1st Semester - First Year		2nd Semester - First Year	
ENG 1010	Freshman Comp: Composing Arguments	ENG 1020	Freshman Comp: Analysis, Research & Doc.
MTH 1310	Finite Math for Mgmt & Soc Science	MTH 1320	Calculus for Mgmt & Soc Science
COMM 1010 or COMM 1100	Presentational Speaking or Fund. of Oral Comm	CIS 1010*	Intro to Computers (*or gen elect if 75+ on CIS Placement Test)
BUS 1850	Intro to Business	BUS 1950	Business Communication
___ ____	Natural & Physical Science	____ ____	Arts and Humanities

1st Semester - Second Year		2nd Semester - Second Year	
____ ____	Natural & Physical Science	ECO 2020	Principles of Economics - Micro
ECO 2010	Principles of Economics - Macro	ACC 2020	Principles of Accounting II
ACC 2010	Principles of Accounting I	CIS 2110	Structured Problem Solving in Information Systems
CIS 2010	Foundations of Information Systems	____ ____	Arts and Humanities
MGT 2210	Legal Environment of Business I	HIS____	Historical Studies Elective

1st Semester - Third Year		2nd Semester - Third Year	
CIS 3300	Business Analytics I	CIS 3320	Business Analytics II
CIS 3050	Fundamentals of Systems Analysis and Design	FIN 3300	Managerial Finance
CIS 3230	Telecommunication Systems and Networking	MKT 3000	Principles of Marketing
MGT 3000	Organizational Management	CIS 3060	Database Management Systems
BUS 3040	Global Corporate Social Responsibility & Sustainability	CIS 3500	Information Systems Security

1st Semester - Fourth Year		2nd Semester - Fourth Year	
CIS 3145	Business Application Development	MGT 4950	Strategic Management
CIS ____	CIS Upper Division Elective	CIS 4050	Systems Analysis and Design
CIS ____	CIS Upper Division Elective	CIS ____	CIS Capstone Course (CIS 4xxx level elective)
____ ____	Elective	____ ____	Elective
____ ____	Elective	____ ____	Elective

Note: General elective credits may vary. Total general electives must be sufficient for the student to meet the required University minimum of 120 credit hours. These hours may be used to meet requirements for a minor or a concentration. As per University policy, no more than 16 semester hours in human performance and sport activities (HPL), 4 semester hours of varsity sports (ATH), and no more than 7 semester hours in music ensemble courses will be counted toward the degree.

MULTICULTURAL/GLOBAL DIVERSITY REQUIREMENTS: The University's multicultural and global diversity requirements must be satisfied by taking an approved course listed in the *University Catalog.*

MINORS FOR BUSINESS MAJORS: Majors in the College of Business are NOT required to complete a minor at MSU Denver. Please see an advisor if you have questions about requirements involved with taking a minor.

SUGGESTED CIS CAREER ROADMAP

First Year (0-29 Credits - EXPLORE)
- Meet with a Career Counselor at Career Services (Tivoli 215)
- Take a Career Test & Attend a Career GPS workshop

Second Year (30-59 Credits – EXPLORE)
- Complete your Roadrunner Roadmap Form (available at MSUDenver.edu/career)
- Research occupations, attend Employer Panels, learn to write a resume/post on JobLink
- Meet with the College of Business Career Advisor

Third Year (60-89 Credits – EXPERIENCE)
- Review your Skills Checklist, practice interviewing & join our AITP student chapter
- Participate in research, study abroad, service learning, or an internship through the Applied Learning Center

Fourth Year (90-120 Credits – EXECUTE)
- Update your profiles on JobLink and LindkedIn; attend career fairs
- Develop a job search strategy, connect with employers & apply for positions

*Please note: Prerequisites for courses on this sheet may change. Prior to registering for a course you must have completed the prerequisites **currently** enforced for that course. Please check the online catalog prior to registering each semester. The following concentrations are available to CIS Students: Application Development, Business Analytics, Database Development and Administration, Information Systems Security, Network Systems and Administration or Web Development and Administration.*

This sheet applies to the 2020-2021 Catalog *only*. Students with a declared major in Computer Information Systems should work with an advisor in the College of Business or the department on course selection and sequencing to ensure timely graduation.

General Studies	34
Business core	36
Additional College of Business requirements	6
Major courses	30
General Electives	14
Total to graduate (min. 40 hrs upper division)	**120 min**

Students who have reached junior standing (60 hrs) should request a Degree Progress Report and review it with a faculty advisor in the Department of Computer Information Systems and Business Analytics.

