LSU
Department of Finance

LSU
Department of Mathematics

Mathematics and a Second Discipline: Finance

QUANTITATIVE ASSET MANAGEMENT

This program is designed to prepare mathematics majors for a quantitative career in Asset Management, which requires intellectual ability and analytical skills in applied mathematics, statistical/econometric modeling, machine learning techniques, and computer science. Quantitative analysts, who build models to find patterns and extract signals in financial markets, are called “QUANTS.” Students may ultimately seek employment with asset management firms such as mutual funds, hedge funds, and ETF providers. In addition, there will be opportunities in quantitative research departments at major financial institutions.

Following this particular track for mathematics majors with a second discipline, you will be advised in both Mathematics and Finance. The Director of Undergraduate Studies & Research in the Department of Finance is the advisor to students in the *Mathematics and a Second Discipline: Finance track*. His contact information is:

Kurtay Ogunc, PhD, MBA, MApStat
Email: kurtay@lsu.edu
Office: 2904 Business Education Complex

This program is rigorous but rewarding in the long run. It provides a transdisciplinary approach to master problem solving by combining knowledge from mathematics, statistics, finance, economics and data science. After you graduate from this prestigious program, you will for sure be an attractive job candidate in the field of quantitative asset management.

Required courses for this program track:

- MATH 1550, MATH 1552, MATH 2057, MATH 2090, and MATH 2060
- One of MATH 2020, MATH 2025, or MATH 2030
- MATH 3050, MATH 3355, MATH 4031, MATH 4058, MATH 4340, and MATH 4023 or MATH 4200
- ECON 2030, ECON 4630, ECON 4633
- FIN 3826, FIN 4820, FIN 4828, FIN 4850
- EXST 2201, EXST 3201, EXST 4012

Semester 1

MATH 1550 (5)
Approved Elective (4) - EXST 2201
ENGL 1001 English Composition (3)
General Education Course - Humanities (3)

Total Semester Hours: 15

Semester 2

MATH 1552 (4)
Foreign Language (4)
General Education Course - Social Sciences (2000-level) (3)[1] - ECON 2030
Approved Elective (4) - EXST 3201

Total Semester Hours: 15

Semester 3

MATH 2057 (3)
MATH 3050 (5)[2]
MATH 2020, MATH 2025, or MATH 2030 (3)
General Education Course - Natural Sciences (3)[3]
Natural Sciences Lab (0-1)[3]

Total Semester Hours: 14-15

Semester 4

MATH 2090 (4)
Area of Concentration Course (3) - MATH 3355
Second Discipline Course (3) - FIN 3826
General Education Course - Social Sciences (3)[4]
ENGL 2000 English Composition (3)

Total Semester Hours: 16

[1] The two general education social sciences may be the sequence ECON 2000 and ECON 2010 or ECON 2030 and any general education social science.
[2] Satisfies the 2019-2020 requirement of "any math course numbered 2000 or higher" and two hours of electives.
[3] The courses selected to meet this Natural Science requirement must be chosen from courses offered by departments in the College of Science and come from the approved list.
[4] The two general education social sciences may be the sequence ECON 2000 and ECON 2010 or ECON 2030 and any general education social science.

Semester 5

Second Discipline Course (3) - FIN 4820
Approved Elective (3) - ECON 4630
MATH 4031
Approved Elective (3) - MATH 2105/EXST 2105
General Education Course - Humanities (English/honors 2000-level) (3)

Total Semester Hours: 15

Semester 6

Second Discipline Course (3) - FIN 4850
Second Discipline Elective (3)[5] - FIN 3460, FIN 3840, FIN 3900[6], FIN 4840 or FIN 4910[7]
Approved Elective (3) - EXST 4012
Approved Elective (3) - ECON 4633
Area of Concentration Course (3) - MATH 4058

Total Semester Hours: 15

Semester 7

Second Discipline Course (3) - FIN 4828
Second Discipline Elective (3) - FIN 3460, FIN 3840, FIN 3900, FIN 4840 or FIN 4910
Area of Concentration Course (3) - MATH 4340
Approved Elective (3) - EXST 7151[8] (Strongly recommended)
General Education Course - Natural Sciences (3)[9]
Natural Sciences Lab (0-1)[9]

Total Semester Hours: 15-16

[5] Program advisor will meet with each student to figure out which electives are suitable based upon availability of courses as well as research interest of the student.
[6] Students may take FIN 3900 for a maximum of six credit hours.
[7] Students may take FIN 4910 for a maximum of six credit hours when topics vary.
[8] The Request for Graduate Credit for LSU Seniors Program form must be submitted to The Graduate School no later than the last day to add courses for the semester in which graduate credit is requested and student's last semester of enrollment as an undergraduate. Email submission to gradsvcs@lsu.edu.
[9] The courses selected to meet this Natural Science requirement must be chosen from courses offered by departments in the College of Science and come from the approved list.

Semester 8

Second Discipline Elective (3) - FIN 3460, FIN 3840, FIN 3900, FIN 4840 or FIN 4910
MATH 4023 or MATH 4200 (3)
General Education Course - Arts (3)
General Education Course - Natural Sciences (3)[9]
Natural Sciences Lab (2-1)[9]
MATH 2060 (1)

Total Semester Hours: 14-15