BYU Computer Science Major

Software Engineering Emphasis

Fall 2026 Requirements

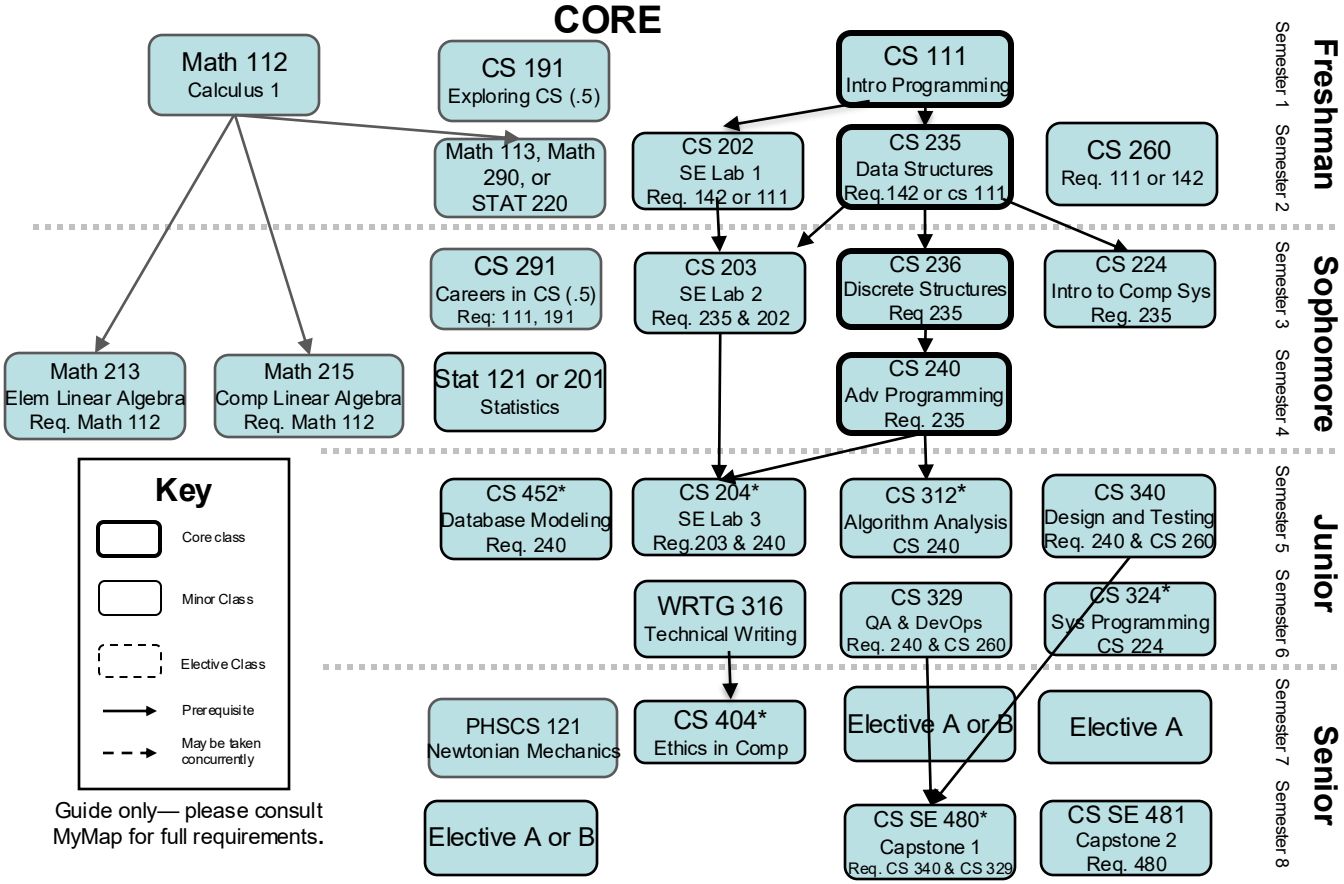
Major (74-76 Hours)

Grades below C- are not allowed in major courses.

