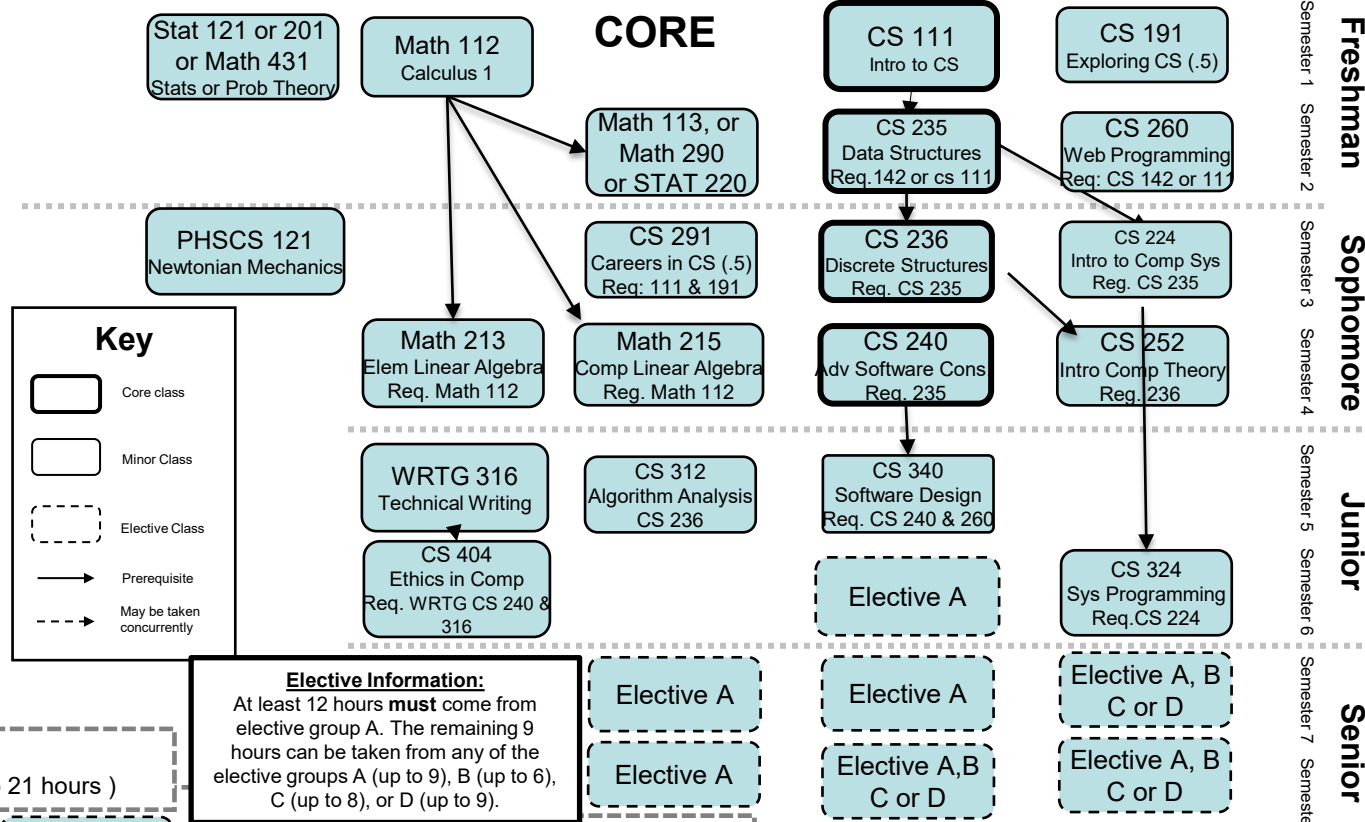


# BYU Computer Science Major

## Fall 2025 Requirements

### Major (74-75 Hours)

- Grades below C- are not allowed in major courses.
- Complete the following courses: CS 111, 191, 224, 235, 236, 240, 252, 260, 291, 312, 324, 340, 404
  - Complete the following supporting courses: WRTG 316, Math 112, 213, 215, and PHSCS121,
  - Complete one of the following: Math 431, Stat 121 or Stat 201
  - Complete one of the following: Math 113, Math 290 or STAT 220
  - Complete 21 hours from the following options
    - 12 hours **must** be from the following courses, but may take up to 21 hours: CS 329, 330, 345, 355, 356, 393, 401R\*\*, 412, 416, 428, 430, 431, 450, 452, 453, 455, 456, 460, 462, 465, 466, 470, 471, 473, 474, 479, 486, 501R\*\*, 513, 556, 574, 575, 580
    - Up to 6 hours from the following  
CS 180, 202, 203, 204, 256, 270, 405, EC EN 220, MATH 113, Math 290, STAT 220
    - Up to 8 hours from the following courses: EC EN 330, EC EN 427, IS 567, or Math 485
    - Up to 9 hours from the following courses: CS 480, 481, 482, 483, 493R\*\*, 494, 495, 497R\*\*, 498R\*\* (If CS, 493R, 497R, 498R, or 501R is chosen, it must be taken for three credit hours)
- Guide only---please consult MyMap for full requirements.



Elective A (Complete 12 (required) up to 21 hours)				Elective B (Choose up to 6 hours)		Elective C (Choose up to 8 hours)		Elective D (Choose up to 9 hours)	
CS 329 QA & DevOps Req: 240 & 260	CS 412 Convex Optimization Req: 240, Math 213 or 312	CS 453 Info Retrieval Req: 240	CS 470 Artificial Intelligence Req: 312, Math 215, Stat 121	CS 180 Intro to Data Science	CS 405 Software Business Req: 240 & WRTG 316	EC EN 330 Embedded Program Req: CS 235 & ECEN 220 or 224	CS 480 Software Eng Cap 1 Req: 240, 340, 329	CS 495 Capstone 2 Req: 240, 494	
