

Professional Certificate for ECF on Fintech – Module 4: Fundamental Fintech Tools and Applications Study Plan for Examination

Note: This study plan is a learning tool to provide you a study schedule with recommended activities. The main objective of it is to get you prepared for the examination with a structured plan to keep track your learning progress. You may flexibly adjust this study plan according to your knowledge, experience, enrolled training session, examination schedule and learning progress in order to fit your personal needs. You are also suggested to study the Recommended Readings listed below to equip yourself with the knowledge, skills and application.

Essential Readings – For learners to prepare for the examination

- (i) ECF-Fintech (Module 4) Study Guide
- (ii) McKinney, Wes (2017). Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython. O'Reilly Media
- (iii) Pandas [https://pandas.pydata.org/docs/getting_started/index.html]
- (iv) Kaggle [<https://www.kaggle.com/>]
- (v) Armbrust et al (2009). Above the Clouds: A Berkeley View of Cloud Computing. 25 pages.
[<https://www2.eecs.berkeley.edu/Pubs/TechRpts/2009/EECS-2009-28.pdf>]
- (vi) Virtualization Overview White Paper. 11 pages. [<https://www.vmware.com/pdf/virtualization.pdf>.]
- (vii) Cloudflare. What is the cloud? [<https://www.cloudflare.com/learning/cloud/what-is-the-cloud/>]
- (viii) Surianarayanan, Chellammal & Pethuru Raj Chelliah (2019). Essentials of Cloud Computing: A Holistic Perspective. Springer Nature.
- (ix) Androulaki, E., Barger, A., Bortnikov, V., Cachin, C., Christidis, K., De Caro, A., Enyeart, D., Ferris, C., Laventman, G., Manevich, Y., Muralidharan, S., Murthy, C., Nguyen, B., Sethi, M., Singh, G., Smith, K., Sorniotti, A., Stathakopoulou, C., Vukolić, M., ... Yellick, J. (2018). Hyperledger fabric. Proceedings of the Thirteenth EuroSys Conference. [<https://doi.org/10.1145/3190508.3190538>]

Supplementary Readings – For learners who would like to know more about the fundamental concepts/ theories of the topic

- (i) Stanfordonline. (2019, March 11). Stanford CS224N: NLP with Deep Learning
[<https://www.youtube.com/watch?v=8rXD5xhemo&list=PLoROMvodv4rOhcuXMZkNm7j3fVwBBY42z>. Youtube.]



- (ii) Ng, A. Machine learning [<https://www.coursera.org/learn/machine-learning>. Stanford Online, Coursera]
- (iii) Barroso, Luiz Andre & Holzle, Urs (2009). The Datacenter as a Computer, An Introduction to the Design of Warehouse-Scale Machines [<https://www.morganclaypool.com/doi/pdf/10.2200/S00193ED1V01Y200905CAC006>. Morgan & Claypool Publishers.]
- (iv) The Linux Foundation. (2021). Blockchain: Understanding Its Uses and Implications [<https://www.edx.org/course/blockchain-understanding-its-uses-and-implications>]
- (v) Murthy, M. (2018, April 18). Life cycle of an Ethereum transaction [<https://medium.com/blockchannel/life-cycle-of-an-ethereum-transaction-e5c66bae0f6e>.]
- (vi) Corda. (2020, July 30). What is Corda? [<https://www.corda.net/blog/what-is-corda/>]

Further Readings – For learners who would like to enhance the depth of breadth of their knowledge of the Module

- (i) Stanfordonline. (2019, March 21). Stanford CS230: Deep Learning [https://www.youtube.com/watch?v=PySo_6S4ZAg&list=PLoROMvodv4rOABXSygHTsbvUz4G_YQhOb. YouTube.]
- (ii) Geron, Aurelien (2019). Hands-On Machine Learning with Scikit-Learn Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems. O'Reilly Media
- (iii) Turnbull, James (2014). The Docker Book: Containerization is the new virtualization. James Turnbull
- (iv) Amazon Financial Services [<https://aws.amazon.com/financial-services/>]
- (v) Zastrin (2021). Ethereum Primer [<https://www.zastrin.com/courses/ethereum-primer/lessons/1-1>]

Time	Suggested Learning Hours	Activities	Materials	Progress (Not started/ in progress/ completed)	Remarks
2 weeks before Lesson	20 hours	<ul style="list-style-type: none"> • Receive and review the following documents: <ol style="list-style-type: none"> 1. Programme Handbook 2. Programme Brochure 3. Study Plan • Conduct self-assessment on the acquired 	<ul style="list-style-type: none"> • Programme Handbook • Programme Brochure • Study Plan 		



Time	Suggested Learning Hours	Activities	Materials	Progress (Not started/ in progress/ completed)	Remarks
		knowledge & skills against the learning outcomes <ul style="list-style-type: none">• Identify the learning gaps• Prepare questions related to training and examinations arrangement• Adjust the time of the study plan to fix your personal needs			
Kick-off session & First Session	2.5 hours	<ul style="list-style-type: none">• Attend the kick-off session• Attend the first training session and raise prepared questions for clarification• Jot down personal notes for revision	<ul style="list-style-type: none">• Kick-off PowerPoint slides• Study Guide (Chapter 1)		<ul style="list-style-type: none">• Please attend the training session on time
Second Session	2 hours	<ul style="list-style-type: none">• Attend the kick-off session• Attend the first training session and raise prepared questions for clarification• Jot down personal notes for revision	<ul style="list-style-type: none">• Kick-off PowerPoint slides• Study Guide (Chapter 1)		<ul style="list-style-type: none">• Please attend the training session on time



