**Computer Science + Entrepreneurship (120 Hours)**

**Freshman**
- **CIS 115 (3)**
  - Intro. Comp. Sci
  - PR: CIS 115 or ECE 241
  - PR/CO: Math 205 or 220
- **CIS 200 (4)**
  - Programming Fund.
  - PR: CIS 115
  - PR/CO: Math 205 or 220
- **ENGL 100 (3)**
  - Writing 1
  - PR: ENGL 100
- **ECON 110 (3)**
  - Princ. of Mac. Econ
- **COMM 105 (2) / COMM 106 (3)**
  - Public Speaking

**Sophomore**
- **CIS 300 (3)**
  - Data & Program Structures
  - PR: CIS 200
- **CIS 301 (3)**
  - Log. Found of Prog.
- **ENGL 200 (3)**
  - Writing 2
  - PR: ENGL 200
- **ECE 241 (3)**
- **Math 220 (4)**
  - Calculus I
  - PR: Math 220

**Junior**
- **CIS 302 (3)**
  - Data Structures
  - PR: CIS 300
- **CIS 415 (3)**
  - Ethics & Conduct
  - PR: CIS 300
- **CIS 575 (3)**
  - Intro. to Programming Languages
  - PR: CIS 301 and 308
- **STAT 510 (3)**
  - Intro. to Prob. & Stats
  - PR: Math 221

**Senior**
- **CIS 520 (3) / CIS 525 (3) / CIS 625 (3)**
  - *CIS 520 is offered in Spring & CIS 525/625 in the Fall
  - PR: CIS 300
  - PR/CO: CIS 300

**Entrepreneurship Elective (3)**

**Human/Soc Sci. Elective (3)**

**Communications Elective**

**Math Elective**

**Math Elective**

**Math Elective**

**Human/Soc Sci. Elective (3)**

**Computer Science Project**

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This course is part of the Pre-Professional Program

This course is part of the Prof. Program

* 018 required every sem.
# Rules for Mathematics, Science, and Electives

<table>
<thead>
<tr>
<th>Math/Science Electives</th>
<th>ENTRP Tech Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOCH 625 Intro.Organic &amp; Biochemistry (5)</td>
<td>MATH 222 Analytic Geo. and Calculus III (4)</td>
</tr>
<tr>
<td>BIOCH 521 General Biochemistry (3)</td>
<td>MATH 340 Elementary Diff. Equations (4)</td>
</tr>
<tr>
<td>BIOL 198 Principles of Biology (4)</td>
<td>MATH 506 Introduction to Nmbr Theory (3)</td>
</tr>
<tr>
<td>BIOL 201 Organismic Biology (5)</td>
<td>MATH 511 Introduction to Algebraic Sys. (3)</td>
</tr>
<tr>
<td>BIOL 450 Modern Genetics (4)</td>
<td>MATH 512 Introduction to Modern Alg. (3)</td>
</tr>
<tr>
<td>BIOL 455 General Microbiology (4)</td>
<td>MATH 515 Introduction to Linear Alg. (3)</td>
</tr>
<tr>
<td>CHM 210 Chemistry I (4)</td>
<td>MATH 551 Applied Matrix Theory (3)</td>
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<tr>
<td>CHM 230 Chemistry II (4)</td>
<td>MATH 572 Foundations of Geometry (3)</td>
</tr>
<tr>
<td>CHM 350 General Organic Chemistry (3)</td>
<td>MATH 633 Advanced Calculus I (3)</td>
</tr>
<tr>
<td>CHM 371 Chemical Analysis (4)</td>
<td>PHYS 113 General Physics (4)</td>
</tr>
<tr>
<td>CHM 531 Organic Chemistry I (3)</td>
<td>PHYS 114 General Physics II (4)</td>
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<tr>
<td>CHM 550 Organic Chemistry II (3)</td>
<td>PHYS 213 Engineering Physics I (5)</td>
</tr>
<tr>
<td>GEOL 100 Earth in Action (3)</td>
<td>PHYS 214 Engineering Physics II (5)</td>
</tr>
<tr>
<td>GEOL 102 Earth in Time (3)</td>
<td>PHYS 223 Physics I, Mech., &amp; Thermodynamics (5)</td>
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<tr>
<td>GEOL 103 Geology Laboratory (1)</td>
<td>PHYS 224 Physics II, Electromag. &amp; Sound (5)</td>
</tr>
<tr>
<td>GEOL 502 Mineralogy (3)</td>
<td>PHYS 325 Physics III, Relativity, and Quant. Phys. (4)</td>
</tr>
<tr>
<td>STAT 511 Intro. Probability and Stat. II (3)</td>
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</tbody>
</table>

