|  |  |  |  |
| --- | --- | --- | --- |
| 1st Semester - First Year | | 2nd Semester - First Year | |
| ENG 1010  MTH 1310  CAS 1010 or CAS 1710  BUS 1850  \_\_\_ \_\_\_\_ | Freshman Comp: Composing Arguments  Finite Math for Mgmt & Soc Science  Public Speaking or Interpersonal Communications  Intro to Business  Natural & Physical Science | ENG 1020  MTH 1320  CIS 1010\*  BUS 1950  \_\_\_\_ \_\_\_\_ | Freshman Comp: Analysis, Research & Doc.  Calculus for Mgmt & Soc Science  Intro to Computers (\*or gen elect if 75+ on CIS Placement Test)  Business Communication  Arts and Humanities |
| 1st Semester - Second Year | | 2nd Semester - Second Year | |
| \_\_\_\_ \_\_\_\_  ECO 2010  ACC 2010  CIS 2010  MGT 2210 | Natural & Physical Science  Principles of Economics - Macro  Principles of Accounting I  Foundations of Information Systems  Legal Environment of Business I | ECO 2020  ACC 2020  CIS 2110  \_\_\_\_ \_\_\_\_  HIS\_\_\_\_ | Principles of Economics - Micro  Principles of Accounting II  Structured Problem Solving in Information Systems  Arts and Humanities  Historical Studies Elective |
| 1st Semester - Third Year | | 2nd Semester - Third Year | |
| CIS 3300  CIS 3050  CIS 3230  MGT 3000  BUS 3040 | Business Analytics I  Fundamentals of Systems Analysis and Design  Telecommunication Systems and Networking  Organizational Management  Global Corporate Social Responsibility & Sustainability | CIS 3320  FIN 3300  MKT 3000  CIS 3060  CIS 3500 | Business Analytics II  Managerial Finance  Principles of Marketing  Database Management Systems  Information Systems Security |
| 1st Semester - Fourth Year | | 2nd Semester - Fourth Year | |
| CIS 3145  CIS \_\_\_\_  CIS \_\_\_\_  \_\_\_\_ \_\_\_\_  \_\_\_\_ \_\_\_\_ | Business Application Development  CIS Elective  CIS Elective  Elective  Elective | MGT 4950  CIS 4050  CIS \_\_\_\_  \_\_\_\_ \_\_\_\_  \_\_\_\_ \_\_\_\_ | Strategic Management  Systems Analysis and Design  CIS Capstone Course (CIS 4xxx level 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

**Computer Information Systems, B.S.**

**303-615-0660 Admin 590**

***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.***

**Catalog 18-19**

###### 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

###### GENERAL STUDIES

Written Communication (WC)

\_\_\_ -3 (typically ENG 1010)

\_\_\_ -3 (typically ENG 1020)

Oral Communication (OC)

CAS 1010-3 Public Speaking ***or***

\_\_\_ CAS 1710-3 Interpersonal Communication

#### 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)

**Computer Information Systems**

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.

This sheet applies to the 2018-2019 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**