(For students admitted in 2016-17 under the 4-year degree)

## BSc in Mathematics and Economics

Students taking the BSc Program in Mathematics and Economics as their first major are exempted from the School Requirements. However, they are still required to complete the University requirements in addition to the major requirements for graduation. For details please refer to the respective sections on this website.

Some courses used to fulfill Major Requirements can also fulfill University Common Core Requirements.
Students may reuse a maximum of 9 credits of these courses to count towards Common Core Requirements.
Students may use no more than 6 credits earned from courses offered in pure online delivery mode to satisfy the graduation requirements of a degree program. This 6 -credit limit does not apply to credits obtained through the credit transfer procedures of the University.

For students graduating with an additional major, they must take all the requirements specified for that major, within which they must complete at least 20 single-counted credits. These 20 credits cannot be used to fulfill any other requirements for graduation except for the 120 -credit degree requirement.

## Major Requirements

## Required Course(s)

|  |  |  | Credit(s) attained |
| :---: | :---: | :---: | :---: |
| MATH |  | Note: [(MATH 1012 OR MATH 1013 OR MATH 1023) AND (MATH 1014 OR MATH 1024)] OR [MATH 1020] | 4-7 |
| MATH | 1012 | Calculus IA | 4 |
| MATH | 1013 | Calculus IB | 3 |
| MATH | 1014 | Calculus II | 3 |
| MATH | 1020 | Accelerated Calculus | 4 |
| MATH | 1023 | Honors Calculus I | 3 |
| MATH | 1024 | Honors Calculus II | 3 |
| MATH | 2023 | Multivariable Calculus | 4 |
| MATH |  | Note: MATH 2033 OR MATH 2043 | 4 |
| MATH | 2033 | Mathematical Analysis | 4 |
| MATH | 2043 | Honors Mathematical Analysis | 4 |
| MATH |  | Note: MATH 2121 OR MATH 2131 | 4 |
| MATH | 2121 | Linear Algebra | 4 |
| MATH | 2131 | Honors in Linear and Abstract Algebra I | 4 |
| MATH | 2411 | Applied Statistics | 4 |
| MATH |  | Note: MATH 3033 OR MATH 3043 | 4 |
| MATH | 3033 | Real Analysis | 4 |
| MATH | 3043 | Honors Real Analysis | 4 |


| MATH/ECON |  |
| :---: | :---: |
| MATH | 4994 |
| MATH | 4999 |
| ECON | 4670 |


| ECON |  |
| :--- | :--- |
| ECON | 2103 |
| ECON | 2113 |
| ECON | 3113 |
| ECON | 3123 |
| ECON | 3133 |
| ECON | 3143 |
| ECON | 3334 |


| SCIE/SBMT |  |
| :---: | :---: |
| SCIE | 1000 |
| SBMT | 1111 |


| ACCT | 2010 |
| :--- | :--- |
| FINA | 2203 |

COMP
COMP 1021
COMP 1022P
COMP 1022Q
LABU 2040
LABU 2060

Note: MATH 4994 OR MATH 4999 OR ECON 4670 0-3
Capstone Project in Mathematics and Economics 3
Independent Capstone Project 3
Economics Research and Communication 0
Note: ECON 2103 OR ECON 21133
Principles of Microeconomics 3
Microeconomics 3
Microeconomic Theory I 4
Macroeconomic Theory I 3
Microeconomic Theory II 4
Macroeconomic Theory II 4
Introduction to Econometrics 4
Note: SCIE 1000 OR SBMT 11110
Science School Induction 0
Business Student Induction 0
Principles of Accounting I 3
Fundamentals of Business Finance 3
Note: COMP 1021 OR COMP 1022P OR COMP 1022Q 3
Introduction to Computer Science 3
Introduction to Computing with Java 3
Introduction to Computing with Excel VBA 3
Business Case Analyses 3
Effective Communication in Business 3

Minimum credit(s) required 6 3 list)
Statistical Inference 3
Stochastic Modeling 3
MATH 3425
MATH 3426
MATH 4321
MATH 4335
MATH 4422
MATH 4423
MATH 4427
MATH 4511
MATH 4512
MATH 4513

|  | Minimum <br> credit(s) <br> required |
| :--- | :---: |
| MATH Depth Electives (2 courses from the specified elective | 6 |
| list) | 3 |
| Statistical Inference | 3 |
| Stochastic Modeling | 3 |
| Sampling | 3 |
| Game Theory | 3 |
| Introduction to Optimization | 3 |
| Data Analysis | 3 |
| Nonparametric Statistics | 3 |
| Loss Models and their Applications | 3 |
| Quantitative Methods for Fixed Income Derivatives | 3 |
| Fundamentals of Mathematical Finance | 3 |


| ECON |  | ECON Depth Electives (2 courses from the specified elective list) | 8 |
| :---: | :---: | :---: | :---: |
| ECON | 4114 | Industrial Organization and Competitive Strategy | 4 |
| ECON | 4234 | Labor Economics and Human Resources | 4 |
| ECON | 4244** | Economics of Human Behavior | 4 |
| ECON | 4254 | Law and Economics | 4 |
| ECON | 4284 | Econometrics for Cross-Section and Panel Data | 4 |
| ECON | 4304 | Time Series Econometrics and Business Forecasting | 4 |
| ECON | 4334 | Money and Banking | 4 |
| ECON | 4364 | International Trade and Investment | 4 |
| ECON | 4374 | International Macroeconomics and Finance | 4 |
| ECON | 4384 | Globalization: Trade, Investment and Exchange Rate | 4 |
| ECON | 4434 | Economic Development and Growth | 4 |
| ECON | 4474 | Hong Kong's Economy | 4 |
| ECON | 4584 | Topics in Economic Growth | 4 |
| SSCI |  | Science Foundation course (2 courses from the specified elective list) | 5 |
| CHEM | 1004 | Chemistry in Everyday Life | 3 |
| CHEM | 1010 | General Chemistry IA | 3 |
| CHEM | 1020 | General Chemistry IB | 3 |
| CHEM | 1030 | General Chemistry II | 3 |
| LIFS | 1030 | Environmental Science | 3 |
| LIFS | 1901 | General Biology I | 3 |
| LIFS | 1902 | General Biology II | 3 |
| LIFS | 1930 | Nature of Life Sciences | 3 |
| LIFS | 2210 | Biochemistry I | 3 |
| PHYS | 1001 | Physics and the Modern Society | 3 |
| PHYS | 1111 | General Physics I | 3 |
| PHYS | 1112 | General Physics I with Calculus | 3 |
| PHYS | 1114 | General Physics II | 3 |
| PHYS | 1312 | Honors General Physics I | 3 |
| PHYS | 1314 | Honors General Physics II | 3 |

**Remarks on course(s):

- ECON 4244: The course was last offered in 2012-13 and was deleted subsequently.

