com/ptr-qamf-gcw</a>