



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

Plan of Study, Effective for Entering Class Fall 2024

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	3
BAIS:9400 OR FIN:9400 Professional Development Business Acumen	1
(repeated)	
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	1
BAIS:8130:0701 OR FIN:8130:0801 Business Communication (repeated)	1
FIN Experiential Course OR Elective	3
Fall	16sh
MBA:8170:0800 International Environment of the Firm	3sh
BAIS:6140:0700 Visual Analytics	3
FIN:9210:0800 Derivatives and Risk Management	3
FIN:9220:0800 Fixed Income	3
BAIS:8130:0702 OR FIN:8130:0802 Business Communication	1
FIN Experiential Course OR Elective	3
Spring	15sh
FIN:9300:0800 Corporate Investment and Financing Decisions	3sh
BAIS:6120:0700 Analytics Experience	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:
 - o FIN:9390 Applied Financial Analysis—Industry Project 3sh
 - o FIN:9225 Applied Fixed Income Analysis Hart Fund 3sh
 - o FIN:9250 and FIN:9260 Applied Securities Analysis—Henry Fund
 - Spring & fall enrollment required, 3sh each
 - o FIN:9391 Thesis in Business 3sh

<u>Registering</u>: 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

<u>Degree Audit</u>: 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
- BAIS:3500 Data Mining (minimum grade A-) waives BAIS:6070 Data Science

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

<u>Important:</u> 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.

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

^{*}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.





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 (SPR)

BAIS:6060 Data Analysis with R (SPR)

BAIS:6100 Text Analytics (SPR)

BAIS:6105 Social Analytics (FA)

BAIS:6110 Big Data Management and Analytics (SPR)

BAIS:6130 Applied Optimization (FA)

BAIS:6400 Cloud Computing (FA/SPR)

BAIS:6210 Data Leadership and Management (FA)

BAIS:9210 Intro to Modeling with VBA (SPR)

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

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.

No prerequisites

ENTR:9800 Entrepre: Advanced Business Planning MGMT:3200 Individuals, Teams, and Organizations

MGMT:9110 Dynamics of Negotiations (SPR)

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.

ACCT:9040 Financial Statements Analysis and forecasting (SPR)

ACCT:9050 Taxes and Business Strategy (SPR)

ACCT:9120 Design and Use of Cost Management

Systems* (FA)

ACCT:9130 Financial Reporting: Theory and Practice (FA)

BAIS:6060 Data Analysis with R (SPR)

BAIS:9210 Intro to Modeling with VBA (SPR)

CS:4400 Database Systems*

CS:5110 Introduction to Informatics

ECON:4800 Econometric Analysis*

ECON:5800 Econometrics*

FIN:4030 Securities Industry Essentials Exam Prep (FA/SPR)

FIN:9140 Enterprise Risk Management (FA)

FIN:9160 Quantitative Finance and Deep Learning (SPR)

FIN:9230 Real Estate Finance and Investments (FA)

FIN:9240 International Finance (FA)

FIN:9310 Corporate Financial Strategy (FA)

FIN:9330 Investment Banking (FA/SPR)

FIN:9350 Wealth Management (SPR)

MATH:4250 Introduction to Financial Mathematics*

ISE:6760 Pattern Recognition for Financial Data

ISE:6780 Financial Engineering and Optimization

STAT:4100 Mathematical Statistics I*

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 (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)