Computer Information Systems

GENERAL STUDIES

Written Communication (WC)
____ -3 (typically ENG 1010)
____ -3 (typically ENG 1020)

Oral Communication (OC)
____ COMM 1010-3   Presentational Speaking or
____ COMM 1100-3   Fund. of Oral Comm

Quantitative Literacy (QL)
____ MTH 1310-4   Finite Math for Mgt. & Social Sciences
Note: MTH1110 or MTH1400 is acceptable for transfer students or students changing their major. Consult with a math faculty advisor for approval.

Arts & Humanities
____ -3
____ -3

Historical
____ -3

Natural and Physical Sciences
____ -3
____ -3

Social and Behavioral Sciences I
____ ECO 2010-3   Principles of Economics: Macro *(QL, WC)*

Social and Behavioral Sciences II
____ ECO 2020-3   Principles of Economics: Micro *(QL, WC)*

Global Diversity **(must be satisfied within General Studies)**
____

Multicultural **(may be satisfied within General Studies, major, minor or elective)**
____

Additional College of Business Requirements (6 credits)
____ BUS 3040-3   Global Corporate Social Responsibility & Sustainability *(60 Credit hrs)*
____ MTH 1320-3   Calculus for Management and Social Sciences

GENERAL ELECTIVES (14 hours)

BUSINESS CORE *(required pre-reqs for each course listed)*
____ BUS 1850-3   Intro to Business-*transfer students coming in with 6+ credits of business courses do not need to take BUS 1850 but will need another CBUS course outside of major and bus core.*
____ BUS 1950-3   Business Communication (CAS 1010 or 1710, ENG 1010, ENG 1020 Co-req or pre-req)

The following business core courses require completion of ENG 1020, Oral Com (OC), and Quantitative Lit (QL), unless otherwise noted
____ ACC 2010-3   Principles of Accounting I *(no OC)*
____ ACC 2020-3   Principles of Accounting II *(ACC 2010)*
____ CIS 2010-3   Foundations of Information Systems *(CIS 1010 or CIS test, QL Co-req)*
____ CIS 3300-3   Business Analytics I *(MTH 1320 or 1410, CIS 2010 or CIS 2300, 60 hrs)*
____ CIS 3320-3   Business Analytics II *(CIS 3300, 60 hrs)*
____ FIN 3300-3   Managerial Finance *(ACC 2010, ECO 2010 & 2020, MTH 1320 or 1410, 60 hrs)*
____ MGT 2210-3   Legal Environment of Business I *(QL Co-req)*
____ MGT 3000-3   Organizational Management *(60 Credit hrs)*
____ MKT 3000-3   Principles of Marketing *(60 Credit hrs)*
____ MGT 4950-3   Strategic Management *(Senior/ Completion of Business Core)*

Note: All business core courses must be completed with a grade of "C-" or better.

MAJOR COURSES
____ CIS 2110-3   Structured Problem Solving in Information Systems *(CIS 2010)*
____ CIS 3050-3   Fundamentals of System Analysis & Design *(CIS 2110)*
____ CIS 3060-3   Database Management Systems *(CIS 2110)*
____ CIS 3145-3   Business Application Development *(CIS 2110)*
____ CIS 3230-3   Telecommunications Systems and Networking *(CIS 2110)*
____ CIS 3500-3   Information Systems Security *(CIS 3230)*
____ CIS 4050-3   Systems Analysis and Design *(CIS 3050, CIS 3060, CIS 3145, CIS 3230, CIS 3500, 90 hrs)*

Select 9 hrs of upper-division electives from below in consultation with a faculty advisor:
(at least 3 hours must be a 4000-level course *excludes CIS 4050*)

____ CIS 3030-3 Business Web Page Dev	____ CIS 4030-3 Web Site Administration
____ CIS 3220-3 Analysis of Hardware	____ CIS 4060-3 Adv. Database Mgmt.
____ CIS 3270-3 Adv. Comp Apps for Bus	____ CIS 4160-3 Adv. Programming Seminar
____ CIS 3280-3 Lan/Wan Sys for Bus	____ CIS 4260-3 Database Administration
____ CIS 3290-3 Operating Systems End	____ CIS 4280-3 Network Install & Admin.
____ CIS 3310-3 Business Forecasting Methods	____ CIS 4281-3 Network Install & Admin UNIX
____ CIS 3350-3 Knowldg Discovry & Data Mining	____ CIS 4370-3 Data Science & Big Data Anlytcs
____ CIS 3460-3 Data Warehouse/ Mining	____ CIS 4410-3 Management Info. Systems
____ CIS 3490-3 Managing Bus. Info, EnterpSys	____ CIS 4500-3 Info Sys Security Tools & Tech
____ CIS 3980-3 Internship	____ CIS 4550-3 Info Sys Scrty Mgt & Info Asurnc