Time	Suggested Learning Hours	Activities	Materials	Progress (Not started/ in progress/ completed)	Remarks
1 week after the first & second session	20 hours	<ul style="list-style-type: none"> • Study ECF-Fintech Study Guide of Chapter 1 to self-assess your understanding of the contents and application • Prepare questions for trainer’s clarification • Study other relevant essential reading materials 	<ul style="list-style-type: none"> • Personal notes • ECF-Fintech Study Guide (Chapter 1) • All essential reading documents 		
Third session	2.5 hours	<ul style="list-style-type: none"> • Attend the third training session and raise prepared questions for clarification • Jot down personal notes for revision 	<ul style="list-style-type: none"> • ECF-Fintech Study Guide (Chapter 1) 		<ul style="list-style-type: none"> • Please attend the training session on time
Fourth session	2 hours	<ul style="list-style-type: none"> • Attend the fourth training session and raise prepared questions for clarification • Jot down personal notes for revision 	<ul style="list-style-type: none"> • ECF-Fintech Study Guide (Chapter 2) 		<ul style="list-style-type: none"> • Please attend the training session on time
1 week after the third & fourth session	20 hours	<ul style="list-style-type: none"> • Study ECF-Fintech Study Guide of Chapter 1 & 2 to self-assess your understanding of the contents and application • Prepare questions for trainer’s clarification • Study other relevant essential reading materials 	<ul style="list-style-type: none"> • Personal notes • ECF-Fintech Study Guide (Chapter 1 & 2) • All essential reading documents 		



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Fifth session	3 hours	<ul style="list-style-type: none">Attend the fifth training session and raise prepared questions for clarificationJot down personal notes for revision	<ul style="list-style-type: none">ECF-Fintech Study Guide (Chapter 2)		<ul style="list-style-type: none">Please attend the training session on time
Sixth session	3 hours	<ul style="list-style-type: none">Attend the sixth training session and raise prepared questions for clarificationJot down personal notes for revision	<ul style="list-style-type: none">ECF-Fintech Study Guide (Chapter 2)		<ul style="list-style-type: none">Please attend the training session on time
1 week after the fifth & sixth session	20 hours	<ul style="list-style-type: none">Study ECF-Fintech Study Guide Chapter 2 to self-assess your understanding of the contents and applicationPrepare questions for trainer's clarificationStudy other relevant essential reading documents	<ul style="list-style-type: none">Personal notesECF-Fintech Study Guide (Chapter 2)All essential reading documents		
Seventh session	3 hours	<ul style="list-style-type: none">Attend the seventh training session and raise prepared questions for clarificationJot down personal notes for revision	<ul style="list-style-type: none">ECF-Fintech Study Guide (Chapter 3)		<ul style="list-style-type: none">Please attend the training session on time
Eighth	3 hours	<ul style="list-style-type: none">Attend the eighth training session and raise	<ul style="list-style-type: none">ECF-Fintech Study Guide		<ul style="list-style-type: none">Please



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session		<p>prepared questions for clarification</p> <ul style="list-style-type: none"> Jot down personal notes for revision 	(Chapter 3)		attend the training session on time
1-2 weeks after the seventh & eighth session	20 hours	<ul style="list-style-type: none"> Study ECF-Fintech Study Guide Chapter 3 to self-assess your understanding of the contents and application Study HKMA website/ other relevant websites to access latest market update Share and discuss the learning experience with other learners to learn the real-life market practices Consult experienced fintech experts regarding real life market application Make enquiries to trainers via HKIB for clarification, if needed Attend relevant internal or external training sessions/ seminars/conferences/ talks to catch up new market practices 	<ul style="list-style-type: none"> Personal notes ECF-Fintech Study Guide (Chapter 3) All essential, supplementary and further reading documents listed at Programme Handbook Materials from relevant training sessions/ seminars/conferences Reference Links: HKMA's Guide to Enhanced Competency Framework on Fintech at https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2021/20211203e1.pdf 		



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3-5 weeks after the seventh & eighth training session	25 hours	<ul style="list-style-type: none"> Share and discuss the learning with other learners or experts to learn the real-life market practices Attend relevant internal or external training sessions/ seminars/conferences to catch up new market practices Consolidate common asked questions for further reflection Make enquiries to trainers via HKIB for clarification, if needed Study sample examination questions 	<ul style="list-style-type: none"> ECF-Fintech Study Guide All essential, supplementary and further reading documents listed at Programme Handbook Materials from relevant training sessions/ seminars/ Conferences Sample examination questions, if any 		
6-9 weeks after the seventh & eighth training session	35 hours	<ul style="list-style-type: none"> Go through the materials again for identifying learning gap and gaining better understanding on the application at their workplace or at a similar working environment Complete all the recommended readings and have good understanding on the knowledge and application Study HKMA website/ other relevant websites to access latest market update Review the consolidated common asked questions for further reflection 	<ul style="list-style-type: none"> ECF-Fintech Study Guide All essential, supplementary and further reading documents listed at Programme Handbook Materials from relevant training sessions/ seminars/ Conferences 		



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		<ul style="list-style-type: none">• Make enquiries to trainers via HKIB for clarification, if needed			
1 - 2 week before Exam	16 hours	<ul style="list-style-type: none">• Go through all the learning materials again to familiarize with the subject content• Revise the Chapter Summary and Reference Summary (Chapter 1 - 3)• Check the exam notice for the exam date, exam time and exam venue	<ul style="list-style-type: none">• Personal notes• Study Guide• All relevant teaching and learning materials• Sample examination questions, if any• Examination Attendance Notice		
Exam	3 hours	<ul style="list-style-type: none">• Attend examination			
Total:	200 hours				