Courses

On this page you will find descriptions of the courses that we offer. See the <u>registrar's schedule</u> of current and upcoming offerings (with times). For future semesters, students may view our <u>projected teaching plan</u>. Students may also look at the current semester's <u>course homepages</u>. Students can also look at our list of <u>concentration areas</u> to choose their CS electives. Advanced undergraduates may also receive <u>permission</u> to take graduate courses. Finally, for an <u>explanation of how UT numbers courses work</u>.

Core Courses for CS Majors
CS Electives
CS Classes for Non-Majors

Core Courses for CS Majors

Programming

312 Introduction to Programming OR 312H Introduction to Programming: Honors
314 Data Structures OR 314H Data Structures Honors

Systems

<u>429 Computer Organization and Architecture</u> OR <u>429H Computer</u>
<u>Organization and Architecture: Honors</u>
<u>439 Principles of Computer Systems</u> OR <u>439H Principles of</u>
<u>Computer Systems: Honors</u>

Theory

311 Discrete Math for Computer Science OR 311H Discrete Math for **Computer Science: Honors** 331 Algorithms and Complexity OR 331H Algorithms and **Complexity: Honors**

The old curriculum had eleven CS courses that students were required to take, leaving little time for electives. The new curriculum has only six. This gives students the opportunity to dive into concentration areas, or to study computer science more broadly by sampling from various subareas.

CS Electives

104C Competitive Programming 105C Computer Programming: C++

105P Topics In Computer Programming Languages

108 Software Systems

109/209/309 Topics in Computer Science

178H/378H Undergraduate Topics in Computer Science: Honors

340D Debugging & Verifying Programs

341 Automata Theory

341H Automata Theory: Honors

342 Neural Networks

342C Computational Brain

343 Artificial Intelligence

343H Artificial Intelligence: Honors

344M Autonomous Multiagent Systems

344R Robotics

345 Programming Languages

345H Programming Languages: Honors

346 Cryptography

347 Data Management

349 Contemporary Issues in Computer Science

350C Advanced Computer Architecture

350F Operating Systems

353 Theory of Computation

- 354R Game Technology
- 354S Game Development Capstone: 2D Games
- 354T Game Development Capstone: 3D Games
- 356 Computer Networks
- 356R Introduction to Wireless Networks
- 361 Introduction to Computer Security
- 361C Information Assurance and Security
- 361S Network Security and Privacy
- 363D Introduction to Data Mining
- 370 Undergraduate Reading and Research
- 370F Undergraduate Reading and Research: Writing
- 371D Distributed Computing
- 371G Generic Programming and the STL
- 371M Mobile Computing
- 371P Object-Oriented Programming
- 371R Information Retrieval and Web Search
- 371S Object-Oriented Software Engineering
- 373 Software Engineering
- 373S Software Design
- 374L Longhorn Startup
- 375 Compilers
- 376 Computer Vision
- 377 Principles and Applications of Parallel Programming
- 377P Programming for Performance
- 378 Undergraduate Topics in Computer Science
- 378 Autonomous Intelligent Robotics I
- 378 Computational Intelligence in Game Research FRI
- 378 Information Assurance and Security
- 378 Introduction to Cyberphysical Systems
- 378 Mobile Computing
- 378 Mobile News App Design
- 378H Algorithms and Complexity: Honor
- 379H Computer Sciences Honors Thesis

CS Classes for Non-Majors

105P Topics In Computer Programming Languages

108 Software Systems

109/209/309 Topics in Computer Science

302 Computer Fluency

303E Elements of Computers and Programming

313E Elements of Software Design

323E Elements of Scientific Computing

323H Elements of Scientific Computing: Honors

324E Elements of Graphics and Visualization

326E Elements of Networking

327E Elements of Databases

328E Topics in Elements of Computing

329E Advanced Topics in Elements of Computing

329E Elements of Computing in Society

329E Elements of Navigating Cyberspace

329E Elements of Web Programming

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