## **Department of Mathematics**

## Sample Study Plan for Major in Quantitative Finance (SEP in year 3 sem 1) (For students matriculated in AY2021/2022 or after)



College of Humanities and Sciences

| Year 1  |                            | Year 2                              |  | Year 3 |   | Year 4   |  |
|---|----------------------------|-------------------------------------|--|--------|---|--|--|
| Sem 1   | Sem 2                      | Sem 1                               | Sem 2  | Sem 1  | Sem 2   | Sem 1  | Sem 2  |
| HSA1000 Asian Interconnections<br>HSH1000 The Human Condition                                 |                            | Scientific Inquiry II               | Artificial<br>Intelligence                           | UE3    | Interdisciplinary I   | Interdisciplinary II   | QF4104 Project in<br>Quantitative Finance<br>and Fintech |
| HSI1000 How Science Works, Why<br>Science Works<br>HSS1000 Understanding Social<br>Complexity |                            | Digital Literacy<br>(CS1010S)       | Communities and<br>Engagement                        | UE4    | UE8   | QF4102<br>Financial Modelling<br>and Computation             | UE9  |
| Data Literacy<br>DTK1234 Design Thinking  |                            | Writing<br>(SP1541)                 | UE2  | UE5    | QF3103<br>Advanced<br>Mathematics in<br>Quantitative<br>Finance | One of the following<br>modules: QF4205,<br>DSE4211, DSE4212 | UE10   |
| UE1   | MA2001<br>Linear Algebra I | MA2104<br>Multivariable<br>Calculus | MA2213<br>Numerical Analysis<br>I                    | UE6    | QF2103<br>Computing for<br>Quantitative<br>Finance              | QF4103<br>Mathematical<br>Models of Financial<br>Derivatives | UE11   |
| QF1100<br>Introduction to<br>Quantitative<br>Finance  | MA2002<br>Calculus         | MA2116/ST2131<br>Probability        | QF2104<br>Fundamentals of<br>Quantitative<br>Finance | UE7    | QF3101<br>Investment<br>Instrument and<br>Risk Management       | ST3131<br>Regression<br>Analysis                             | UE12   |

**Note:** 1. Recommended semester for SEP is year 3 semester 1

2. To find out how HSA1000, HSH1000, HSI1000, HSS1000 are pre-allocated, click <u>here</u>.

3. Students have to complete all CHS Common Curriculum courses in their first two years except for the following 3 courses:

• Communities and Engagement course – can be taken from Years 2 to 4

• Two Interdisciplinary courses – can be taken in Years 3 and 4