CU DENVER **BUSINESS** SCHOOL

INFORMATION SYSTEMS STUDENT GUIDEBOOK

University of Colorado **Denver**

CU IN THE CITY

Welcome to the Information Systems Program at the University of Colorado Denver

I want to welcome each of you to the Information Systems program at the University of Colorado Denver. The Information Systems faculty and Business School staff are excited to have you on our campus.

Information Systems professionals use technical skills, business know-how, and administrative insights to help companies make decisions on the acquisition, implementation, and management of technology. We are here to help you master these skills in order to develop a keen insight into how businesses work. Information Systems knowledge is always in demand.

CU Denver also offers exceptional opportunities to participate in activities outside the classroom that add value to your time inside the classroom. Be sure to take advantage of our student clubs, internship opportunities and many speaker events.

A major priority of our Information Systems department is to place students in challenging and rewarding business careers that will utilize their Information Systems degree. The path to job placement begins well-before graduation so it is never too early to start planning. We have created this Guidebook as a resource to reference during your time at CU Denver. Whether you are pursuing one of our two Bachelor's degrees and/or a Master's of Science in Information Systems, the information contained in this Guidebook will help you make informed decisions about your future.

The Information Systems faculty, Graduate and Undergraduate Advisors, and Business Career Connections are here to guide you along your path to a fulfilling career in Information Systems.

Please feel free to contact me if you would like further information.

Dawn Gregg
Discipline Director, Information Systems
Professor of Information Systems
Business School | University of Colorado Denver
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Information Systems Career Paths

Information Systems is a dynamic career field focused on the deployment of various information technologies in ways that help organizations achieve their strategic goals and operational objectives. Information technologies are among the most value adding processes in organizations, creating a demand for skilled individuals who can think in terms of the company's business, technology, and organizational or "people" strategies in a way that ensures each is aligned with and reinforcing of the other two.

n information systems graduate will possess the skills and insights needed to understand both business processes and the technologies available to support them. Success in information systems requires analytical skills, logic and creativity, as well as excellent interpersonal and communication abilities.

Employment Opportunities for Information Systems Majors:

Virtually every organization, businesses in all industries, government entities, or not-for-profit groups, depends on information technology and, as a result, adds to the demand for information systems professionals. Some positions are more technical than analytical, and some organizations choose to place entry level employees in these sorts of positions to "learn the ropes."

In other cases, companies will place the new team member in a business or process analyst role under the supervision of a veteran manager. Consulting firms providing information systems-related solutions to their clients are another area of employment for an information systems graduate. Whatever the role and whatever the specific technology involved, the focus will be on the value-adding from integrating of information technology into the organization.

LinkedIn

Business Career Center helps students prepare for careers in Information Systems. This preparation includes career strategy, resumes, interview preparation and compensation negotiation, can make a real difference in getting noticed and hired by great employers. Additionally, the timelines for different industries can vary greatly and sometimes applying in the right time frame can make all the difference, especially in the Tech industry and with large employers. Go and visit them sooner rather later in their offices on the 4th floor of the Business School or contact them at bcc@ucdenver.edu

Typical Information Systems Job Titles

- Application Analyst
- Business Analyst
- Cloud Architect
- Cybersecurity Analyst
- Data Analyst
- Data Scientist
- Database Administrator
- Information Systems Manager
- IT Consultant
- IT Technical Support
- Network Engineer
- Software Engineer
- Systems Analyst
- Web Developer

Additional Information Systems Career Information

- www.isaca.org
- www.denverissa.org
- www.chima.org
- www.coloradotechnology.org .

Internships

If you're majoring in information systems, an internship is one of the best ways to explore career paths in the tech industry. In addition to learning on-the-job responsibilities, you'll also discover what types of team dynamics best fit your style of working. As an intern, you'll usually be paired with a more experienced professional who will act as your mentor, giving you guidance on the technical aspects of your project as well as helping you to manage and execute it. An internship will offer you the opportunity to see what the field is like and whether it's a good fit for you. And because information systems majors are very in demand among employers, the internship is also likely to be very well compensated.

Whether you're considering a summer internship or an internship during the school year, taking on an internship will give you the experience you need to pursue a career in the technology industry after graduation.

When do I apply for Internships?

Recruiting for internships occurs throughout the year. Apply for internships during your Junior and/or Senior year. Graduate students can apply throughout their MS Information Systems program.

For additional information regarding both campus and external internship opportunities, contact Business Career Connections at bcc@ucdenver.edu or Paul Worthman of the Experiential Learning Center at paul.worthman@ucdenver.edu. On campus and many external internship positions are recruited through a tool called Handshake. You can register at https://ucdenver.joinhandshake.com/login.

Scholarships

Each year, CU Denver students are awarded millions of dollars in scholarships. Scholarships are great because they are free money – money given to you for your education by a higher education institution, state or federal government, or a private company or organization that you don't have to pay back. Check them out here: ucdenver.scholarshipuniverse.com/

Scholarship Tips

Apply for scholarships early and often.

Pay close attention to scholarship application deadlines. You will be disqualified for eligibility if you miss the submission deadline.

If you find you've missed a deadline for a scholarship, keep looking – there are hundreds of scholarships out there, all with different deadlines.

Don't discount the smaller scholarships – a few hundred dollars can offset costs, and being awarded more than one smaller scholarship adds up quickly.

Be sure to investigate scholarships each year you're in college. Nearly 50 percent of available scholarships are for students already in college.

Many scholarships are based on financial need and academic achievement, but there are many others that have different eligibility requirements such as community service, first-generation, race and ethnic identity, community involvement, major degree program, age, special talents and hobbies, or memberships in organizations.

Guidance by Year

It's never too early to start laying the groundwork for a successful career in Information Systems. Whether you're joining the CU Denver Information Systems department as a freshman, as a transfer student or as a graduate student, below you will find helpful guidance to consider along your academic journey.

Freshman/Sophomore

Meet with your advisor to map out your degree plan. Call (303) 315-8110 to set up a phone or office appointment.

Visit Business Career Connections (BCC) on the 4th floor of the Business Building to identify and assess career opportunities and to start building your resume and LinkedIn profile. Contact BCC: bcc@ucdenver.edu.

Sign up for Handshake (CU Denver's Career, Jobs, and Event Information): ucdenver.joinhandshake.com/login.

Learn what is needed for a successful Information Systems career by utilizing the resources provided in this guidebook, attending Information Systems department events and attending the numerous Information Systems Association (ISA) and Transamerica Cybersecurity and Digital Forensics Student Club meetings that are open to all students.

Apply for scholarships:
ucdenver.scholarshipuniverse.com/

Connect regularly with your advisor through scheduled appointments or by email:
undergrad.advising@ucdenver.edu.

Junior/Senior

If you are a transfer student, **meet with your advisor to map out your degree plan**. Call (303) 315-8110 to set up a phone or office appointment.

Complete internship training through either a BCC Career Essentials Workshop business.ucdenver.edu/bcc or the Experiential Learning Center www.ucdenver.edu/lynxconnect/internships.

After completing the training, you will be able to **apply for internships on Handshake**.

Be actively involved in the Information Systems Association (ISA) and/or **Transamerica Cybersecurity and Digital Forensics Student Club**. If you do not join one of the clubs, then attend the numerous club meetings that are open to all students.

Start building a professional network by attending *Become a Business Leader with an Edge* in the fall semester, Business School Career Fairs and Information Systems department events.

