(For students admitted in 2017-18 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.

Major Requirements

Required Course(s)

| | | | | Credit(s) attained |
|-----------|-----|------|---|--------------------|
| MATH | | | Note: [(MATH 1012 <u>OR</u> MATH 1013 <u>OR</u> MATH 1023) <u>AND</u> (MATH 1014 <u>OR</u> MATH 1024)] <u>OR</u> [MATH 1020] | 4-7 |
| MA | ΛTH | 1012 | Calculus IA | 4 |
| MA | ΛTH | 1013 | Calculus IB | 3 |
| MA | ΛTH | 1014 | Calculus II | 3 |
| MA | λTH | 1020 | Accelerated Calculus | 4 |
| MA | λTH | 1023 | Honors Calculus I | 3 |
| MA | TH | 1024 | Honors Calculus II | 3 |
| MATH | | 2023 | Multivariable Calculus | 4 |
| MATH | | | Note: MATH 2033 OR MATH 2043 | 4 |
| MA | TH | 2033 | Mathematical Analysis | 4 |
| MA | ΛTH | 2043 | Honors Mathematical Analysis | 4 |
| MATH | | | Note: MATH 2121 <u>OR</u> MATH 2131 | 4 |
| MA | TH | 2121 | Linear Algebra | 4 |
| MA | ΛTH | 2131 | Honors in Linear and Abstract Algebra I | 4 |
| MATH 2411 | | 2411 | Applied Statistics | 4 |
| MATH | | | Note: MATH 3033 <u>OR</u> MATH 3043 | 4 |
| MA | ΛTH | 3033 | Real Analysis | 4 |
| MA | ΛTH | 3043 | Honors Real Analysis | 4 |
| MATH/ECON | | | Note: MATH 4994 <u>OR</u> MATH 4999 <u>OR</u> ECON 4670 | 0-3 |
| MA | ΛTH | 4994 | Capstone Project in Mathematics and Economics | 3 |
| MA | ΛTH | 4999 | Independent Capstone Project | 3 |
| EC | ON | 4670 | Economics Research and Communication | 0 |
| ECON | | | Note: ECON 2103 <u>OR</u> ECON 2113 | 3 |
| EC | ON | 2103 | Principles of Microeconomics | 3 |
| EC | ON | 2113 | Microeconomics | 3 |
| | | | | |

| ECON | 3113 | Microeconomic Theory I | 4 |
|-----------|-------|---|---|
| ECON | 3123 | Macroeconomic Theory I | 3 |
| ECON | 3133 | Microeconomic Theory II | 4 |
| ECON | 3143 | Macroeconomic Theory II | 4 |
| ECON | 3334 | Introduction to Econometrics | 4 |
| SCIE/SBMT | | Note: SCIE 1000 OR SBMT 1111 | 0 |
| SCIE | 1000 | Science School Induction | 0 |
| SBMT | 1111 | Business Student Induction | 0 |
| ACCT | 2010 | Principles of Accounting I | 3 |
| FINA | 2203 | Fundamentals of Business Finance | 3 |
| COMP | | Note: COMP 1021 OR COMP 1022P OR COMP 1022Q | 3 |
| COMP | 1021 | Introduction to Computer Science | 3 |
| COMP | 1022P | Introduction to Computing with Java | 3 |
| COMP | 1022Q | Introduction to Computing with Excel VBA | 3 |
| LABU | 2040 | Business Case Analyses | 3 |
| LABU | 2060 | Effective Communication in Business | 3 |

Elective(s)

| | | | credit(s) required | |
|------|--------|---|-----------------------|--|
| MATH | | MATH Depth Electives (2 courses from the specified elective list) | 6 | |
| MATH | 3423 | Statistical Inference | 3 | |
| MATH | 3425 | Stochastic Modeling | 3 | |
| MATH | 3426 | Sampling | 3 | |
| MATH | 4321 | Game Theory | 3 | |
| MATH | 4335 | Introduction to Optimization | 3 | |
| MATH | 4422 | Data Analysis | 3 | |
| MATH | 4423 | Nonparametric Statistics | 3 | |
| MATH | 4427 | Loss Models and Credibility Theory | 3 | |
| MATH | 4511 | Quantitative Methods for Fixed Income Derivatives | 3 | |
| MATH | 4512 | Fundamentals of Mathematical Finance | 3 | |
| MATH | 4513 | Life Contingencies Models and Insurance Risk | 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 | |
| | | | | |

Minimum

| | 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 |
| S | 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 | 2 |
| | 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.