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

350F Operating Systems

353 Theory of Computation

349 Contemporary Issues in Computer Science

350C Advanced Computer Architecture

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

<u>379H Computer Sciences Honors Thesis</u>

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

Viewed using Just Read