Interview for internships early in the fall semester.

Complete internships during spring, summer or fall. Multiple internships are encouraged.

Seek exposure to as many technologies as possible, even at a familiarization rather than proficiency level.

Continue building a portfolio of technologies you are familiar with. Consider certifications for key technologies related to your chosen career path.

Develop personal skills including: customer focus, problem solving, self-direction, team orientation, analysis, and research.

Consider the 4+1 program. The 4+1 program allows a seamless transition from the CU Denver undergraduate Information Systems program the MS Information Systems program with a specialization in either the Business Intelligence or the Cybersecurity and Information Assurance specializations. Students with a 3.0 GPA in the sophomore and junior courses (ISMG 2800, 3500 and 3600) can request a waiver of the GMAT exam. For more information about the 4+1 program, contact your advisor

If you choose to pursue a graduate degree outside of CU Denver, **plan for when you will take the GMAT exam.**

Apply for scholarships:
ucdenver.scholarshipuniverse.com/

Meet with your advisor regularly through scheduled appointments or by email: undergrad.advising@ucdenver.edu.

Seniors be sure to meet with your advisor to make sure you are on track to graduate. Call (303) 315-8110 to set up a phone or office appointment.

Graduate Student Guidance

Meet with your advisor to map out your graduate degree plan. Call (303) 315-8110 to set up a phone or office appointment.

Use the **Information Systems optimal course flow document** to understand when courses are offered and when you need to take courses based on your specialization. Since many courses have recommended prerequisites and are only offered once a year, failing to take courses in the recommended sequence could delay your graduation.

Understand course formats: All classes are offered in an asynchronous online format and most classes are also offered in a hybrid format. Hybrid classes will have between 10% and 50% of content delivered face-to-face.

Most **classes are 8-weeks** long and move very quickly. This means the workload each week is twice the workload of a semester-long class. Each student must manage their own time each week, to know when assignments are due, and any other weekly course obligations. It is recommended that students only plan to take one 8-week class at a time.

Join the Information Systems Association (ISA) and/or **Transamerica Cybersecurity and Digital Forensics Student Club**. If you do not join one of the clubs, then attend the numerous club meetings that are open to all students.

Interview for internships during spring, summer or fall.

Complete internships during spring, summer or fall. Multiple internships are encouraged.

Build a portfolio of technologies you are familiar with. Consider certifications for key technologies related to your chosen career path.

Develop personal skills including customer focus, problem solving, self-direction, team orientation, analysis, and research.

Build a professional network by attending *Meet the Firms* in the fall and spring semesters, Business School Career Fairs and Information Systems department events.

Apply for scholarships:
ucdenver.scholarshipuniverse.com/

Connect regularly with your advisor through scheduled appointments or by email: grad.advising@ucdenver.edu.

Undergraduate Information Systems Degree Options

Information Systems

A degree in Information Systems helps you develop the technical skills, business know-how, and administrative insights you need to make decisions on the development, implementation, and management of technology.

IS Degree Requirements

Junior Year

ISMG 3500 - Business Data and Database Management

ISMG 3600 - System Strategy, Architecture and Design

ISMG 4300 - Information Systems Security & Privacy

Senior Year

ISMG 4400 - Programming Fundamentals w Python

Coreq: ISMG 3500

PLUS 2 Information Systems Electives

ISMG 2800 - Designing for the Web

ISMG 3110 - Data Governance & Ethics

ISMG 3300 - Social Media in Business

ISMG 4750 - Business Intelligence and Financial Modeling

ISMG 4760 - Customer Relationship Management

See the program plans at the end of this guide!

Information and Cybersecurity Management

Our Information and Cybersecurity Management program empowers you with the practical skills and analytical foundation to become a cybersecurity expert. Through our comprehensive curriculum, you'll gain expertise in leveraging cutting-edge information technologies while strategically prioritizing data privacy, security, and compliance. Emerge as a versatile information security professional adept at fortifying digital defenses and cultivating a secure, resilient organizational culture.

Cybersecurity Degree Requirements

Junior Year

ISMG 3500 - Business Data and Database Management

ISMG 3600 - System Strategy, Architecture and Design

ISMG 4300 - Information Systems Security & Privacy

ISMG 4700 - IT Infrastructure (offered fall & summer)

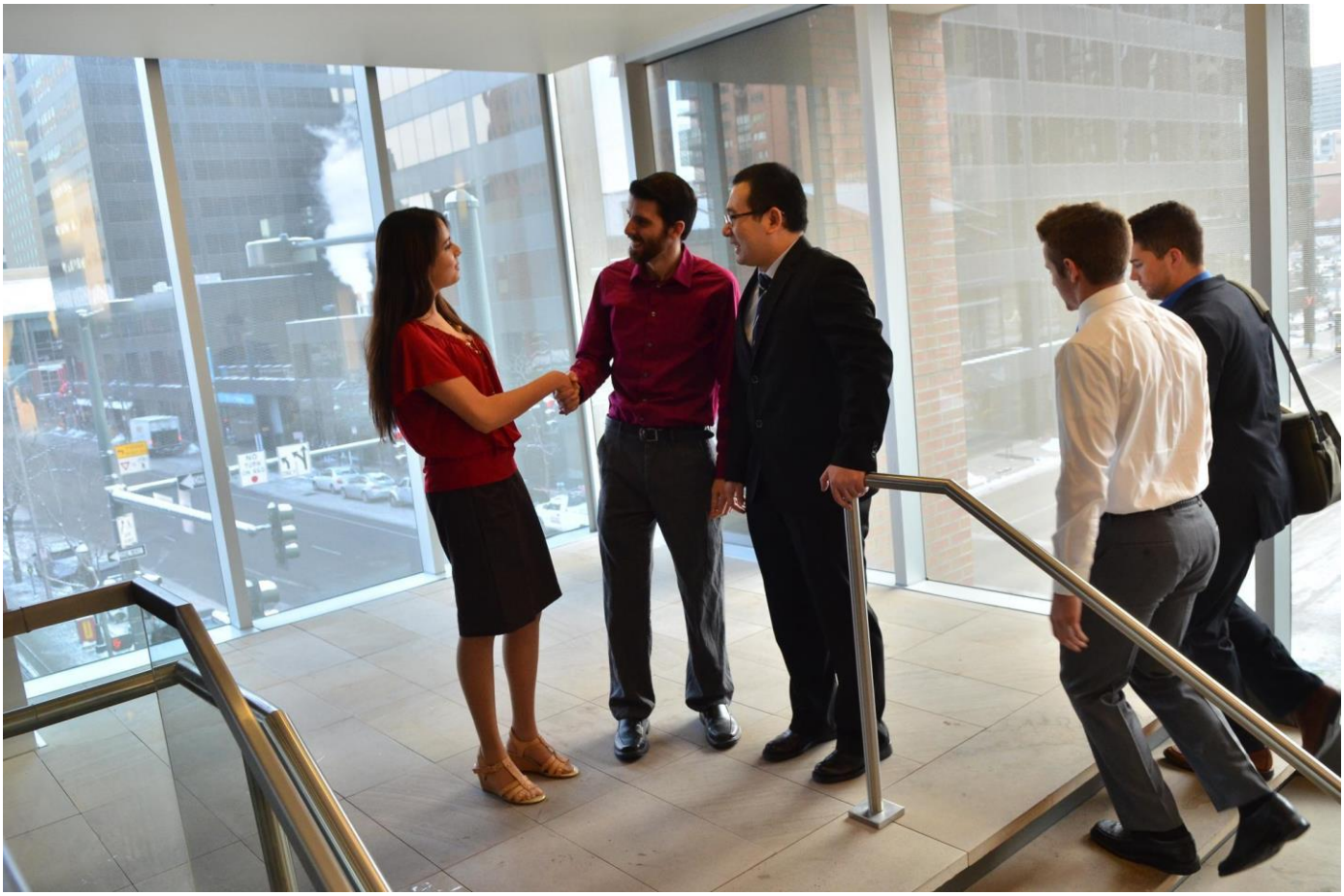
Senior Year

ISMG 4400 - Programming Fundamentals w Python

ISMG 4720 Enterprise Security

ISMG 4865 Digital Forensics Analysis

ISMG 4860 Ethical Hacking Concepts & Methodologies



Combining Undergraduate and Graduate Degrees (4+1)

