Mathematical Finance

Faculty

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Overview

The Mathematical Finance major is an interdisciplinary study of financial markets. Increasingly, firms of all types, and financial institutions in particular, rely on sophisticated mathematical models to understand financial markets, to evaluate financial instruments, and to measure and manage risk. To understand and utilize these models, students need specific capabilities that can be only gained from study in the fields of economics, finance, and mathematics. The major is specifically designed for students considering graduate studies and careers in Finance, Applied Financial Economics, Mathematical Finance, Applied Mathematics, or Actuarial Science.

Requirements

The Major

The requirements for the degree of Bachelor of Science with a major in Mathematical Finance are as follows:

1. Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ACCT 1301</td>
<td>Fundamentals of Financial Accounting</td>
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<tr>
<td>FNCE 3301</td>
<td>Fundamentals of Financial Management</td>
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<tr>
<td>ECON 1311</td>
<td>Principles of Microeconomics</td>
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<tr>
<td>ECON 1312</td>
<td>Principles of Macroeconomics</td>
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</table>
### Courses

**MFIN-3-71 Internship**

Internships may be arranged with businesses, nonprofit institutions, and government agencies. The job must include analysis based on tools learned in the course of completing the MFIN major. The workload requirements are expected to be similar to those of typical MFIN courses carrying the same number of hours of credit. Must be taken pass/fail. Prerequisites: ACCT 1301, ECON 1312, MATH 1312 and permission of the program chair.