

Programme & Curriculum Structure

The MSc in FinTech Programme is an intensive **1-year full-time or 2-year part-time** programme by coursework taught in 3 trimesters per year. The curriculum consists of two specialisations: *Artificial Intelligence* and *Operations and Compliance*. The courses in the MSc in FinTech programme are delivered in intensive periods of 7 weeks. In other words, each trimester is split into two halves. All courses are conducted at **NTU (main campus)** in the evenings of weekdays or Saturdays.

The programme consists a total of **33 Academic Units (AUs)**, with 21 AUs of compulsory modules, 6 AUs from the chosen specialisation's electives, and 6 AUs from other electives:

The requirements for graduation are as follow:

1. Successful completion of all requirements as prescribed by the programme of study; and
2. A minimum CGPA of 2.50 is attained at the completion of the programme of study.

COMPULSORY COURSES

MH8801 Introduction to FinTech (1.5AU)
MH8802 FinTech Ecosystem and Innovations (1.5AU)
MH8803 Principles of Finance and Risk Management (1.5AU)
MH8131 Probability and Statistics (1.5AU)
MH6151 Data Mining (3AU)
MH8804 Quantitative Methods in Finance (1.5AU)
MH8805 Algorithmic Trading and Robo-Advisors (1.5AU)
MH6808 Blockchain Systems and Applications (3AU)
MH6809 Practicum (6AU)

ARTIFICIAL INTELLIGENCE PRESCRIBED ELECTIVE COURSES

MH8101 Operations Research I (1.5AU)
MH8811 Python Programming (1.5AU)
MH6812 Advanced Natural Language Processing with Deep Learning (3 AU)

OPERATIONS AND COMPLIANCE PRESCRIBED ELECTIVE COURSES

MH8822 Regulatory Technology (1.5AU)
MH8821 Anti-Financial Crime and Compliance (1.5AU)
MH8331 Financial and Risk Analytics I (1.5AU)
MH8332 Financial and Risk Analytics II (1.5AU)

UNRESTRICTED ELECTIVE COURSES

MH8102 Operations Research II (1.5AU)
MH8141 Time Series Analysis (1.5AU)
MH8341 Data Management and Business Intelligence (1.5AU)
MH6301 Information Retrieval and Analysis (3AU)
MH8831 Applied Cryptography

Note: Prescribed Elective courses of one specialisation could be Unrestricted Elective courses of another specialisation. On average, full-time students take **4-5** classes a week and part-time students take **2-3** classes a week.