

M.S. in Finance & M.S. in Business Analytics
Plan of Study, Effective for Entering Class Fall 2023

Fall	16sh
MBA:8140:0800 Corporate Financial Reporting	3sh
MBA:8180:0800 Managerial Finance	3
BAIS:9100:0800 Data and Decisions	3
BAIS:6040:0700 Data Programming in Python	3
BAIS:6050:0700 or 0800 Data Management & Visual Analytics	3
BAIS:9400 OR FIN:9400 Professional Development Business Acumen	1
Spring	16sh
FIN:9150:0800 Financial Modeling and Firm Valuation	2sh
FIN:9200:0800 Portfolio Management	3
BAIS:6070:0700 Data Science	3
BAIS:9110:0700 Advanced Analytics	3
BAIS:9400 OR FIN:9400 Professional Development Business Acumen (repeated)	1
BAIS:8130:0701 OR FIN:8130:0801 Business Communication	1
Elective or FIN Experiential Course	3
Fall	16sh
MBA:8170:0800 International Environment of the Firm	3sh
BAIS:6120:0700 Analytics Experience or Elective	3
FIN:9210:0800 Derivatives and Risk Management	3
FIN:9220:0800 Fixed Income	3
BAIS:8130:0702 OR FIN:8130:0802 Business Communication (repeated)	1
Elective	3
Spring	15sh
FIN:9300:0800 Corporate Investment and Financing Decisions	3sh
BAIS:6120:0700 Analytics Experience if not yet taken or Elective	3
FIN Experiential course if not yet taken or Elective	3
Elective	3
Elective	3
Total: 63 semester hours	

- At least one **experiential elective** must be selected from this list:
 - FIN:9390 Applied Financial Analysis—Industry Project 3sh
 - FIN:9225 Applied Fixed Income Analysis – Hart Fund 3sh
 - FIN:9250 and FIN:9260 Applied Securities Analysis—Henry Fund
 - Spring & fall enrollment required, 3sh each
 - FIN:9391 Thesis in Business 3sh

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.

M.S. Business Analytics Course Waivers

Course waiver:

A student may waive BAIS: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:

- BAIS:2800 Business Analytics or ECON:2800 **AND**
- Another class that uses Excel and statistics, including MKTG:3100 Marketing Research, ACCT:4100 Auditing, BAIS:3500 Data Mining, BAIS: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:

- BAIS:3020 Computational Thinking (minimum grade A-) waives BAIS:6040 Data Programming in Python
- BAIS:3200 Database Management (minimum grade A-) waives BAIS:6050 Data Management & Visual Analytics
- BAIS:3500 Data Mining (minimum grade A-) waives BAIS:6070 Data Science

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

M.S. Finance Course Waivers

Course waiver:

- 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 with CPA or CFA level 1.
- MBA:8170 International Environment of the Firm: economics majors with a minimum 3.3 major GPA.

A student may waive BAIS: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:

- BAIS:2800 Business Analytics or ECON:2800 **AND**
- Another class that uses Excel and statistics, including MKTG:3100 Marketing Research, ACCT:4100 Auditing, BAIS:3500 Data Mining, BAIS:3800 Optimization and Simulation Modeling, or ECON:3355 Econ and Business Forecasting. Request approval for additional coursework from advisor.

One waiver from the following is allowed if you had an A– or better in the following Tippie undergrad course. The equivalent undergraduate course must have been taken prior to beginning the MFin Program (i.e. not in the U2G year).

- FIN:4210 Futures and Options waives FIN:9210 Derivatives
- FIN:4220 Fixed Income Securities waives FIN:9220
- FIN:4250 Applied Equity Valuation waives FIN:9150

*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.

Important: 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.

M.S. in Business Analytics (Career)

Consult MyUI for current course offerings and timing for a given semester, to check restrictions and prerequisites, and for course descriptions: <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; a syllabus will likely be requested for review. Courses in BOLD are strongly recommended. Note that not all BAIS courses are offered every year.

Approved Electives**BAIS:4280 Cybersecurity****BAIS:6060 Data Analysis with R****BAIS:6100 Text Analytics****BAIS:6105 Social Analytics****BAIS:6110 Big Data Management and Analytics****BAIS:6130 Applied Optimization****BAIS:6140 Information Visualization****BAIS:6400 Cloud Computing****BAIS:6210 Data Leadership and Management****BAIS:9210 Intro to Modeling with VBA**

ACCT:9170 Advanced Accounting Analytics

BIOS:5120/STAT:5610 Regression Modeling & ANOVA
in Health Sciences

BIOS:5310/STAT:5810 Research Data Management

CS:3210 Programming Languages and Tools

CS:4420 Artificial Intelligence

CS:4470 Health Data Analytics

CS:5110 Intro to Informatics

ECE:5490 Multi-Dimensional Image Analysis Tools

ECON:4800 Econometric Analysis

ECON:5800 Econometrics

EPID:5200 Principles of Public Health Informatics

FIN:9160 Quantitative Finance and Deep Learning

GEOG:3520 GIS for Environmental Studies

GEOG:3540 Intro to Geographic Visualization

GEOG:4150 Health and Environment: GIS Applications

GEOG:4580 Intro to Geographic Databases

GEOG/IGPI:5540 Geographic Visualization

ISE:3600/STAT:3620 Quality Control

ISE:4172 Big Data Analytics

ISE:6350 Computer Intelligence

JMC:3640 Data Journalism

MATH:4250 Intro to Financial Mathematics

ME:4150 Artificial Intelligence in Engineering

MKTG:9165 Digital Marketing Analytics

MKTG:9310 Marketing Analytics

POLI:3001 Hawkeye Poll

PSQF:6209 Survey Research and Design

PSQF:6243 Intermediate Statistical Methods

PSQF:6246 Design of Experiments

PSQF:6250 Computer Packages for Statistical Analysis

(not recommend if completed BAIS:6060)