The MS Information Systems degree requires 30 credit hours of graduate work. As a current CU Denver Information Systems student, you can seamlessly transition from your undergraduate program into the MSIS program.

What is the 4+1 Program?

The 4+1 program allows CU Denver students early admission into the MS Information Systems program in their fourth or final year as an undergraduate. There are two benefits to our 4+1 program. First, CU Denver Information Systems students with a 3.0 or higher GPA in their undergraduate Information Systems courses (ISMG 2800, 3500 and 3600) can be accepted into the program without taking the GMAT exam. Second, some students can take two graduate level courses in their senior year, with those six credit hours counting toward both the undergraduate and MS degrees. With the assistance of your advisor (undergrad.advising@ucdenver.edu), you can select two graduate Information Systems courses that will take the place of two undergraduate Information Systems courses.

When should I apply to the 4+1 Program?

You should apply to the 4+1 program when you have one academic year remaining in your undergraduate degree. In addition, you must have successfully completed the Information Systems courses (ISMG 3000, 3500 and 3600). You can also apply as a senior - but may not be able to double count courses.

MS Information Systems Courses

The Master of Science in Information Systems (MSIS) program at the Business School is a 30 semester credit hour STEM (Science, Technology, Engineering, Mathematics) degree program that provides students the fundamental knowledge necessary for a career as an IS professional. The MSIS program layers managerial training with technical concepts to help you become a leader in your chosen career path in information technology. You can choose between industry leading specializations in Business Intelligence or Cybersecurity and Information Assurance or customize your own degree to allow you to focus on topics most relevant to your interests. With hands-on software projects, each class will take you one step closer to understanding how to harness the power of technology for business.

MS Information Systems students come from a wide variety of academic backgrounds. Therefore, it is critical to meet with your advisor to map out an individualized degree plan. Below is information on Information Systems courses that will guide your path to graduation.

For example, students with an undergraduate degree In Information Systems may waive some of the core graduate courses allowing you to take additional elective courses.

See the program plans at the end of this guide!

Core Courses

Required courses:

ISMG 6080 Database Management Systems

ISMG 6180 Information Systems Strategy

ISMG 6430 Information Systems Security and Privacy

Plus, select two of the following courses:

ISMG 6020 Programming Fundamentals with Python *

ISMG 6060 Analysis Modeling & Design

ISMG 6120 Network Design and Analysis *

ISMG 6220 Business Intelligence Systems and Analytics+

ISMG 6450 IT Project Management

ISMG 6830 IT Governance and Service Management

* required for Cybersecurity & Information Assurance Specialization
+ required for Business Intelligence Specialization

Elective Courses

Students may complete a four or five-course specialization or create customized degree using any course numbered 6000 or higher with an ISMG prefix (may include core classes not used to satisfy the core requirement). Selected 6000-level Business School, CVEN or CSCI courses may be used to satisfy up to 6 credits of elective credit for a customized degree.

Information Systems Graduate Specializations

Business Intelligence

Business Intelligence (BI) systems combine operational data with analytical tools to present complex and competitive information to planners and decision makers. The objective is to improve the timeliness and quality of inputs to the decision process. BI is used to understand the capabilities available in the firm; the state-of-the-art, trends, and future directions in the markets, the technologies, and the regulatory environment in which the firm competes; and the actions of competitors and the implications of these actions. With this specialization, you get the necessary skills and knowledge in real-time data warehousing, data visualization, data mining, online analytical processing, customer relationships management, dashboards and scorecards, corporate performance management, expert and advanced intelligent systems, and hands-on experience with leading BI tools.

BI Degree Requirements

Choose 4 of the following courses:

ISMG 6470 Text Data Analytics

ISMG 6480 Data Warehouse and Administration

ISMG 6810 Business Intelligence in Healthcare

ISMG 6820 Business Intelligence and Financial Modeling

BUSN 6530 Data Analysis for Managers (Students may substitute BANA 6610, *with approval of the BANA program*)

Students must complete the following core course:

ISMG 6220 Business Intelligence Systems and Analytics

Cybersecurity and Information Assurance

With recent breaches in the security of many large government agencies and private corporations, cybersecurity is an issue of great importance to the global society. The Cybersecurity and Information Assurance Specialization prepares students for cybersecurity, information security, and IT risk management positions in business and critical infrastructure sectors of the economy identified by the U.S. Department of Homeland Security including enterprises such as banks, governments, retail, health care institutions, law enforcement, construction, insurance agencies, transportation, and the military.

Cybersecurity Degree Requirements

Students must complete ALL 5 courses

ISMG 6340 Cloud Computing Concepts, Tools, and Security

ISMG 6860 Ethical Hacking Concepts and Methodologies

ISMG 6890 IT Risk Management

ISMG 6865 Digital Forensic Analysis

ISMG 6910 Design Science Practicum or approved Internship with required paper and presentation to be completed during the final 12 credit hours of the program.

Students must complete the following core courses:

ISMG 6020 Programming Fundamentals with Python

ISMG 6120 Network Design and Analysis

Information Systems Association (ISA)

University of Colorado Denver's Information Systems Association is a growing community of Information Systems students which facilitates the engagement in higher education. Open to all CU Denver students, the Association provides its members networking, career development, and professional development opportunities.

Our core beliefs

We at ISA believe that students, regardless of major must harness the powers of the information age in order to have interesting and dynamic careers. Those who leverage their tools and resources are able to optimize businesses and create solutions that help the future of humanity. Not only is Information the key to solving the problems of the future, those that can understand and organize it see monetary success and flexible schedules.

Our Mission

We hope to bring to campus unique tech opportunities to help students find the career path. Our events include guest lectures, company tours, panels, social events, and networking opportunities.

The chapter is affiliated with the Association for Information Systems (AIS) and has won outstanding student chapter awards in 2018, 2013-2016 and 2010.

For more information

Find us on Facebook at: www.facebook.com/CUDenverISA/

Contact Jiban Khuntia, the ISA faculty advisor, at jiban.khuntia@ucdenver.edu

I believe the opportunities provided through the ISA club are invaluable. You can expand your network and build lasting relationships with individuals throughout CU Denver and the Denver IT community. Being an award-winning (six times) student chapter of the Association of Information Systems (AIS), the club connects to a larger research and practice community at the national and international levels. I would recommend getting involved in the ISA as early as possible and attending as many events as you can.

