

Computer Science + Entrepreneurship (120 Hours)

Effective F2022

Freshman

Sophomore

Junior

Senior

CIS 115 (3) Intro. Comp. Sci	CIS 200 (4) Programming Fund. PR: CIS 115 or ECE 241 PR/CO: Math 205 or 220	CIS 300 (3) Data & Program Structures PR: CIS 200 PR: Math 205 or 220	CIS 400 (3) Object-Oriented Design, Imp., & Testing PR: CIS 300	CIS 501 (3) SW Arch. & Design PR: CIS 400	CIS 575 (3) Intro to Alg. Analysis PR: CIS 300 and 301 PR: Math 510	CIS 505 (3) Intro. to Programming Languages PR: CIS 301 & 400	CIS 520 (3)/ CIS 525 (3)/ CIS 625 (3) <small>*CIS 520 is offered in Spring & CIS 525/625 in the Fall CIS 520/625 PR: CIS 400 & 450 CIS 525 PR: CIS 300 & 308</small>
Math 220 (4) Calculus I	CIS 221 (4) Calculus II PR: Math 220	CIS 301 (3) Log. Found of Prog. PR: CIS 200	CIS 308 (1) C Lang. Lab PR: CIS 300	CIS 415 (3) Ethics & Conduct PR: CIS 300	CIS 450 (3) Comp. Arch & Ops PR: ECE 241 PR/CO: CIS 308	ENTRP 575 (3) Entrepreneurship & Innovation Course	Entrepreneurship Elective (3)
ENGL 100 (3) Writing 1	ECE 241 (3) Intro. Com. Engg.	ENGL 200 (3) Writing 2 PR: ENGL 100	Math 510 (3) Discrete Math PR: Math 221	Entrepreneurship Elective (3)	CIS 560 (3) Database System PR: CIS 300, 301 PR/CO: Math 312 or 510	ENTRP 340 (3) Introduction to Entrepreneurship	CIS 596 (3) Computer Science Project
ECON 110 (3) Princ. of Mac. Econ	1 Natural Science Choose Seq. 1 out of 2	2 Natural Science Choose Seq. 2 out of 2	1 Math/Natural Sci. Elective <small>* 300 Level & above</small>	Human/Soc.Sci. Elective (3)	STAT 510 (3) Intro. to Prob. & Stats PR: Math 221	2 Math/ Natural Sci. Elective	3 Math Elective
COMM 105 (2)/ COMM 106 (3) Public Speaking		Human/Soc.Sci. Elective (3)	Communications Elective	Human/Soc.Sci. Elective (3)	ENGL 516 (3)/ ENGL 415 (3) Writing Comm. for Sci/Engg. PR: ENGL 200	Entrepreneurship Elective (3)	Human/Soc.Sci. Elective (3)
CIS 015 (0) Undergrad Seminar	CIS 018 (0) Professional Development Seminar	CIS 018 (0) Professional Development Seminar	CIS 018 (0) Professional Development Seminar	CIS 018 (0) Professional Development Seminar	CIS 018 (0) Professional Development Seminar	CIS 018 (0) Professional Development Seminar	CIS 018 (0) Professional Development Seminar

This course is part of the Pre-Professional Program

This course is part of the Prof. Program
* 018 required every sem.

Advisor: _____

Student ID: _____

Rules for Mathematics, Science, and Electives

Math/Science Electives

- 1** **2** All remaining hours, choose from the following:
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| BIOCH 625 Intro.Organic & Biochemistry (5) | MATH 222 Analytic Geo. and Calculus III (4) |
| BIOCH 521 General Biochemistry (3) | MATH 340 Elementary Diff. Equations (4) |
| BIOL 198 Principles of Biology (4) | MATH 506 Introduction to Nmbr Theory (3) |
| BIOL 201 Organismic Biology (5) | MATH 511 Introduction to Algebraic Sys. (3) |
| BIOL 450 Modern Genetics (4) | MATH 512 Introduction to Modern Alg. (3) |
| BIOL 455 General Microbiology (4) | MATH 515 Introduction to Linear Alg. (3) |
| CHM 210 Chemistry I (4) | MATH 551 Applied Matrix Theory (3) |
| CHM 230 Chemistry II (4) | MATH 572 Foundations of Geometry (3) |
| CHM 350 General Organic Chemistry (3) | MATH 633 Advanced Calculus I (3) |
| CHM 371 Chemical Analysis (4) | PHYS 113 General Physics (4) |
| CHM 531 Organic Chemistry I (3) | PHYS 114 General Physics II (4) |
| CHM 550 Organic Chemistry II (3) | PHYS 213 Engineering Physics I (5) |
| GEOL 100 Earth in Action (3) | PHYS 214 Engineering Physics II (5) |
| GEOL 102 Earth in Time (3) | PHYS 223 Physics I, Mech., & Thermodynamics (5) |
| GEOL 103 Geology Laboratory (1) | PHYS 224 Physics II, Electromag. & Sound (5) |
| GEOL 502 Mineralogy (3) | PHYS 325 Physics III, Relativity, and Quant. Phys. (4) |
| STAT 511 Intro. Probability and Stat. II (3) | |
- 3** One of the following math courses must be included:
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| MATH 222 Analytic Geometry and Calc. III (4) | MATH 515 Introduction to Linear Algebra (3) |
| MATH 340 Elementary Differential Equ.s (4) | MATH 551 Applied Matrix Theory (3) |
| MATH 506 Intro. to Number Theory (3) | MATH 572 Foundations of Geometry (3) |
| MATH 511 Intro. to Algebraic Systems (3) | MATH 633 Advanced Calculus I (3) |
| MATH 512 Intro. to Modern Algebra (3) | STAT 511 Introductory Probability and Stat. II (3) |

ENTRP Tech 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)

Natural Science Sequence

- 1** **2** One of the following two-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)

Communications Elective Choices

- Options:
- COMM 322 Interpersonal Communications (9)
 - 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

- 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)
- eng.ksu.edu/docs/student-services/hss.pdf