M.S. in Business Analytics (Career)

Plan of Study

<table>
<thead>
<tr>
<th>Fall (13 s.h.)</th>
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<tbody>
<tr>
<td>MSCI:9100:0700 Data and Decisions</td>
<td>3 sh</td>
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<tr>
<td>MSCI:6050:0700 or 800 Data Management and Visual Analytics</td>
<td>3</td>
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<tr>
<td>MSCI:6060:0700 Data Programming in R</td>
<td>3</td>
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<tr>
<td>Elective 1 (see next page for list of approved electives)</td>
<td>3</td>
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<tr>
<td>MBA:8130:701 Business Communication</td>
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<th>Spring (13 s.h.)</th>
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<tr>
<td>MSCI:9110 Advanced Analytics</td>
<td>3</td>
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<tr>
<td>MSCI:6070 Data Science</td>
<td>3</td>
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<tr>
<td>Elective 2</td>
<td>3</td>
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<tr>
<td>Elective 3</td>
<td>3</td>
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<tr>
<td>MBA:8130:0702 Business Communication (repeated)</td>
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<tr>
<td>MSCI:6120 Analytics Experience</td>
<td>3</td>
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<td>Elective 4</td>
<td>3</td>
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<td>Elective 5</td>
<td>3</td>
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<tr>
<td>Elective 6</td>
<td>3</td>
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<tr>
<td>MBA:8130:0703 Business Communication (repeated)</td>
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Total: 39 semester hours

Course waiver

Waiver of a core course does not reduce credit hours required for the degree—the waived course is replaced by an additional elective. To receive a waiver, contact your advisor at least two weeks prior to the start of the semester of the course you are seeking to waive.

A student may waive MSCI:9100 Data and Decisions if as a Tippie undergrad 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.

Tippie Business Analytics and Information Systems (BAIS) undergraduate majors may be able to waive the following:
- 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

Students from other colleges or majors, please contact your advisor to inquire about a possible waiver.

Registering: Log into MyUI ([https://myui.uiowa.edu/my-ui/home.page](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.

Pre-approved electives listed on next page.
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Pre-approved Electives

Consult MyUI for current course offerings (below is when courses have traditionally been offered but this is subject to change), to check restrictions and pre-requisites, course timing and for course descriptions: [https://myui.uiowa.edu/my-ui/courses/dashboard.page](https://myui.uiowa.edu/my-ui/courses/dashboard.page)

To request that a course not on this list be approved for MSBA credit, contact your advisor at least two weeks prior to the start of the semester.

*BUSINESS COURSES:
MSBA Career students may take up to 6 hours of electives from an approved list of non-analytics, non-MSCI business electives offered by other Tippie departments. Additional electives in Finance are available for those that complete MBA:8180 or have an undergraduate finance degree with a 3.25 cumulative GPA. Contact your advisor.

**Preferred courses in bold.**

### Fall

**BIOS:**5310/STAT:5810 Research Data Management  
**CS:**3210 Programming Languages and Tools  
**CS:**5110 Intro to Informatics  
**ECON:**5805 Statistics for Economics  
**EPID:**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:**5101 Statistical Inference II  
**STAT:**5810 Research Data Management  
**URP:**6225 Applied GIS for Planners

### Business Courses*

**No pre-requisites**

**MBA:**8140 Corporate Financial Reporting  
**MBA:**8170 International Environment of the Firm  
**MBA:**8180 Managerial Finance  
**MGMT:**3200 Individuals, Teams and Organizations  
**MGMT:**4325 Team Project Management  
**MGMT:**9150 Nonprofit Organizational Effectiveness I  
**MGMT:**9160 Nonprofit Org Effectiveness II

### 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

### Business Courses*

**No pre-requisites**

**MGMT:**3200 Individuals, Teams and Organizations  
**MGMT:**4325 Team Project Management  
**MGMT:**9150 Nonprofit Organizational Effectiveness I  
**MGMT:**9160 Nonprofit Org Effectiveness II

This form is a planning tool only for on-campus, full-time MSBA (Career) students. It does not apply to off-campus professional MSBA students.