Jiban Khuntia,
Associate Professor of Information Systems

Transamerica Cybersecurity and Digital Forensics Student Association (TCSC)

What We Do

The TCSC is a student organization that aims to learn and teach hacking fundamentals, digital forensics, networking and other technology related topics to increase the skill sets of students. The club provides a variety of resources to allow members to create side projects, workshops and more. Industry partners provide knowledge that help students improve their professional profiles. All students are welcome to join regardless of their major, knowledge, and skills!

Benefits Include:

- Access to a dedicated cybersecurity lab
- Learning resources, including Security+, CEH v11, Kali Linux
- Raspberry Pis, networking tools, 3D printer
- Hacking workshops
- Leadership opportunities
- Industry speakers

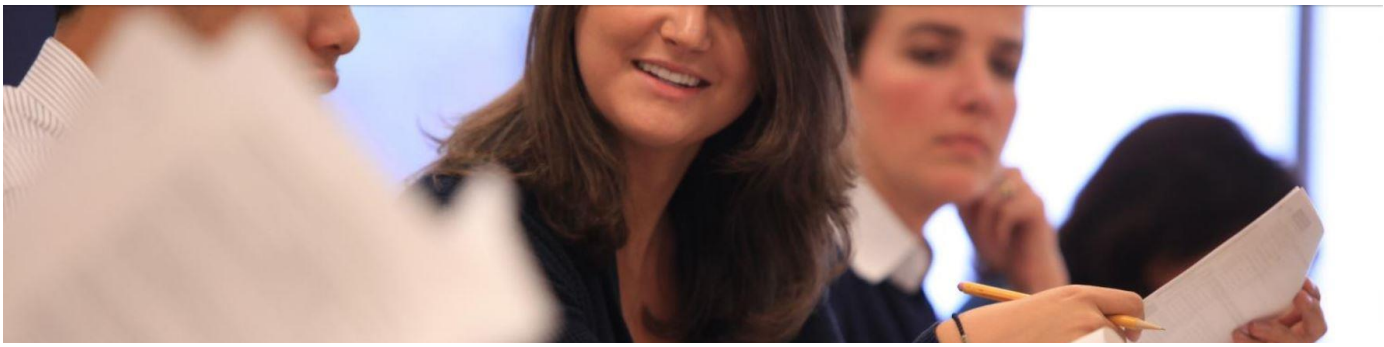
For More Information:

CU Denver students can join TCSC on MyLynx by simply looking up the name of the student club or following this link: https://ucdenver.presence.io/organization/transamerica-cybersecurity-and-digital-forensics-student-club

Contact Ersin Dincelli, the TCSC faculty advisor, at ersin.dincelli@ucdenver.edu

TCSC is one of the largest student clubs in the Business School. TCSC cybersecurity lab provides students access to an extensive library for cybersecurity related topics, computers that are equipped with cybersecurity tools, a 3D printer, various cybersecurity related games, microcomputers, and other equipment that students can try hands-on cybersecurity exercises.

Ersin Dincelli,
Assistant Professor of Information Systems



Academic Integrity

Academic integrity in the university context has two purposes. Students need to do their own assignments to learn the necessary skills to be able to be successful as Information Systems professionals. Students also need to develop an ethical perspective which will allow them to make ethical decisions in both their personal and professional lives.

Cheating

Cheating hurts everyone at CU Denver because it undermines academic integrity, creates mistrust between students and with faculty, and it fosters unfair competition.

Cheating can include cheating on exams, plagiarism, reuse of assignments without faculty permission, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery or falsification of assignment results, lying, facilitating academic dishonesty (e.g., by sharing assignment solutions or exams with others or on homework sharing sites), and unfair competition.

Academic honesty is required in all work submitted for grading. Unless the instructor specifies an assignment is a group assignment, you must solve all assignments without the help of others. For example, you must not look at your classmate's solutions to homework problems or purchase solutions from a homework site. However, you may discuss assignment specifications (not solutions) with others to be sure you understand what the assignment requirements are.

"I Probably Won't Get Caught"

Many students think there is "one right" solution for information systems assignments and that "no one will know" if they copy solutions or get help from an outside source.

In reality, there are often thousands of ways to address many of the assignments given in the Information Systems program and instructors can tell if you copied code or even collaborated on an assignment. We have had cases where half of the students in a class have received zeros on multiple assignments because the students cheated.

Consequences of Cheating

The minimum consequence for cheating is zero on the assignment. Cheating on an exam will result in you failing the course. Multiple instances of academic dishonesty can result in suspension, and/or expulsion. If you are an international student, you may even lose your visa status if you fail a class or are suspended for academic dishonesty.

Ignorance of these rules is not an excuse and will not lessen the penalty.

Avoiding Academic Dishonesty

If your instructor permits using fragments of source code or other content from outside sources, such as your textbook or on-line resources, you must properly cite the source. Not citing it constitutes plagiarism. Similarly, your group projects must list everyone who participated.

If a friend is struggling with an assignment do not share your solution with them. Chances are they will submit all or part of your assignment solution and both of you will be guilty of academic dishonesty. Instead, urge them to contact the instructor or point them to a relevant example.

Your instructor is free to override parts of this policy for particular assignments. To protect yourself: (1) Ask the instructor if you are not sure what is permissible. (2) Seek help from the instructor or TA, as you are always encouraged to do, rather than from other students. (3) Cite any questionable sources of help you may have received.

For more information on university academic honesty policies, see the CU Denver catalog (catalog.ucdenver.edu) and the CU Denver academic integrity website: www.ucdenver.edu/student/health-wellness/student-conduct/academic-integrity.

What to do if you're struggling

You may feel alone if you're having problems balancing (and passing!) your classes, you're definitely not. Many students struggle at one time or another in their classes. Here are some things to keep in mind:

Adopt best practices

Experts say students should attend class, take notes, and engage with the material, the faculty and their classmates.

Read the whole syllabus. It's there you will find details on deadlines, assigned readings, extra credit opportunities and more.

Do your homework - even if it doesn't count towards your grade!

Ask for academic help

Reach out to your **professors**, either in their office hours or via email. Talk to them about your struggles. Ask them what guidance they can give you.

Reach out to your **academic adviser** at either undergrad.advising@ucdenver.edu or grad.advising@ucdenver.edu. They know about resources on campus and could help you come up with an action plan of how to better manage your course load.

Use campus resources like the CU Denver Writing Center and the Learning Resource Center.

If there aren't any tutors for a class you are taking, consider starting a study group with other members of your class. The group can help each other understand course material but should not help with actual assignments.

Support for mental health issues

As a student, you may experience a range of challenges, such as strained relationships, traumas, increased anxiety, substance use, feeling down, difficulty concentrating, and/or lack of motivation.

You can find supportive campus and community resources at the Health Center at Auraria or the CU Denver Counseling Center. After hours you can call 303.615.9911 or text Talk to 38255.

When should you seek help?

The best time get academic or other help is as soon as you think you might have a problem.

Don't wait until you're in too deep to get some support. If you've failed a midterm, that means you need help studying for the next one—not that you should wait and see how the next one goes.

When should you drop a class?

If you're considering dropping a class, go talk to your academic adviser as soon as possible as there are drop deadlines.

You can talk about why you want to drop, what your alternative options are, what it means for your major, what it means for next semester, and what (if anything) it means for your financial aid.