STAT:4100 Mathematical Statistics I

STAT:4101 Mathematical Statistics II

STAT:4200 Statistical Methods and Computing

STAT:4540 Statistical Learning

STAT:4560 Statistics for Risk Modeling

STAT:5100 Statistical Inference I

STAT:5200 Applied Statistics I

STAT:5400 Computing in Statistics

URP:6200/PBAF:6200 Analytic Methods in Planning I

URP:6225 Applied GIS for Planners

Research Oriented

CS:5430 Machine Learning

CS:5980 Deep Learning

ECE:5450 Machine Learning

ECON:5805 Statistics for Economics

ISE:6380 Deep Learning

ISE:6720 Nonlinear Optimization

ISE:6760 Pattern Recognition for Financial Data

ISE:6780 Financial Engineering and Optimization

ME:4111 Scientific Computing and Machine Learning

STAT:6560 Applied Time Series Analysis

STAT:7400 Computer Intensive Statistics

Business Courses

MSBA Career students may take up to 6 hours of electives from the following list of approved non-analytics business electives. Additional electives in Finance are available for those that complete MBA:8180 or have an undergraduate finance degree with a 3.33 major GPA; contact your advisor.

No prerequisites

ENTR:9800 Entrep: Advanced Business Planning

MBA:8140 Corporate Financial Reporting (Fall)

MBA:8170 International Environment of the Firm (Fall)

MBA:8180 Managerial Finance (Fall)

MGMT:3200 Individuals, Teams, and Organizations

MGMT:9150 Nonprofit Organizational Effectiveness I

MGMT:9160 Nonprofit Org Effectiveness II

PSQF:5165 Intro to Program and Project Evaluation

M.S. in Finance

Approved Electives

Courses with an asterisk(*) have upper level prerequisites, please review carefully before enrolling in those courses.

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| ACCT:9120 Design and Use of Cost Management Systems* | ECON:5800 Econometrics* |
| ACCT:9130 Financial Reporting: Theory and Practice | FIN:4030 Securities Industry Essentials Exam Prep |
| ACCT:9030 Financial Accounting Standards & Analysis | FIN:9140 Enterprise Risk Management |
| ACCT:9050 Taxes and Business Strategy | FIN:9160 Quantitative Finance and Deep Learning |
| ACCT:9170 Advanced Accounting Analytics | FIN:9230 Real Estate Finance and Investments |
| BAIS:6040 Data Programming in Python | FIN:9240 International Finance |
| BAIS:6050 Data Management and Visual Analytics | FIN:9290 Alternative Investments Port Strategies |
| BAIS:6060 Data Analysis with R | FIN:9310 Corporate Financial Strategy |
| BAIS:6070 Data Science | FIN:9330 Investment Banking |
| BAIS:6140 Information Visualization | FIN:9350 Wealth Management |
| BAIS:9110 Advanced Analytics | MATH:4250 Introduction to Financial Mathematics* |
| BAIS:9210 Intro to Modeling with VBA | ISE:6760 Pattern Recognition for Financial Data |
| CS:4400 Database Systems* | ISE:6780 Financial Engineering and Optimization |
| CS:5110 Introduction to Informatics | STAT:4100 Mathematical Statistics I* |
| ECON:4800 Econometric Analysis* | STAT:4101 Mathematical Statistics II* |

Concentrations

Concentrations do not appear on transcripts but may be listed on resumes.

It may be possible to complete more than one concentration.

Corporate Finance

- Experiential course: FIN:9390 Applied Financial Analysis—Industry Project (Fall)
- FIN:9330 Investment Banking (Fall or Spring)
- 3 Electives of your choice

Risk Management

- Experiential course: Any
- FIN:9140 Enterprise Risk Management
- FIN:9240 International Finance (fall)
- 2 electives of your choice (unless in Henry Fund, then 1 elective)

Quantitative Finance

- Experiential course: Any
- CS:5110 Introduction to Informatics (fall) or BAIS:6040 Data Programming in Python (fall)
- ISE:6780 Financial Engineering and Optimization or MATH:4250 Intro to Financial Mathematics (fall)
- FIN:9160 Quantitative Finance and Deep Learning (spring)
- 2 additional electives (BAIS:6050 Data Management and Visual Analytics (fall) is highly recommended)

Investments

- Experiential course: FIN:9225 Hart Fund (fall or spring) or FIN:9250/FIN:9260 Henry Fund (spring and fall enrollment required, 3sh each)
- FIN:9240 International Finance (fall)
- FIN:9350 Wealth Management (spring)
- 2 electives of your choice (unless in Henry Fund, then 1 elective). Recommended: FIN:4030 Securities Industry Exam Prep (spring/fall, 1sh)