1. Complete the following courses: CS 111, 191, 202, 203, 204, 224, 235, 236, 240, 260, 291, 312, 324, 329, 340, 404, 452, 480, 481
2. Complete the following supporting courses: WRTG 316, Math 112, 213, 215, and Phscs 121
3. Complete one of the : Stat 121 or Stat 201
4. Complete one of the following three courses: Math 113, Math 290 or STAT 220
5. Complete 2 courses from the following courses: CS 256, 270, 330, 345, 356, 453, 456, 460, 462, 465, 473, 486
6. Complete 1 courses from the following courses: CS 252, 256, 270, 330, 345, 355, 356,393, 401R**, 405, 412, 416, 418, 430, 450, 453, 455, 456, 460, 462, 465, 466, 470,471, 473, 474, 479, 486, 493R**, 497R**, 498R**, 501R**, 513, 556, 574, 575, 580, EC EN 424, EC EN 425, IT&C 567, MATH 411, Math 431, MATH 485

(If CS 401R, 493R, 497R, 498R, or 501R is chosen, it must be taken for three credit hours)

Elective Information:
Students must complete a total of 3 elective courses.2 from Elective A and 1 from Elective B. Courses may not double count between Elective A and Elective B.



Guide only— please consult MyMap for full requirements.

Elective A
(Choose 2 courses)

- CS 256 Intro to HCI
- CS 270 Intro to Machine Learning
- CS 330 Prog Languages Req: 240
- CS 345 Operating Sys Dsgn Req: 224 & 240
- CS 356 Adv. Tech in HCI Req: 256 &260
- CS 453 Info Retrieval Req: 240
- CS 456 UI Software Req: 240, 356
- CS 460 Networks Req: 324
- CS 462 Distributed Systems Req: 260, 324
- CS 465 Security Req: 324
- CS 473 Avd. Machine Learning 312,Math 215,Stat 121
- CS 486 Verification & Valid Req: 312
- CS 252 Intro Comp Theory Req: 235
- CS 256 Intro to HCI
- CS 270 Intro to Machine Learning Req:
- CS 330 Prog Languages Req: 240
- CS 345 Operating Sys Dsgn Req: 224 & 240
- CS 355 Interactive Graphic Req: 240,Math 213,215
- CS 356 Adv. Tech in HCI Req: 256 & 260
- CS 393 Collaborative Problem Solving
- CS 401R** Topics in CS
- CS 405 Software Business Req: 240 & Engl 316
- CS 412 Convex Optimization Req: 240
- CS 416 Advanced Algorithms Req: 312, 355,Math 313
- CS 418 Bioinformatics Algorithms CS 240
- CS 430 Formal Verification CS 330 or Math 290
- CS 450 Computer Vision Req: 312, 355,Math 313
- CS 453 Info Retrieval Req: 240
- CS 455 Comp Graphics Req: 355,Math 213,215
- CS 456 Mobile& Ubiquitous HCI Req: 240, 356
- CS 460 Networks Req: 235
- CS 462 Distributed Systems Req: 260, 324
- CS 465 Security Req: 324
- CS 466 Block Chain Req: 312
- CS 470 Artificial Intelligence 312,Math 215,Stat 121

Elective B
(Choose 1 courses)

- CS 471 Voice User Interfaces
- CS 473 Avd. Machine Learning 312,Math 215,Stat 121
- CS 474 Deep Learning 312,Math 213, 215
- CS 479 Intro to Machine Translation
- CS 486 Verification & Valid Req: 312
- CS 493R** Comp. Competition Req: 240
- CS 497R** Research
- CS 498R** Special Projects Req: 240
- CS 501R** Adv CS Topics
- CS 513 Robust Control Req: Math 213, 215
- CS 556 Inter Soft Systems
- CS 574 Transformers for NLP Req: 270, 312
- CS 575 Intro to Network Science Req: 312
- CS 580 Theory of Predictive Modeling
- EC EN 424 Computer Systems
- EC EN 425 Real-Time Operating Systems
- IT&C 567 Security Testing Req: CS 465 or IT 366
- MATH 411 Numerical Methods Req: MATH 334
- MATH 431 Probability Theory Req: Math 213
- MATH 485 Cryptography Req: MATH 213