Concluding Remarks and Advice

Practice professionalism. This applies not only for interactions with recruiters and Information Systems professionals, but also for faculty, staff, and fellow students. Communicating professionally (e.g., no text language in emails) is essential for success and should be practiced throughout your academic career.

Regularly check your CU Denver email account for important emails from advising, BCC, the Information Systems department, etc. Provide email responses in a timely manner.

Connect with Information Systems faculty for valuable industry information, career guidance, recruiting advice and other forms of mentorship.

If you are an international student, utilize the services offered by the CU Denver Office of International Affairs. They can be reached at internationalaffairs@ucdenver.edu or ucdenver.edu/academics/internationalprograms.

Stay Informed on Industry Developments There are new trends in the information technology industry on a regular basis, so if you stand still too long you will fall behind. Students and professionals alike should keep themselves current on the latest developments in their field.

Always look for networking and recruiting opportunities. Building a professional network is essential to succeed in the Information Systems profession. Do not underestimate the importance of connecting with recruiters and professionals.

Write "thank you" notes to all interviewers, recruiters and professionals involved in the recruiting process. An email is acceptable, but a handwritten note is more impactful.

Remember, this is a challenging program and there are resources available to ensure success. Ask as many questions as it takes to find the information you need to succeed. CU Denver provides a unique opportunity to access some of the greatest businesses in Denver with its central location. All of the faculty and staff are here to assist you in tapping into all of the resources the university has and opportunities the city has to offer.

Appendix

1. Degree Plan: BSBA Information Systems
2. Degree Plan: BSBA Information and Cybersecurity Management
3. Degree Plan: MS Information Systems

Business School
UNIVERSITY OF COLORADO DENVER

Information Systems

Bachelor of Science in Business Administration
Catalog Year 2024-2025

Undergraduate Information Systems Program Overview

The Information Systems (IS) program equips students with the practical and analytical skillsets required to manage businesses using information technologies. We help students build an adaptable knowledge base for their continued career advancement by gaining deeper understanding of the capabilities of rapidly advancing information technologies. Upon completion of our IS program, students will understand how to innovate organizational practices by acquiring, developing, deploying and managing information technologies in an organization.

Academic Advising

It is recommended that students meet with an advisor regarding their individualized degree plan at least once per year.

Business School Advising
undergrad.advising@ucdenver.edu
https://business.ucdenver.edu/current-students/undergraduate-advising
Business School Building, floor 4
303-315-8110

General Graduation Requirements & Policies

All CU Denver Business students are required to complete the following minimum general graduation requirements:

1. Complete a minimum of 120 applicable course hours
2. Achieve a minimum 2.0 CU cumulative grade point average (GPA) and business GPA
3. Complete a minimum of 45 upper division (3000/4000 level) credits
4. Residency: complete a minimum of 30 CU Denver business course hours in good standing

Course Schedule & Delivery Modes

CU Denver offers courses in both in person (IP) and online (OL) delivery modes. Students may complete this degree either entirely in person OR entirely online. Students that need to take classes either online or in person will need to pay attention to when courses are offered in the format needed. Below are the required classes for this major and when they are generally offered in person and online. Students will need to choose core classes and electives that meet their individual needs:

	When	Fall	Spring	Summer
Core Classes				
ENGL 1020	Semester 1	IP & OL	IP & OL	IP & OL
ENGL 2030	Semester 2	IP & OL	IP & OL	IP & OL
MATH 1060 Finite Math	Semester 1	IP & OL	IP & OL	OL
Social Sciences: ECON 2012	Semester 3	IP & OL	IP & OL	IP & OL
Graduation Requirements for Business				
UNIV 1110 College Success	Semester 1	IP & OL	IP & OL	-
COMM 2050 Business and Professional Speaking	Semester 2	IP & OL	IP & OL	OL
ECON 2022 Principles of Economics: Microeconomics	Semester 4	IP & OL	IP & OL	IP & OL
ENGL 3170 Business Writing	Semester 4	IP & OL	IP & OL	OL
Business Core:				
BUSN 2110+BUSN 3110	Semesters 2 & 3	IP & OL	IP & OL	-
ISMG 2050 Introduction to Business Problem Solving	Semester 2	IP & OL	IP & OL	OL
BANA 2010 Business Statistics	Semester 3	IP & OL	IP & OL	IP & OL
ACCT 2200 Financial Accounting & Financial Stmt Analysis	Semester 3	IP & OL	IP & OL	Either IP or OL
ACCT 2220 Managerial Accounting and Professional Issues	Semester 4	IP & OL	IP & OL	OL
BLAW 3050 Business Law and Ethics	Semester 6	IP & OL	IP & OL	OL
BANA 3000 Operations Management	Semester 7	IP & OL	IP & OL	IP & OL
FNCE 3000 Principles of Finance	Semester 6	IP & OL	IP & OL	OL
ISMG 3000 Technology in Business	Semester 5	IP & OL	IP & OL	OL
MGMT 3000 Managing Individuals and Teams	Semester 5	IP & OL	IP & OL	OL
MKTG 3000 Principles of Marketing	Semester 5	IP & OL	IP & OL	OL
MGMT 4500 Business Policy and Strategic Management	Semester 8	IP & OL	IP & OL	OL (May)
Information Systems Required Classes				
ISMG 3500 Business Data & Database Management	Semester 5 or 6	IP	OL	-
ISMG 3600 System Strategy, Architecture and Design	Semester 5 or 6	OL	IP	-
ISMG 4300 Information Security & Privacy	Semester 6 or 7	OL	IP	-
ISMG 4400 Python Programming Fund.	Semester 6 or 7	IP	OL	-
ISMG 4700 Business Data Communications and Networking	Sem 7 or Summer	IP		OL
ISMG/MGMT 4900 Project Management and Practice	Semester 7 or 8	IP & OL	IP & OL	Either IP or OL

Updated 2.1.23

Business School
UNIVERSITY OF COLORADO DENVER

Information Systems

Bachelor of Science in Business Administration
Catalog Year 2024-2025

SAMPLE ACADEMIC PLAN OF STUDY

The following academic plan is a ***sample*** pathway to completing degree requirements. This schedule can be adjusted to accommodate AP, IB, and/or CLEP credits, as well as courses taken during the summer sessions. Students should tailor this plan based on transfer credit, course availability, and individual preferences related to course load, schedules, and add-on programs such as minors or double-majors. Students must complete an experiential learning credit (internship, study abroad program, or project-based course) and a capstone course taken in their final semester. **This plan assumes that the foreign language graduation requirement has been completed with high school courses or proficiency exam.**

Year One

Semester 1	CRS
ENGL 1020 Core Composition I	3
MATH 1060 Finite Math	3
Arts, Humanities, OR Behavioral Science	3
Arts, Humanities, OR Behavioral Science	3
UNIV 1110 College Success	1
TOTAL SEMESTER HOURS	13

Semester 2	CRS
ISMG 2050 Intro to Business Problem Solving	3
ENGL 2030 Core Composition II	3
COMM 2050 Business and Professional Speaking	3
Natural and Physical Sciences	3
Arts, Humanities, OR Behavioral Science	3
BUSN 2110 Cultivating Emotional Intelligence	1
TOTAL SEMESTER HOURS	16

