

Subject Description Form

Subject Code	DSAI4206
Subject Title	Emerging Topics in FinTech
Credit Value	3
Level	4
Pre-requisite / Co-requisite / Exclusion	Nil
Objectives	<p>The objective of this subject is to:</p> <ol style="list-style-type: none"> 1. introduce the emerging developments or selected topics in FinTech and their implications. The subject covers the current state of the major thematic areas in FinTech, including its ecosystem, trends and opportunities; and 2. fulfil PolyU's lifelong learning objective, this subject also seeks to develop students' independent learning and critical thinking capabilities using research- informed teaching and other innovative teaching/learning methods.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <p><i>Professional/academic knowledge and skills</i></p> <ol style="list-style-type: none"> (a) understand how the current states impact the major thematic areas in FinTech; (b) understand and discuss the recent research advances of emerging technologies for financial services; (c) evaluate recent financial technologies and their impact on the future of financial services; and (d) learn how to learn and to analyze a FinTech-related topic with independent learning and critical thinking capabilities.
Subject Synopsis/ Indicative Syllabus	<p>Topics will be selected according to the recent developments in FinTech and may be varied in different offerings of the subject. Some potential topics are illustrated below.</p> <ol style="list-style-type: none"> 1. Current state of the major thematic areas in the FinTech ecosystem such as infrastructure (e.g., identity, privacy, security), crowdfunding (e.g., types, platforms, applications), e-trading (e.g., algorithmic trading), and peer-to-peer (P2P) lending. 2. Trends and opportunities for shaping the FinTech ecosystem. 3. Trends in FinTech innovation, including e-payment, digital banking, cybersecurity, virtual currency, disruptive financial services, crowdfunding, P2P lending and regulatory challenges can influence the short-term and long-term developments of various industries.

