**Computer Science + Entrepreneurship**

(120 + 15 Hours)

**Freshman**
- **CIS 115 (3)** Intro. Comp. Sci.
  - Prerequisite: PR/CO: MATH 205 or 220
  - PR: CIS 111 or CIS 115 or ECE 241

- **ECON 110 (3)** Princ. Of Mac. Econ.
  - PR: MATH 220

**Sophomore**
- **CIS 200 (4)** Programming Fund.
  - PR/CO: MATH 205 or 220
  - PR: CIS 111 or CIS 115 or ECE 241

- **CIS 300 (3)** Data & Pgm. Structures.
  - PR: CIS 200
  - PR: MATH 205 or 220

- **CIS 301 (3)** Log. Found of Prog.
  - PR: CIS 200

  - PR: MATH 220

**Junior**
- **CIS 400 (3)** Object-Oriented Design, Impl., & Testing.
  - PR: CIS 300

- **CIS 415 (3)** Ethics & Comp. Tech (F)
  - PR: CIS 300

- **Communications Elective**

**Senior**
- **CIS 408 (1)** C/C++, Lang., Lab
  - PR: CIS 300

- **CIS 450 (3)** Comp. Arch & Ops
  - PR: ECE 241
  - PR/CO: CIS 308

- **CIS 505 (3)** Introduction to Programming Languages

**5th Semester**
- **Tech Elective (3)**

**Effective: 5/2020**

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**Advisor: ____________________________  Student ID: ____________________________**

This course is apart of the pre-professional program

This course is apart of the professional program

* CIS 018 required every semester
# Rules for Mathematics and Science Electives

## Math/Science Electives (17 Hours)

1. One of the following 2-semester sequences must be included:
   - BOL 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)
   - BOL 198 Principles of Biology (4)
   - BOL 201 Organismic Biology (5)
   - BOL 450 Modern Genetics (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)
   - MATH 222 Analytic Geometry and Calculus III (4)
   - MATH 340 Elementary Differential Equations (4)
   - MATH 506 Introduction to Number Theory (3)
   - MATH 551 Introduction to Algebraic Systems (3)
   - 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)

## Humanities/Social Science Electives + K-State 8

### Human Diversity/Social Science
- AMETH 160 Intro. to American Ethnic Studies (3)
- AMETH 461 Transformative Thought (3)
- COMM 420 Gender Communication (3)
- GEOG 310 Geography of Kansas (3)
- GWSS 105 Intro. to Gender, Women, and Sexuality Studies (3)
- LEAD 212 Intro. to Leadership Concepts (3)
- MUSIC 420 History of Jazz (3)
- SOCIO 211 Intro. to Sociology (3)
- THTRE 665 Drama Therapy with Special Populations (3)

### Aesthetics Experience & Interpretive Understanding
- 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)

### Historical Perspectives
- AMETH 160 Intro. to American Ethnic Studies (3)
- ARCH 301 Appreciation of Architecture (3)
- GEOG 310 Geography of Kansas (3)
- HIST 151 History in the U.S. to 1877 (3)
- HIST 152 History in the U.S. since 1877 (3)
- POLSC 115 U.S. Politics (3)
- THTRE 270 Intro. to Theatre (3)