Year Two

Semester 3	CRS
ACCT 2200 Financial Accounting and Financial Statement	3
BANA 2010 Business Statistics	3
Social Sciences: ECON 2012 Macroeconomics	3
ENGL 3170 Business Writing	3
General Elective *(or Regional Expertise/ Foreign Lang)*	3
BUSN 3110 Career & Professional Development	1
TOTAL SEMESTER HOURS	16

Semester 4	CRS
ACCT 2220 Managerial Accounting and Professional Issues	3
ECON 2022 Principles of Economics: Microeconomics	3
Natural and Physical Sciences with a Lab	4
General Elective *(or Regional Expertise/ Foreign Lang)*	3
General Elective *(or Regional Expertise)*	3
TOTAL SEMESTER HOURS	16

Year Three

Semester 5	CRS
ISMG 3500 Business Data & Database Mgmt. (or 3600)*	3
BANA 3000 Operations Management	3
ISMG 3000 Technology in Business	3
MGMT 3000 Managing Individuals and Teams	3
International Perspectives	3
TOTAL SEMESTER HOURS	15

Semester 6	CRS
ISMG 3600 System Strategy, Arch. And Design (or 3500)	3
ISMG 4300 Information Security & Privacy (or 4400)	3
BLAW 3050 Business Law and Ethics	3
FNCE 3000 Principles of Finance	3
MKTG 3000 Principles of Marketing	3
TOTAL SEMESTER HOURS	15

Year Four

Semester 7	CRS
ISMG 4400 Python Programming Fund. (or 4300)	3
ISMG 4700 IT Infrastructure (OL in summer)	3
Specialization/Minor Course or ISMG Elective	3
International Studies	3
General Elective	3
TOTAL SEMESTER HOURS	15

Semester 8	CRS
ISMG/MGMT 4900 Project Management and Practice	3
Specialization/Minor Course or ISMG Elective	3
MGMT 4500 Business Policy and Strategic Management	3
Cultural Diversity	3
General Elective	2
TOTAL SEMESTER HOURS	14

Business School
UNIVERSITY OF COLORADO DENVER

Information Systems

Bachelor of Science in Business Administration
Catalog Year 2024-2025

DEGREE REQUIREMENTS

Courses	Credits	Prerequisites	Term	Hours	Grade
*Students are responsible for consulting advisors for current prerequisite and scheduling information as they change regularly					
Required CU Denver Core Curriculum Coursework	**34**				
ENGL 1020	3				
ENGL 2030	3	ENGL 1020			
MATH 1060 Finite Math	3				
Arts	3				
Humanities	3				
Behavioral Sciences	3				
Social Sciences: ECON 2012	3				
Natural and Physical Sciences **with lab**	4				
Natural and Physical science	3				
Cultural Diversity (BUSN/MGMT 4100 recommended)	3	Junior standing			
International Perspectives (INTB 4400/4200 recommend)	3				
Graduation Requirements for Business	**13**				
UNIV 1110 College Success	1	Only required for entering first term freshmen			
COMM 2050 Business and Professional Speaking	3				
ECON 2022 Principles of Economics: Microeconomics	3				
ENGL 3170 Business Writing	3	Sophomore standing			
ISMG 4900 Project Management (Experiential Learning)	3				
Business Core	**35**				
BUSN 2110+BUSN 3110	2	1 credit each			
ISMG 2050 Introduction to Business Problem Solving	3				
BANA 2010 Business Statistics	3	MATH 1060			
ACCT 2200 Financial Accounting and Financial State. An.	3	MATH 1060			
ACCT 2220 Managerial Accounting & Professional Issues	3	MATH 1060, ACCT 2200			
BLAW 3050 Business Law and Ethics	3	Junior Standing			
BANA 3000 Operations Management	3	MATH 1060, ACCT 2200, BANA 2010, Junior St			
FNCE 3000 Principles of Finance	3	MATH 1060, ACCT 2200, BANA 2010, ECON 2012, ECON 2022, Junior Standing			
MGMT 3000 Managing Individuals and Teams	3	Junior Standing			
MKTG 3000 Principles of Marketing	3	Junior Standing, Coreq COMM 2050			
ISMG 3000 Technology in Business	3	Junior Standing			
MGMT 4500 Business Policy and Strategic Management	3	All Business Core with C or C- or better			
International Studies	**3**				
INTB or other	3	Choose one approved class			
Major: Information Systems	**18**				
ISMG 3500 Business Data & Database Management	3	ISMG 2050			
ISMG 3600 System Strategy, Architecture and Design	3	ISMG 2050			
ISMG 4300 Information Security & Privacy	3	Coreq: ISMG 3000			
ISMG 4400 Python Programming Fund.	3	ISMG 2050, Coreq: ISMG 3500			
Specialization/Minor Course, ISMG Elect or Internship*	3				
Specialization/Minor Course or ISMG Elective*	3				
Foreign Language Proficiency Level 1 & 2 or Regional Exp.	**10***	*If proficiency is met, student is responsible for completing 10 elect.			
Other Courses-Electives	**7**	*17 if language proficiency is met			
		Total Credit Hours: 120			

* ISMG Electives may be from an ISMG Specialization, from a Business School Minor (BANA, FNCE, RISK) or be any ISMG elective class (including an internship).

Business School
UNIVERSITY OF COLORADO DENVER

Information and Cybersecurity Management

Bachelor of Science in Business Administration
Catalog Year 2024-2025

Program Overview

The Information Systems (IS) program equips students with the practical and analytical skillsets required to manage businesses using information technologies. We help students build an adaptable knowledge base for their continued career advancement by gaining deeper understanding of the capabilities of rapidly advancing information technologies. Upon completion of our IS program, students will understand how to innovate organizational practices by acquiring, developing, deploying, and managing information technologies in an organization.

Academic Advising

It is recommended that students meet with an advisor regarding their individualized degree plan at least once per year.

Business School Advising

undergrad.advising@ucdenver.edu , https://business.ucdenver.edu/current-students/undergraduate-advising
Business School Building, floor 4, 303-315-8110

General Graduation Requirements & Policies

All CU Denver Business students are required to complete the following minimum general graduation requirements:

1. Complete a minimum of 120 applicable course hours.
2. Achieve a minimum 2.0 CU cumulative grade point average (GPA) and business GPA.
3. Complete a minimum of 45 upper division (3000/4000 level) credits.
4. Complete a minimum of 30 CU Denver business course hours in good standing.

Course Schedule & Delivery Modes

CU Denver offers courses in both in person (IP) and online (OL) delivery modes. Students may complete this degree either entirely in person OR entirely online. Students that need to take classes either online or in person will need to pay attention to when courses are offered in the format needed. Below are the required classes for this major and when they are generally offered in person and online: COURSE SCHEDULES ARE SUBJECT TO CHANGE!

