

Cyber Security Engineering

2020-2021 Catalog

125 Total Credits

First Year

Semester 1

- 4 Chem 167 (Chem for Engrs)
- 3 Cpr E 185 (Engr Problem Solving)
- 3 Engl 150 (Critical Think & Comm)
- R Engr 101 (Engr Orientation)
- 1 Lib 160 (Library)
- 4 Math 165 (Calculus I)

15 Total Credits

Semester 2

- 4 Com S 227(Object-orient Program)
- R Cpr E 166 (Prof Program Orientation)
- 3 General Education Elective
- 4 Math 166 (Calculus II)
- 5 Phys 221 (Classical Physics I)

16 Total Credits

Sophomore Year

Semester 3

- 4 Cpr E 281 (Digital Logic)
- 3 Com S 228 (Intro to Data Structures)
- 4 Math 267 (Differential Equations)
- 3 Cpr E 230 (Intro Cyber Security)
- R CprE 294 (Program Discovery)

14 Total Credits

Semester 4

- 4 Cpr E 288 (Embedded Systems I)
- 3 Engl 250 (WOVE Comp)
- 3 Math Elective
- 3 Cpr E 231 (Cyber Security Tools)
- 3 Cpr E 234 (Cyber Legal/Ethical)

16 Total Credits

Junior Year

Semester 5

- 4 Cpr E 381 (Org & Assembly Prog)
- 3 Cpr E 310 (Foundations of Cpr E)
- 3 Com S 309 (Software Develop)
- 3 Cpr E 331 (Cyber Crypto Concepts)
- 3 General Education Elective

16 Total Credits

Semester 6

- 3 Com S 311 (Algorithms Analysis) **OR**
CPR E 315 (Algorithms Application)
- 4 Cpr E 308 (Operating Systems)
- 3 Engl 314 or 309 (Tech Comm/Reports)
- 3 General Education Elective
- 3 Cyber Security Elective

16 Total Credits

Senior Year

Semester 7

- 3 Cpr E 491 (Senior Design Project I)
- R Cpr E 494 (Portfolio Assessment)
- 3 Stat 330 (Probabilities & Statistics)
- 6 Cyber Security Electives
- 3 Cpr E Elective
- 3 General Education Elective

18 Total Credits

Semester 8

- 2 Cpr E 492 (Senior Design Project II)
- 3 Technical Elective
- 3 Technical Elective
- 3 General Education Elective
- 3 Cyber Security Elective

14 Total Credits

Shading indicates Basic Program courses

Compiled from official ISU catalog 4-year plans (catalog.iastate.edu/undergraduatemajors-alpha/)