# M.S. in Business Analytics (Career)

## Plan of Study

### Fall (13 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI:9100:0700 Data and Decisions</td>
<td>3 sh</td>
</tr>
<tr>
<td>MSCI:6050:0700 or 800 Data Management and Visual</td>
<td></td>
</tr>
<tr>
<td>Analytics</td>
<td></td>
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<tr>
<td>MSCI:6060:0700 Data Programming in R</td>
<td></td>
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<tr>
<td>Elective 1 (see next page for list of approved</td>
<td></td>
</tr>
<tr>
<td>electives)</td>
<td></td>
</tr>
<tr>
<td>MBA:8130:701 Business Communication</td>
<td>1</td>
</tr>
</tbody>
</table>

### Spring (13 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI:9110 Advanced Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MSCI:6070 Data Science</td>
<td>3</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
</tr>
<tr>
<td>Elective 3</td>
<td></td>
</tr>
<tr>
<td>MBA:8130:0702 Business Communication (repeated)</td>
<td>1</td>
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</tbody>
</table>

### Fall (13 s.h.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MSCI:6120 Analytics Experience</td>
<td>3</td>
</tr>
<tr>
<td>Elective 4</td>
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<tr>
<td>Elective 5</td>
<td></td>
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<tr>
<td>Elective 6</td>
<td></td>
</tr>
<tr>
<td>MBA:8130:0703 Business Communication (repeated)</td>
<td>1</td>
</tr>
</tbody>
</table>

### 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.
**M.S. in Business Analytics (Career)**

**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.

**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**

**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**

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**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**

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**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**

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**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**

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**No pre-requisites**

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*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.

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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.