# M.S. in Finance & M.S. in Business Analytics

## Joint Degree Plan of Study

### Fall of 1st year (16 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA:8130:0701 or 801* Business Communication</td>
<td>1</td>
</tr>
<tr>
<td>MBA:8140:0800 Corporate Financial Reporting</td>
<td>3</td>
</tr>
<tr>
<td>MBA:8180:0800 Managerial Finance</td>
<td>3</td>
</tr>
<tr>
<td>MSCI:6050:0700 Data Management and Visual Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MSCI:6060:0700 Data Programming in R</td>
<td>3</td>
</tr>
<tr>
<td>MSCI:9100:0700 or 0800* Data and Decisions</td>
<td>3</td>
</tr>
</tbody>
</table>

* The teams you will work with in MBA:8130 and MSCI:9100 are the same so you need to be in coordinating sections (701&700 or 801&800). If waiving MSCI:9100, select either MBA:8130 section.

### Spring of 1st year (16 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MBA:8130:0702 or 802 Business Communication</td>
<td>1</td>
</tr>
<tr>
<td>FIN:9200:0800 Portfolio Management</td>
<td>3</td>
</tr>
<tr>
<td>MSCI:6070 Data Science</td>
<td>3</td>
</tr>
<tr>
<td>Elective 1 or FIN experiential course (see below)</td>
<td>3</td>
</tr>
<tr>
<td>Elective 2 or MSCI:9110 Advanced Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Fall of 2nd year (16 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA:8130:0703 or 803 Business Communication</td>
<td>1</td>
</tr>
<tr>
<td>MBA:8170:0800 International Environment of the Firm</td>
<td>3</td>
</tr>
<tr>
<td>FIN:9210 Derivatives and Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>FIN:9220 Fixed Income</td>
<td>3</td>
</tr>
<tr>
<td>FIN:9240 International Finance</td>
<td>3</td>
</tr>
<tr>
<td>MSCI:6120 Analytics Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

### Spring of 2nd year (15 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN:9300:0800 Corporate Investment and Financing</td>
<td>3</td>
</tr>
<tr>
<td>Elective 1 or FIN experiential course</td>
<td>3</td>
</tr>
<tr>
<td>Elective 2 or MSCI:9110 Advanced Analytics</td>
<td>3</td>
</tr>
<tr>
<td>Elective 3</td>
<td>3</td>
</tr>
<tr>
<td>Elective 4</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL: 63 semester hours**

### At least one Finance experiential elective must be selected from this list:

- FIN:9390 Applied Financial Analysis—Industry Project (Fall)
- FIN:9225 Applied Fixed Income Analysis (Fall or Spring)
- FIN:9250 and FIN:9260 Applied Securities Analysis—Henry Fund (spring and fall enrollment required, 3 sh each)
- FIN:9391 Thesis in Business (any semester, individually arranged with a faculty member)

### Course waivers

Waiver of a course does not reduce credit hours; the waived course is replaced by an additional elective. To receive a waiver, contact your advisor prior to the start of the first semester. Waivers may be available as follows:

- **MBA:8180 Managerial Finance**: finance majors with a minimum 3.3 major GPA or with CFA level 1.
- **MBA:8140 Corporate Financial Reporting**: accounting or finance majors with a minimum 3.3 major GPA or CPA or CFA level 1.
- **MBA:8170 International Environment of the Firm**: undergraduate economics majors with a minimum 3.3 major GPA.
- **MSCI:9100 Data and Decisions**:

  - Tippie undergraduate: the student received a grade of B or better in one of the following courses and an A– or better in at least one:
    - MSCI:2800 Business Analytics or ECON:2800 AND
    - Another class that uses Excel and statistics, including MKTG:3100 Marketing Research, ACCT:4100 Auditing, MSCI:3500 Data Mining, MSCI:3800 Optimization and Simulation Modeling, or ECON:3355 Econ and Business Forecasting. Request approval for additional coursework from advisor.
  - Students from other colleges or majors, please contact your advisor to inquire about a possible waiver.

Finance undergraduate majors:

One waiver from the following is allowed if you had an A– or better in the following Tippie undergrad course:

- MSCI:3200 Database Management (minimum grade A-) waives MSCI:6050 Data Management & Visual Analytics
- MSCI:3250 Data Wrangling (minimum grade A-) waives MSCI:6060 Data Programming in R
- MSCI:3500 Data Mining (minimum grade A-) waives MSCI:6070 Data Science

For non-Tippie students, a similar waiver may be possible if review of a submitted syllabus demonstrates a comparable course and an A-or better is received.

5.6.2019
M.S. in Finance
Pre-approved electives

Registering: Log into MyUI (https://myui.uiowa.edu/my-ui/home.page) with your HawkID and password. Click on Courses/Registration in the yellow bar at the top and search for courses. Click the Enroll button to register.