CS 330 Prog Languages Req: CS 236 & 260 or 224	CS 416 Adv. Algorithms Req: CS 240 & CS 312	CS 455 Comp Graphics Req: CS 355, Math 213, 215	CS 471 Voice User Interfaces	CS 202 SE Lab 1 (1 credit) Req: CS 142 or 111	ECEN 220 Fund of Digital sys Req: CS 142 or 111	EC EN 427 Embedded systems Req: EC EN 323 or 330	CS 481 Software Eng Cap 2 Req: CS 480	CS 493R** Comp. Competitions Req: 240	
CS 345 Operating Sys Dsgn Req: 224 & 240	CS 428 Software Engineer Req: 340	CS 456 UI Software Req: 240, & CS 356	CS 473 Avd. Machine Learning Req: CS 270 & Math 213&215	CS 203 SE Lab 2 (1 credit) Req: CS 202 & 235	MATH 113 Calculus 2 Req: MATH 112	IS 567 Cybersecurity & Pen Req: CS 465 or IT 366	CS 482 Data Science Cap 1 Req: 240	CS 497R** Research Req: 240	
CS 355 Interactive Graphics Req: 240, Math 213, 215	CS 430 Formal Verification Req: CS 330 or Math 290	CS 460 Networks Req: 235	CS 474 Deep Learning Req: CS 270 or CS 312	CS 204 SE Lab 3 (1 credit) Req: CS 203 & 240	MATH 290 Fundamentals of Math Req: MATH 112	MATH 485 Cryptography Req: MATH 213	CS 483 Data Science Cap 2 Req: 282	CS 498R** Special Projects Req: 240	
CS 356 Adv. Tech in HCI Req: 256 & 260	CS 431 A. Lang & Compilers Req: 240	CS 462 Distributed Systems Req: 260, & 324	CS 479 Machine Translation Req: CS 240	CS 256 Intro to HCI	STAT 220 Stat Modeling for DS Req: MATH 121 & CS 111		CS 494 Capstone 1 Req: 240		**Must be taken for 3 hours to fill the requirement
CS 393 Collaborative Problem Solving Req: CS 240 & 312	CS 450 Computer Vision Req: 312, & Math 313	CS 465 Security Req: 324	CS 486 Verification & Valid. Req: 312	CS 574 Transformers for NLP Req: 270, 312					
CS 401R** Topics in CS	CS 452 Database Modeling Req: 240	CS 466 Blockchain Tech Req: CS 312	CS 501R** Adv CS Topics	CS 513 Robust Control Req: Math 213, 215	CS 556 Inter Soft Systems				
				CS 575 Intro to Network Science Req: 312	CS 580 Theory of Predictive Modeling				
				CS 575 Intro to Network Science Req: 312	CS 580 Theory of Predictive Modeling				
				CS 270 Intro to ML Req: CS 111 or 142 & Math 112					

Freshman  
Semester 1  
Semester 2  
Sophomore  
Semester 3  
Semester 4  
Junior  
Semester 5  
Semester 6  
Senior  
Semester 7  
Semester 8