	When	Fall	Spring	Summer
Core Classes				
ENGL 1020	Semester 1	IP & OL	IP & OL	IP & OL
ENGL 2030	Semester 2	IP & OL	IP & OL	IP & OL
MATH 1060 Finite Math	Semester 1	IP & OL	IP & OL	OL
Social Sciences: ECON 2012	Semester 3	IP & OL	IP & OL	IP & OL
Graduation Requirements for Business				
UNIV 1110 College Success	Semester 1	IP & OL	IP & OL	-
COMM 2050 Business and Professional Speaking	Semester 2	IP & OL	IP & OL	OL
ECON 2022 Principles of Economics: Microeconomics	Semester 4	IP & OL	IP & OL	IP & OL
ENGL 3170 Business Writing	Semester 4	IP & OL	IP & OL	OL
ISMG/MGMT 4900 Project Management and Practice	Semester 7 or 8	IP & OL	IP & OL	Either IP or OL
Business Core:				
BUSN 2110+BUSN 3110	Semesters 2 & 3	IP & OL	IP & OL	-
ISMG 2050 Introduction to Business Problem Solving	Semester 2	IP & OL	IP & OL	OL
BANA 2010 Business Statistics	Semester 3	IP & OL	IP & OL	IP & OL
ACCT 2200 Financial Accounting & Financial Statement Analysis	Semester 3	IP & OL	IP & OL	Either IP or OL
ACCT 2220 Managerial Accounting and Professional Issues	Semester 4	IP & OL	IP & OL	OL
BLAW 3050 Business Law and Ethics	Semester 6	IP & OL	IP & OL	OL
BANA 3000 Operations Management	Semester 7	IP & OL	IP & OL	IP & OL
FNCE 3000 Principles of Finance	Semester 6	IP & OL	IP & OL	OL
ISMG 3000 Technology in Business	Semester 5	IP & OL	IP & OL	OL
MGMT 3000 Managing Individuals and Teams	Semester 5	IP & OL	IP & OL	OL
MKTG 3000 Principles of Marketing	Semester 5	IP & OL	IP & OL	OL
MGMT 4500 Business Policy and Strategic Management	Semester 8	IP & OL	IP & OL	OL (May)
Information Systems Required Classes				
ISMG 3500 Business Data & Database Management	Semester 5 or 6	IP	OL	-
ISMG 3600 System Strategy, Architecture and Design	Semester 5 or 6	OL	IP	-
ISMG 4300 Information Security & Privacy	Semester 6 or 7	OL	IP	-
ISMG 4400 Python Programming Fund.	Semester 6 or 7	IP	OL	-
ISMG 4700 Business Data Communications and Networking	Sem 7 or Summer	IP		OL
ISMG 4720 Enterprise Security	Semester 6 or 7	IP & OL		-
ISMG 4860 Ethical Hacking Concepts & Methodologies	Semester 7 or 8	IP & OL	-	-
ISMG 4865 Digital Forensics Analysis	Semester 7 or 8	-	IP & OL	-

Updated 3.7.24

Business School
UNIVERSITY OF COLORADO DENVER

Information and Cybersecurity Management

Bachelor of Science in Business Administration
Catalog Year 2024-2025

SAMPLE ACADEMIC PLAN OF STUDY

The following academic plan is a ***sample*** pathway to completing degree requirements. This schedule can be adjusted to accommodate AP, IB, and/or CLEP credits, as well as courses taken during the summer sessions. Students should tailor this plan based on transfer credit, course availability, and individual preferences related to course load, schedules, and add-on programs such as minors or double majors. Students must complete an experiential learning credit (internship, study abroad program, or project-based course) and a capstone course taken in their final semester. **This plan assumes that the foreign language graduation requirement has been completed with high school courses or proficiency exam.**

Year One

Semester 1	Credits
ENGL 1020 Core Composition I	3
MATH 1060 Finite Math	3
Arts, Humanities, OR Behavioral Science	3
Arts, Humanities, OR Behavioral Science	3
UNIV 1110 College Success	1
TOTAL SEMESTER HOURS	13

Semester 2	Credits
ISMG 2050 Intro to Business Problem Solving	3
ENGL 2030 Core Composition II	3
COMM 2050 Business and Professional Speaking	3
Natural and Physical Sciences	3
Arts, Humanities, OR Behavioral Science	3
BUSN 2110 Cultivating Emotional Intelligence	1
TOTAL SEMESTER HOURS	16

Year Two

Semester 3	Credits
ACCT 2200 Financial Accounting and Financial Statement	3
BANA 2010 Business Statistics	3
Social Sciences: ECON 2012 Macroeconomics	3
ENGL 3170 Business Writing	3
General Elective *(or Regional Expertise/ Language)*	3
BUSN 3110 Career & Professional Development	1
TOTAL SEMESTER HOURS	16

Semester 4	Credits
ACCT 2220 Managerial Accounting and Professional Issues	3
ECON 2022 Microeconomics	3
Natural and Physical Sciences with a Lab	4
General Elective *(or Regional Expertise/ Language)*	3
General Elective *(or Regional Expertise)*	3
TOTAL SEMESTER HOURS	16

Year Three

Semester 5	Credits
ISMG 3500 Business Data & Database Mgmt. (or 3600)	3
ISMG 4700 IT Infrastructure (OL in summer)	3
BANA 3000 Operations Management	3
ISMG 3000 Technology in Business	3
MGMT 3000 Managing Individuals and Teams	3
TOTAL SEMESTER HOURS	15

Semester 6	Credits
ISMG 3600 System Strategy, Arch. And Design (or 3500)	3
ISMG 4300 Information Security & Privacy (or 4400)	3
BLAW 3050 Business Law and Ethics	3
FNCE 3000 Principles of Finance	3
MKTG 3000 Principles of Marketing	3
TOTAL SEMESTER HOURS	15

Year Four

Semester 7	Credits
ISMG 4400 Python Programming Fund. (or 4300)	3
ISMG 4720 Enterprise Security	3
ISMG 4860 Ethical Hacking Concepts & Methodologies	3
International Studies & Perspectives	3
General Elective	2
TOTAL SEMESTER HOURS	14

Semester 8	Credits
ISMG/MGMT 4900 Project Management and Practice	3
ISMG 4865 Digital Forensics Analysis	3
MGMT 4500 Business Policy and Strategic Management	3
Cultural Diversity	3
Elective	3
TOTAL SEMESTER HOURS	15

