

Software Engineering

2020-2021 Catalog

125 Total Credits

First Year

Semester 1

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

15 Total Credits

Semester 2

4 Math 166 (Calculus II)
5 Phys 221 (Classical Physics I)
R SE 166 (Careers in SE)
4 Com S 227 (Object-orient Program)
3 Economics Elective

16 Total Credits

Sophomore Year

4 Math 267 (Differential Equations)
3 Engl 250 (WOVE Composition)
4 Cpr E 281 (Digital Logic)
3 Com S 228 (Intro to Data Structures)
3 Sp Cm 212 (Public Speaking)

17 Total Credits

3 Math Elective
3 General Education Elective
3 Com S 327 (Advanced Programming) **OR**
Cpr E 288 (Embedded Systems I) (4 cr)
3 S E 319 (User Interfaces)

12 Total Credits

Junior Year

Semester 5

3 General Education Elective
3 Com S 309 (Software Develop)
3 Com S 321 (Intro Computer Arch) **OR**
Cpr E 381 (Org & Assembly Lvl Prog) (4 cr)
3 Com S 363 (Database Mgmt Sys)
3 Com S 230 (Discrete Computation) **OR**
Cpr E 310 (Fund Cpr Engr)

15 Total Credits

Semester 6

3 Open Elective
3 S E 329 (Software Project Mgmt)
3 Com S 311 (Design & Analysis Algrth)
3 S E 339 (Software Arch & Design)
3 Com S 352 (Operating Systems) **OR**
Cpr E 308 (Operating Sys Principles) (4 cr)
3 Engl 314 or 309 (Tech Comm/Reports)

18 Total Credits

Senior Year

Semester 7

3 S E 491 (Senior Design Project I)
3 Stat 330 (Prob & Statistics)
3 Software Engineering Elective
3 General Education Elective
3 S E 421 (Software Anlys & Verification)

15 Total Credits

Semester 8

2 S E 492 (Senior Design Project II)
3 S E Elective
9 Supplementary Electives
3 General Education Elective

17 Total Credits

Shading indicates Basic Program courses

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