	<p>4. Trends in the field of FinTech that will have the most significant impact on the future.</p> <p>5. Latest development and popular topics in FinTech.</p> <p>With research-informed teaching and learning approach, students are encouraged to progressively become active enquirers, rather than passive learners accruing knowledge.</p>																																				
<p>Teaching/ Learning Methodology</p>	<p>Class activities include lectures, labs and tutorials/seminars (when applicable). In addition to the fundamental knowledge and principles, classes cover the advanced/particular topics based on research-informed teaching and learning approach. Students will learn and experience parts of the research process by studying the selected research articles and exploring new research on the basis of their own interests.</p> <p>Student groups will present what they learn from their own research studies during classes (i.e., using reproducible research or research review and survey). Each class will focus more on discussion and problem-solving.</p>																																				
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="376 741 1458 1234"> <thead> <tr> <th data-bbox="376 741 743 913" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="743 741 932 913" rowspan="2">% weighting</th> <th colspan="4" data-bbox="932 741 1458 846">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th data-bbox="932 846 1062 913">a</th> <th data-bbox="1062 846 1193 913">b</th> <th data-bbox="1193 846 1324 913">c</th> <th data-bbox="1324 846 1458 913">d</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 913 743 987">Continuous Assessment</td> <td data-bbox="743 913 932 987" rowspan="2">55%</td> <td colspan="4" data-bbox="932 913 1458 987"></td> </tr> <tr> <td data-bbox="376 987 743 1093">1. Assignments, Project and Quiz</td> <td data-bbox="932 987 1062 1093">✓</td> <td data-bbox="1062 987 1193 1093">✓</td> <td data-bbox="1193 987 1324 1093">✓</td> <td data-bbox="1324 987 1458 1093">✓</td> </tr> <tr> <td data-bbox="376 1093 743 1167">Examination</td> <td data-bbox="743 1093 932 1167">45%</td> <td data-bbox="932 1093 1062 1167">✓</td> <td data-bbox="1062 1093 1193 1167">✓</td> <td data-bbox="1193 1093 1324 1167">✓</td> <td data-bbox="1324 1093 1458 1167"></td> </tr> <tr> <td data-bbox="376 1167 743 1234">Total</td> <td data-bbox="743 1167 932 1234">100 %</td> <td colspan="4" data-bbox="932 1167 1458 1234"></td> </tr> </tbody> </table> <p data-bbox="376 1256 1473 1323">Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p data-bbox="376 1357 1473 1525">Continuous assessments (assignments, project and quiz) are designed to facilitate students to achieve the intended learning outcomes. The project is designed to enhance students' ability to a deeper understanding of a problem of a larger-scope and solve it systematically. Quizzes are given to ensure the students' understanding of the basic concept and application.</p> <p data-bbox="376 1559 1473 1626">Examination will provide a summative evaluation of the overall ability and understanding of the students in the topics.</p>				Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed				a	b	c	d	Continuous Assessment	55%					1. Assignments, Project and Quiz	✓	✓	✓	✓	Examination	45%	✓	✓	✓		Total	100 %				
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<p>Student Study Effort Expected</p>	<p>Class contact:</p> <table border="1" data-bbox="376 1742 1473 1809"> <tr> <td data-bbox="376 1742 1150 1809"> <ul style="list-style-type: none"> ▪ Lectures / Tutorials / Labs </td> <td data-bbox="1150 1742 1473 1809" style="text-align: right;">39 Hrs.</td> </tr> </table> <p>Other student study effort:</p> <table border="1" data-bbox="376 1883 1473 2018"> <tr> <td data-bbox="376 1883 1150 1951"> <ul style="list-style-type: none"> ▪ Self-study and class preparation </td> <td data-bbox="1150 1883 1473 1951" style="text-align: right;">26 Hrs.</td> </tr> <tr> <td data-bbox="376 1951 1150 2018"> <ul style="list-style-type: none"> ▪ Assignment, Project, Quiz and Examination </td> <td data-bbox="1150 1951 1473 2018" style="text-align: right;">52 Hrs.</td> </tr> </table> <table border="1" data-bbox="376 2018 1473 2078"> <tr> <td data-bbox="376 2018 1150 2078">Total student study effort</td> <td data-bbox="1150 2018 1473 2078" style="text-align: right;">117 Hrs.</td> </tr> </table>				<ul style="list-style-type: none"> ▪ Lectures / Tutorials / Labs 	39 Hrs.	<ul style="list-style-type: none"> ▪ Self-study and class preparation 	26 Hrs.	<ul style="list-style-type: none"> ▪ Assignment, Project, Quiz and Examination 	52 Hrs.	Total student study effort	117 Hrs.																									
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**Reading List
and References**

Reference Books:

1. Chishti, Susanne and Barberis, Janos, *The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*, Wiley, 2016.
2. Schulte, Paul, *The Next Revolution in our Credit-Driven Economy: The Advent of Financial Technology*, Kindle Edition, Wiley, 2015.
3. Tavlas, Tolga, *Digital Banking Tips: Practical Ideas for Disruptors*, Kindle Edition, Amazon Digital Services, Inc., 2015.
4. Odame, Paul and Jubi, Gloria, *IT Financial Management: Corporate Financing, IT Value Realization Budgeting & Planning, ITIL Capacity Management*, Kindle Edition, FRENIQ BOOKS, 2015.
5. Taylor, Kevin C., *FinTech Law: A Guide to Technology Law in the Financial Services Industry*, Bloomberg BNA, 2014.
6. Khanna, Ayesha, *Straight Through Processing for Financial Services: The Complete Guide* (Complete Technology Guides for Financial Services), 1st Edition, Academic Press, 2007.
7. Freedman, David M. and Nutting, Matthew R., *A Brief History of Crowdfunding*, Retrieved Nov. 2015.
8. Lawton, Kelvin and Marom, Dan, *The Crowdfunding Revolution: How to Raise Venture Capital Using Social Media*, McGraw-Hill, 2013.
9. Allen, Franklin, McAndrews, James and Strahan, Philip, *E-Finance: An Introduction*, The Wharton School, University of Pennsylvania, 2001.
10. Dresner, Steven, *Crowdfunding: A Guide to Raising Capital on the Internet*, New Jersey-Wiley, 2014.