Updated 3.7.24

Business School
UNIVERSITY OF COLORADO DENVER

Information and Cybersecurity Management

Bachelor of Science in Business Administration
Catalog Year 2024-2025

DEGREE REQUIREMENTS

Courses	Credits	Prerequisites	Term	Credits	Grade
*Students are responsible for consulting advisors for current prerequisite and scheduling information as they change regularly					
Required CU Denver Core Curriculum Coursework	**34**				
ENGL 1020	3				
ENGL 2030	3	ENGL 1020			
MATH 1060 Finite Math	3				
Arts	3				
Humanities	3				
Behavioral Sciences	3				
Social Sciences: ECON 2012	3				
Natural and Physical Sciences **with lab**	4				
Natural and Physical science	3				
Cultural Diversity	3	Junior Standing - BUSN/MGMT 4100 rec.			
International Perspectives	3	INTB 3000, INTB 4400 or 4200 recommended			
Graduation Requirements for Business	**13**				
UNIV 1110 College Success	1	Only required for entering first term freshmen			
COMM 2050 Business and Professional Speaking	3				
ECON 2022 Principles of Economics: Microeconomics	3				
ENGL 3170 Business Writing	3	Sophomore standing			
ISMG/MGMT 4900 Project Management and Practice	3	(Experiential Learning, Junior Standing)			
Business Core	**35**				
BUSN 2110+BUSN 3110	2	1 credit each			
ISMG 2050 Introduction to Business Problem Solving	3				
BANA 2010 Business Statistics	3	MATH 1060 with C- or better			
ACCT 2200 Financial Acct and Statement Analysis	3	MATH 1060 with C- or better			
ACCT 2220 Managerial Acct & Professional Issues	3	ACCT 2200 with C- or better			
BLAW 3050 Business Law and Ethics	3	45 + credits complete			
BANA 3000 Operations Management	3	ACCT 2200, BANA 2010 with C- or better & 45 crdi			
FNCE 3000 Principles of Finance	3	MATH 1060, ACCT 2200, BANA 2010 with C- or better, ECON 2012, ECON 2022 & 45+ credits			
MGMT 3000 Managing Individuals and Teams	3	45 + credits complete			
MKTG 3000 Principles of Marketing	3	45 + credits complete			
ISMG 3000 Technology in Business	3	BANA 2010, COMM 2050 w C- or better & 45 crd			
MGMT 4500 Business Policy and Strategic Management	3	All Business Core with C- or better			
International Studies	**3**				
INTB or other	3	Choose one			
Major: Information Systems	**24**				
ISMG 3500 Business Data & Database Management	3	ISMG 2050 with **C-** or better			
ISMG 3600 System Strategy, Architecture and Design	3	ISMG 2050 with **C-** or better			
ISMG 4300 Information Security & Privacy	3	Junior Standing, Coreq: ISMG 3000			
ISMG 4400 Python Programming Fund.	3	ISMG 2050, Coreq: ISMG 3500			
ISMG 4700 IT Infrastructure	3	Junior Standing			
ISMG 4720 Enterprise Security (NEW COURSE)	3				
ISMG 4860 Ethical Hacking Concepts & Methods	3				
ISMG 4865 Digital Forensics Analysis	3				
Language Proficiency Level 1 and 2 or Regional Expertise	**10***	*If proficiency is met, student is responsible for completing 10 additional electives			
Other Courses-Electives	**1**	*11 if language proficiency is met			
		Total Credit Hours: 120			

MS Information Systems

Online & Hybrid 8-Week Program
2 Year Degree Completion

Fall and Spring semesters are split into term A (first 8 weeks) and term B (second 8 weeks).

These outlines are the optimal sequencing of MS Information Systems courses based on your specialization and a 2-year degree completion. Since many courses have recommended prerequisites and are only offered once a year, failing to take courses in the recommended sequence could delay your graduation.

All classes are offered in the online format, most classes are also offered in a hybrid format. Courses that will also be offered in a hybrid format will be indicated with (Hy). Hybrid classes will have between 10% and 50% of content delivered face-to-face.

Business Intelligence Specialization

Term	Fall Admission	Term	Spring Admission
Fall A	ISMG 6080 (Hy)	**Spr A**	ISMG 6080 (Hy)
Fall B	ISMG 6220	**Spr B**	ISMG 6220 (Hy)
Spr A	ISMG 6820 (Hy)	**Sum**	ISMG 6180 (Hy)
Spr B	ISMG 6480 (Hy) *BUSN 6530*	**Fall A**	ISMG 6810 (Hy)
Sum	ISMG 6180 (Hy)	**Fall B**	ISMG 6430 (Hy)
Fall A	ISMG 6810 (Hy)	**Spr A**	ISMG 6820 (Hy)
Fall B	ISMG 6470 (Hy)* *BUSN 6530*	**Spr B**	ISMG 6480 (Hy) *BUSN 6530*
Spr A	ISMG 6830 (Hy) *ISMG 6020**	**Sum**	ISMG 6450 (Hy)
Spr B	ISMG 6430	**Fall A**	ISMG 6020* *ISMG 6060 (Hy)*
Sum	ISMG 6450 (Hy)	**Fall B**	ISMG 6470 (Hy)* *BUSN 6530*

Cybersecurity Specialization

Term	Fall Admission	Term	Spring Admission
Fall A	ISMG 6080 (Hy)	**Spr A**	ISMG 6080 (Hy)
Fall B	ISMG 6430 (Hy)	**Spr B**	ISMG 6430
Spr A	ISMG 6865 (Hy)	**Sum**	ISMG 6340
Spr B	ISMG 6120 (Hy)	**Fall A**	ISMG 6860 (Hy)
Sum	ISMG 6340	**Fall B**	ISMG 6890 (Hy)
Fall A	ISMG 6860 (Hy)	**Spr A**	ISMG 6865 (Hy)
Fall B	ISMG 6890 (Hy)	**Spr B**	ISMG 6910 (Hy)
Spr A	ISMG 6020*	**Sum**	ISMG 6120
Spr B	ISMG 6910 (Hy)	**Fall A**	ISMG 6020 (Hy)*
Sum	ISMG 6180 (Hy)	**Fall B**	ISMG 6180

* For students with no programming background, it is recommended that they take a one credit ISMG 5090 Introduction to Python for Business class their first Maymester if they are interested in taking either ISMG 6020 (Programming Fundamentals with Python) or ISMG 6470 (Text Data Analytics).

If you are admitted in the summer, you take one of the recommended summer courses first, then follow the schedule for the Fall term.

MS Information Systems

8-Week Classes
1.5 Year Degree Completion

All classes are offered in the online format, most classes are also offered in a hybrid format. Courses that will also be offered in a hybrid format will be indicated with (Hy). Hybrid classes will have between 10% and 50% of content delivered face-to-face.

Business Intelligence

Fall Admission

Term	Term A	Term B
Fall 1	ISMG 6080	ISMG 6220
		ISMG 6180 (Hy or OL)
Spring 1	ISMG 6820 (Hy)+	ISMG 6480 (Hy)
	ISMG 6430 (F2F only) (16-week) OR Term B Online	
Summer	ISMG 6450 (Hy)	
Fall 2	ISMG 6810 (Hy)+	ISMG 6470 (Hy)*
	ISMG 6060 (HY)	

Spring Admission

Term	Term A	Term B
Spring 1	ISMG 6080 (Hy)	ISMG 6220 (Hy)
	ISMG 6430 (F2F only) (16-week) OR Term B Online	
Summer	ISMG 6450 (Hy)	
Fall 1	ISMG 6810 (Hy)	ISMG 6470 (Hy)*
		ISMG 6180 (Hy)
Spring 2	ISMG 6820 (Hy)	ISMG 6480 (Hy)
	ISMG 6020 (HY)	

Cybersecurity

Fall Admission

Term	Term A	Term B
Fall 1	ISMG 6080	ISMG 6430 (Hy)
		ISMG 6180 (Hy)
Spring 1	ISMG 6865 (Hy)	ISMG 6120 (Hy)
		ISMG 6910 (Hy)
Summer	ISMG 6340 (HY)	
Fall 2	ISMG 6860 (Hy)	ISMG 6890 (Hy)
	ISMG 6020 (OL)*	

Spring Admission

Term	Term A	Term B
Spring 1	ISMG 6080 (Hy)	ISMG 6120 (Hy)
	ISMG 6430 (F2F only) (16-week) OR Term B Online	
Summer	ISMG 6180 (HY)	
Fall 1	ISMG 6860 (Hy)	ISMG 6890 (Hy)
	ISMG 6020 (OL)*	
Spring 2	ISMG 6865 (Hy)	ISMG 6910 (Hy)
		ISMG 6340 (HY)

* For students with no programming background, it is recommended that they take a one credit ISMG 5090 Introduction to Python for Business class their first Maymester if they are interested in taking either ISMG 6020 (Programming Fundamentals with Python) or ISMG 6470 (Text Data Analytics).

If you are admitted in the summer, you take ISMG 6180 first, then follow the schedule for the Fall term.

Denver

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