One of the following math courses must be included:

- MATH 222 Analytic Geometry and Calc. III (4)
- MATH 340 Elementary Differential Equations (4)
- MATH 506 Intro. to Number Theory (3)
- MATH 511 Intro. to Algebraic Systems (3)
- MATH 512 Intro. to Modern Algebra (3)
- MATH 633 Advanced Calculus I (3)
- PHYS 113 General Physics (4)
- PHYS 114 General Physics II (4)
- PHYS 213 Engineering Physics I (5)
- PHYS 214 Engineering Physics II (5)
- PHYS 223 Physics I, Mech., & Thermodynamics (5)
- PHYS 224 Physics II, Electromag. & Sound (5)
- PHYS 325 Physics III, Relativity, and Quant. Phys. (4)

All remaining hours, choose from the following:

- ENTRP T ech Electives

Students are required to complete 15 hours of Tech Electives

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

- Capstone:
  - ENTRP 575 Entrepreneurship and Innovation Capstone to be taken in the semester immediately following CIS 596 (3)

- Required CIS Course:
  - CIS 596 Entrepreneurship Project to be taken in the fall immediately preceding ENTRP 350 (3)
  - ENTRP 340 Introduction to Entrepreneurship (3)

- Additional Tech Elective Courses (9):
  - Nine hours of additional coursework from:
    - ENTRP 350 Technology and Innovation Management (3)
    - ENTRP 411 Innovation in Organizations (3)
    - ENTRP 435 The Entrepreneurial Experience (3)
    - ENTRP 466 Digital Business (3)
    - ENTRP 497 Topics in Entrepreneurship (1-3)
    - ENTRP 520 Social Entrepreneurship (3)
    - ENTRP 540 Entrepreneurial Consulting (3)
    - FINAN 561 Finance for Entrepreneurs (3)
    - MANGT 390 Business Law (3)
    - MANGT 520 Organizational Behavior (3)
    - MANGT 531 Human Resources Management (3)

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<table>
<thead>
<tr>
<th>Natural Science Sequence</th>
<th>Communications Elective Choices</th>
<th>Humanities/Social Science Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 198 and 401 (9 Hours)</td>
<td>COMM 322 Interpersonal Communications (9)</td>
<td>ARCH 301 Appreciation of Architecture (3)</td>
</tr>
<tr>
<td>CHM 210 and 230 (8 hours)</td>
<td>COMM 326 Small Group Discussion Methods (3)</td>
<td>COMM 323 Nonverbal Communication (3)</td>
</tr>
<tr>
<td>PHYS 213 and 214 (10 Hours)</td>
<td>MANGT 420 Principles of Management (3)</td>
<td>ENGL 270 American Literature (3)</td>
</tr>
<tr>
<td>PHYS 223 and 224 (10 Hours)</td>
<td>THTRE 261 Fundamentals of Acting (3)</td>
<td>GWSS 350 Gender in American Film (3)</td>
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<td></td>
<td>THTRE 265 Fundamentals of Improvisation (3)</td>
<td>GWSS 550 Women and Popular Culture (3)</td>
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<td>MUSIC 170 History of Rock and Roll (3)</td>
</tr>
</tbody>
</table>

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)

engg.ksu.edu/docs/student-services/hss.pdf