Rules for Mathematics and Science Electives

1. One of the following 2-semester sequences must be included:
   - BIOL 198 and 401 (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 511 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 655 Business Analytics and Data Mining
    - MKTG 880 Advanced 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 550 Women and Popular Culture (3)
  - MUSIC 170 History of Rock and Roll (3)