

NUS School of Computing
Master of Science in Digital Financial Technology (MSc DFinTech)
(Effective from AY2022/2023)

Elective Modules (12MC)

Students are strongly encouraged to take the elective modules from one vertical track, but are not restricted to do so.

Vertical #1. Computing Technologies

1. CS5224 (4MC) Cloud Computing
2. CS5231 (4MC) Systems Security
3. CS5321 (4MC) Network Security
4. CS5331 (4MC) Web Security
5. CS5421 (4MC) Database Applications Design and Tuning
6. CS5439 (4MC) Software Security
7. IS4234 (4MC) Compliance and Regulation Technology
8. IS5008 (4MC) Technology Risk and Cyber Resilience
9. IS5009 (4MC) Topics in Financial Technology Solutions
10. FT5008 (2MC) Contemporary Topics in Blockchain Applications

Vertical #2. Financial Data Analytics and Intelligence

1. CS5242 (4MC) Neural Networks and Deep Learning
2. CS5246 (4MC) Text Processing on the Web
3. CS5339 (4MC) Theory and Algorithms for Machine Learning
4. CS5344 (4MC) Big-Data Analytics Technology
5. CS5446 (4MC) AI Planning and Decision Making
6. IS5006 (4MC) Intelligence Systems Deployment
7. IS5126 (4MC) Hands-on with Applied Analytics
8. IS5152 (4MC) Data-Driven Decision Making
9. FT5009 (2MC) Contemporary Topics in Financial Data Analytics

Vertical #3. Digital Financial Transactions and Risk Management

1. BMF5342 (4MC) Technological Disruptions in Finance and Data Analytics
2. BMF5346 (4MC) Venture Capital and Private Equity
3. BMF5353 (4MC) Applied Investment Strategies
4. BMF5354 (4MC) Financial Regulation in a Digital Age
5. BMF5355 (4MC) Financial Institutions, Markets, Systems and Technology
6. BMF5358 (4MC) Entrepreneurship in Financial Technology
7. BT4013 (4MC) Analytics for Capital Market Trading and Investment
8. BT4016 (4MC) Risk Analytics for Financial Services
9. CS5233 (4MC) Simulation and Modelling Techniques
10. FE5103 (4MC) Equity Products and Exotics
11. FE5224 (2MC) Current topics in Applied Risk Management
12. FE5227 (2MC) Commodities Fundamentals and Modelling

****Important: Modules in this list may be subject to change as decided by the Departments.***