Schedule Advising Meeting: MyUI / Student Information / My Appointments / Select Advisor and Choose a Time

Degree Audit: Academic planning tool to review progress toward degree completion. MyUI / Student Information / Degree Audit. IP means in progress. + will show once completed.

Electives choices: MFin/MSBA joint degree students can select from any of the pre-approved electives from either master’s list to fulfill the four elective courses required.

To request that another course not on this list count toward your master’s coursework, please contact your academic advisor. Note that courses considered for elective hours must be quant/tech courses (i.e. math, stats, accounting, analytics, computer science, physics, engineering, etc.).

Consult MyUI to see if a course is offered in any given semester, check that you meet pre-requisites and that electives do not conflict with required course timing. Semester courses are offered is subject to change.

See next page for MSBA approved electives.

Finance Approved Electives

FALL
ACCT:9120 Design and Use of Cost Management Systems
ACCT:9130 Financial Reporting: Theory and Practice
CS:4400 Database Systems
CS:5110 Introduction to Informatics
FIN:9140 Corporate and Financial Risk Management
FIN:9230 Real Estate Finance and Investments
FIN:9280 Global Structured Finance
FIN:9310 Corporate Financial Strategy
FIN:9330 Investment Banking
MSCI:6050 Data Management and Visual Analytics
MSCI:6060 Data Programming with R
MSCI:6140 Information Visualization
STAT:4100 Mathematical Statistics I

SPRING
ACCT:9030 Financial Accounting Standards & Analysis*
Strongly recommended
ACCT:9050 Taxes and Business Strategy
CS:4400 Database Systems
FIN:4030 Securities Industry Essentials Exam Prep
FIN:9330 Investment Banking
FIN:9350 Wealth Management
ISE:6760 Pattern Recognition for Financial Data
ISE:6780 Financial Engineering and Optimization
MSCI:6070 Data Science
MSCI:9110 Advanced Analytics
MSCI:9210 Intro to Modeling with VBA
STAT:4101 Mathematical Statistics II

*Strongly recommended courses are regularly offered. Students are encouraged to complete these courses in order to meet the academic standards of the program.
### Fall

- BIOS:5310/STAT:5810 Research Data Management
- CS:3210 Programming Languages and Tools
- CS:5110 Intro to Informatics
- ECON:5805 Statistics for Economics
- EPIID:5200 Principles of Public Health Informatics
- GEOG:3520 GIS for Environmental Studies
- GEOG:4150 Health and Environment: GIS Applications
- GEOG:4580 Intro to Geographic Databases
- ISE:3600 Quality Control
- ISE:4172 Big Data Analytics
- ME:4111 Scientific Computing and Machine Learning
- ME:4150 Artificial Intelligence in Engineering
- MSCI:6110 Big Data Management and Analytics (for 2nd years due to pre-reqs)
- MSCI:6140 Information Visualization
- MSCI:6210 Data Leadership and Management
- PHYS:4905 Special Topics in Physics: Scientific Computing Using Phyton
- POLI:3001 Hawkeye Poll
- POLI:7002 Topics Methodology: Text as Data
- PSQF:6243 Intermediate Statistical Methods
- PSQF:6246 Design of Experiments
- STAT:4100 Mathematical Statistics I
- STAT:5400 Computing in Statistics
- URP:6200 Analytic Methods in Planning I

### Spring

- ACCT:9170 Advanced Accounting Analytics
- BIOS:5120 Regression Modeling & ANOVA in Health Sciences
- BIOS:5310 Research Data Management
- CS:4420 Artificial Intelligence
- CS:4470 Health Data Analytics
- ECON:4800 Econometric Analysis
- ECON:5800 Econometrics
- GEOG:3540 Intro to Geographic Visualization
- MSCI:4280 Data Security
- MSCI:6100 Text Analytics
- MSCI:9210 Intro to Modeling with VBA
- PSQF:6209 Survey Research and Design
- PSQF:6243 Intermediate Statistical Methods
- PSQF:6250 Computer Packages for Statistical Analysis
- STAT:4101 Mathematical Statistics II
- STAT:5101 Statistical Inference II
- STAT:5810 Research Data Management
- URP:6225 Applied GIS for Planners

### Research/PhD oriented

- CS:5430 Machine Learning
- ISE:6380 Deep Learning
- ISE:6720 Nonlinear Optimization
- ISE:6780 Financial Engineering and Optimization
- ME:4111 Scientific Computing and Machine Learning
- MSCI:6500 Social Network Analytics
- STAT:6560 Applied Time Series Analysis
- STAT:7400 Computer Intensive Statistics