## Computer Science + Masters in Business Administration 
(147 Hours)

### Freshman
- **CIS 115 (3)** Intro. Comp. Sci.  
  PR/CO: MATH 205 or 220  
  PR: CIS 111 or CIS 115 or ECE 241
- **CIS 200 (4)** Programming Fund.  
  PR: CIS 200
- **CIS 300 (3)** Data & Pgm Structures  
  PR: CIS 200  
  PR: MATH 205 or 220
- **ENGL 100 (3)** Writing 1
- **ECON 110 (3)** Princ. Of Mac. Econ.
  PR: MATH 220
  PR: CIS 200
- **MATH 220 (4)** Calculus I
- **MATH 221 (4)** Calculus II  
  PR: MATH 220
- **COMM 105 (2)**/ COMM 106 (3)  
  Public Speaking
- **CIS 015 (0)** Undergrad Seminar

### Sophomore
- **CIS 308 (1)** C/C++ Lang. Lab  
  PR: CIS 300
- **CIS 309 (1)** Ethics & Comp. Tech (F)  
  PR: CIS 300
- **CIS 400 (3)** Object-Oriented Design, Imp., & Testing  
  PR: CIS 300
- **CIS 501 (3)** SW Arch. & Design  
  PR: CIS 400
- **ECON 120 (3)** Principles of Microeconomics  
  PR: ENGL 100
- **ENGL 200 (3)** Writing 2  
  PR: ENGL 100
- **MATH 222 (4)** Calculus III
- **Math Elective**
  PR: MATH 221

### Junior
- **CIS 415 (3)** Comp. Arch. & Ops  
  PR: ECE 241  
  PR/CO: CIS 308
- **CIS 560 (3)** Database System  
  PR: CIS 300 and 301  
  PR: MATH 212, 510
- **Human/Soc Sci. Elective (3)**
- **ENGL 516 (3)** Discrete Math  
  PR: MATH 221
- **Human/Soc Sci. Elective (3)**
- **ENGL 415 (3)** Writing Comm. for Sci/Engg.  
  PR: ENGL 200

### Senior
- **Tech Elective (3)**
- **ACCTG 810 (3)** Foundations of Accounting
- **FINAN 815 (3)** Foundations of Finance
- **Human/Soc Sci. Elective (3)**
- **Unrestricted (3/4)**

### 5th Year
- **Tech Elective (3)**
- **MANGT 810 (3)** Operations & Supply Chain Management
- **MKTG 810 (3)** Marketing Concepts & Research
- **MANGT 860 (3)** Business Strategy
- **GENBA 890 (3)** Business Capstone/ OR GENBA MBA Internship (3)

### Notes
- Advisor: ___________________________  
  Student ID: ___________________________

- This course is apart of the pre-professional program
- This course is apart of the professional program
Rules for Mathematics and Science Electives

Math/Science Electives (17 Hours)

1. One of the following 2-semester sequences must be included:
   - BIOL 198 and 201 (9 Hours)
   - CHM 210 and 230 (8 Hours)
   - PHYS 213 and 214 (10 Hours)
   - PHYS 223 and 224 (10 Hours)

2. All remaining hours, choose from the following:
   - BIOCH 625 Introductory Organic & Biochemistry (5)
   - BIOCH 521 General Biochemistry (3)
   - BIOL 198 Principles of Biology (4)
   - BIOL 201 Organismic Biology (5)
   - BIOL 450 Modern Genetics (4)
   - BIOL 455 General Microbiology (4)
   - CHM 210 Chemistry I (4)
   - CHM 230 Chemistry II (4)
   - CHM 350 General Organic Chemistry (3)
   - CHM 531 Organic Chemistry I (3)
   - CHM 371 Chemical Analysis (4)
   - CHM 550 Organic Chemistry II (3)
   - GEOL 100 Earth in Action (3)
   - GEOL 102 Earth in Time (3)
   - GEOL 103 Geology Laboratory (1)
   - GEOL 502 Mineralogy (3)

3. One of the following mathematics courses must be included:
   - MATH 222 Analytic Geometry and Calculus III (4)
   - MATH 340 Elementary Differential Equations (4)
   - MATH 506 Introduction to Number Theory (3)
   - MATH 511 Introduction to Algebraic Systems (3)
   - MATH 512 Introduction to Modern Algebra (3)
   - MATH 515 Introduction to Linear Algebra (3)
   - MATH 551 Applied Matrix Theory (3)
   - MATH 572 Foundations of Geometry (3)
   - MATH 633 Advanced Calculus I (3)
   - PHYS 113 General Physics (4)
   - PHYS 213 Engineering Physics I (5)
   - PHYS 223 Physics I, Mechanics, & Thermodynamics (5)
   - PHYS 114 General Physics II (4)
   - PHYS 214 Engineering Physics II (5)
   - PHYS 224 Physics II, Electromagnetism, and Sound (5)
   - PHYS 325 Physics III, Relativity, and Quantum Physics (4)
   - STAT 511 Introductory Probability and Statistics II (3)

Communications Elective Choices

- COMM 322 Interpersonal Communications (3)
- COMM 326 Small Group Discussion Methods (3)
- MANGT 420 Principles of Management (3)
- THTRE 261 Fundamentals of Acting (3)
- THTRE 265 Fundamentals of Improvisation (3)

MBA Tech Electives

Required Tech Elective: 3 hours
- CIS 520 Operating Systems (spring course only)
  or CIS 625 Parallel Programming (fall course only)

Capstone Experience: 3 hours
- CIS 598 Computer Science Project
  or both CIS 642 Software Engineering Project I (3 hours) and CIS 643 Software Engineering Project II (3 hours, taken as an unrestricted elective)

Additional Tech Elective Courses (9 hours)
- Three courses taken for graduate credit from the following list:
  - CIS 731 Programming Techniques for Data Science and Analytics
  - CIS 732 Machine Learning and Pattern Recognition
  - MIS 670 Social Media Analytics and Web Mining

At most one of:
- MIS 665 Business Analytics and Data Mining
- MKTG 880 Applied Marketing Analysis
- MKTG 881 Advanced Marketing Analysis

Other Data Analytics courses, including special topics courses, approved by both the Department of Computer Science and the College of Business Administration.

Humanities/Social Science Electives

Suggestions:
- ARCH 301 Appreciation of Architecture (3)
- COMM 323 Nonverbal Communication (3)
- ENGL 270 American Literature (3)
- GWSS 350 Gender in American Film (3)
- GWSS 550 Women and Popular Culture (3)
- MUSIC 170 History of Rock and Roll (3)

Aesthetic Experience & Interpretive Understanding