Graduate Business School Policies:
- Students are expected to meet all course PREREQUISITES and COREQUISITES. A Prerequisite is a course which must be completed prior. A corequisite is a course which may be completed prior or concurrently. Prerequisites and corequisites are enforced by the registration system. Prerequisites and corequisites can be found in the course description in the student portal.
- Students must apply for graduation prior to CENSUS DATE of the last semester.
- A grade of “C” or higher is passing and required for all coursework. Cumulative GPA must be 3.0 or higher to graduate.
- This Degree Plan contains the current official course requirements and may only be modified by a Graduate Business School employee.

For questions about your degree plan or for other program assistance, please call 303-315-8110 or e-mail grad.advising@ucdenver.edu

**MS Information Systems Core Courses (15 credits):**

<table>
<thead>
<tr>
<th>Term</th>
<th>Grade</th>
<th>Course Name</th>
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<tbody>
<tr>
<td></td>
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<td>1. ISMG 6080 Database Management Systems</td>
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<td>2. ISMG 6180 Information Systems Strategy</td>
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<td>3. ISMG 6430 Information Systems Security and Privacy</td>
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</tbody>
</table>

Choose two of the following:
- ISMG 6020 Programming Fundamentals with Python*
- ISMG 6060 Analysis Modeling & Design
- ISMG 6120 Network Design and Analysis*
- ISMG 6220 Business Intelligence Systems and Analytics (Recommended prior coursework: ISMG 6080)+
- ISMG 6450 IT Project Management (Recommended prior coursework: ISMG 6180)
- ISMG 6830 IT Governance and Service Management

* required for Cyber Security Specialization
+ required for Business Intelligence Specialization

**Elective Courses (15 credits)**

1. Any course numbered 6000 or higher with an ISMG prefix.
2. Up to 6 credits can be fulfilled with approved graduate courses from the Business School, Computer Science, or GIS programs. Approved electives are listed on the back of degree plan.
3. May also choose to specialize in Cyber Security or Business Intelligence. Specialization requirements are listed on the back of degree plan. **Specialization selected: Cyber Security – Business Intelligence**
Approved Electives to Fulfill 6 Elective Credits – No Specialization

ACCT 6020 Auditing Theory
ACCT 6031 Intermediate Financial Accounting I
ACCT 6054 Accounting Information Systems
Any BANA course that is numbered 6000 or higher *Note: Some BANA courses have BANA 6610 as prerequisite, in which enrollment permission is granted by the BANA program director based upon evidence of quantitative ability.
CSCI 5211 Mobile Computing and Programming
CSCI 5455 Data Mining
CSCI 5580 Data Science
CSCI 5582 Artificial Intelligence
CVEN 5381 Introduction to Geographic Information Systems
CVEN 5382 Geospatial Data Development
CVEN 5383 GIS Analysis – Theory and Practice
CVEN 5384 GIS Project Management
CVEN 5385 GIS Relational Database Systems
CVEN 5386 GIS Laboratory
CVEN 5387 Advanced Remote Sensing
CVEN 5390 Interactive Web Mapping GIS
CVEN 5391 Introduction to Geomatics
CVEN 5392 Unmanned Aerial Systems
CVEN 5395 GPS/GNSS
ENTP 6022 Digital Strategy for Entrepreneurs
ENTP 6620 New Venture Operations and Project Management (cannot receive credit for both ENTP 6620 and ISMG 6450)
ENTP 6822 Legal and Ethical Issues of Entrepreneurship
ENTP 6824 Entrepreneurial Financial Management
ENTP 6826 International Entrepreneurship
ENTP 6848 Leadership in New Ventures
HLTH 6071 Introduction to Health Information Technology
HLTH 6072 Management of Healthcare Information Technology
RISK 6129 Practical Enterprise Risk Management
RISK 6209 Cyber Risk Management
RISK 6309 Strategic Risk Management
RISK 6509 Global Risk Management Travel Study

Specializations:

**Cybersecurity and Information Assurance Specialization - Students must complete ALL courses**

Requires students to complete the following core courses:

- ISMG 6020 Programming Fundamentals with Python
- ISMG 6120 Network Design and Analysis

Complete all of the following courses:

- ISMG 6860 Ethical Hacking Concepts and Methodologies (Recommended prior coursework: ISMG 6120)
- ISMG 6865 Digital Forensic Analysis (Recommended prior coursework: ISMG 6860)
- ISMG 6890 IT Risk Management
- ISMG 6910 Design Science Practicum or approved Internship with required paper and presentation to be completed during the final 9 credit hours of the program

**Business Intelligence Specialization**

Requires students to complete the following core course:

- ISMG 6220 Business Intelligence Systems and Analytics

Choose 4 of the following:

- ISMG 6470 Text Data Analytics
- ISMG 6480 Data Warehouse and Administration (Prerequisite: ISMG 6080)
- ISMG 6810 Business Intelligence in Healthcare
- ISMG 6820 Business Intelligence and Financial Modeling
- BUSN 6530 Data Analytics for Managers (Students may substitute with BANA 6610, requires permission from the BANA program director)

*Fifth elective can be any ISMG course numbered 6000 or higher OR any approved elective course listed above.