



On this page you will find descriptions of the courses that we offer. See the [registrar's schedule](http://registrar.utexas.edu/schedules/) (<http://registrar.utexas.edu/schedules/>) of current and upcoming offerings (with times). For future semesters, students may view our [projected teaching plan](https://www.cs.utexas.edu/undergraduate-program/courses/teaching-plans) (<https://www.cs.utexas.edu/undergraduate-program/courses/teaching-plans>). Students may also look at the current semester's [course homepages](/undergraduate/academics/curriculum-degree-plans/class-homepages) (</undergraduate/academics/curriculum-degree-plans/class-homepages>). Students can also look at our list of [concentration areas](/sites/default/files/legacy_files/undergraduate/CS%20Concentration%20Areas.pdf) (/sites/default/files/legacy_files/undergraduate/CS%20Concentration%20Areas.pdf) to choose their CS electives. Advanced undergraduates may also receive [permission](http://www.cs.utexas.edu/faq/68714) (<http://www.cs.utexas.edu/faq/68714>) to take graduate courses. Finally, for an [explanation of how UT numbers courses work](http://registrar.utexas.edu/catalogs/gi09-10/ch04/gi09.ch04a.html#credit-value-and-course-numbers) (<http://registrar.utexas.edu/catalogs/gi09-10/ch04/gi09.ch04a.html#credit-value-and-course-numbers>).

- [Core Courses for CS Majors](/undergraduate-program/academics/courses#core) (</undergraduate-program/academics/courses#core>)
- [CS Electives](/undergraduate-program/academics/courses#electives) (</undergraduate-program/academics/courses#electives>)
- [CS Classes for Non-Majors](/undergraduate-program/academics/courses#non-majors) (</undergraduate-program/academics/courses#non-majors>)

Core Courses for CS Majors

Programming

- [312 Introduction to Programming](/courses/312-introduction-programming) (</courses/312-introduction-programming>) OR [312H Introduction to Programming: Honors](/courses/312h-introduction-programming-honors) (</courses/312h-introduction-programming-honors>)
- [314 Data Structures](/courses/314-data-structures) (</courses/314-data-structures>) OR [314H Data Structures Honors](/courses/314h-data-structures-honors) (</courses/314h-data-structures-honors>)

Systems

- [429 Computer Organization and Architecture](/undergraduate-program/courses/429-computer-organization-and-architecture) (</undergraduate-program/courses/429-computer-organization-and-architecture>) OR [429H Computer Organization and Architecture: Honors](/courses/429h-computer-organization-and-architecture-honors) (</courses/429h-computer-organization-and-architecture-honors>)
- [439 Principles of Computer Systems](/undergraduate-program/courses/439-principles-computer-systems) (</undergraduate-program/courses/439-principles-computer-systems>) OR [439H Principles of Computer Systems: Honors](/courses/439h-principles-computer-systems-honors) (</courses/439h-principles-computer-systems-honors>)

Theory

- [311 Discrete Math for Computer Science \(/undergraduate-program/courses/313h-logic-sets-and-functions\)](/undergraduate-program/courses/313h-logic-sets-and-functions) OR [311H Discrete Math for Computer Science: Honors \(/undergraduate-program/courses/313k-logic-sets-and-functions\)](/undergraduate-program/courses/313k-logic-sets-and-functions)
- [331 Algorithms and Complexity \(/undergraduate-program/courses/331-algorithms-and-complexity\)](/undergraduate-program/courses/331-algorithms-and-complexity) OR [331H Algorithms and Complexity: Honors \(/undergraduate-program/courses/331h-algorithms-and-complexity-honors\)](/undergraduate-program/courses/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 \(/courses/104c-competitive-programming\)](/courses/104c-competitive-programming)

[105C Computer Programming: C++ \(/courses/105c-computer-programming-c\)](/courses/105c-computer-programming-c)

[105P Topics In Computer Programming Languages \(/courses/105p-topics-computer-programming-languages\)](/courses/105p-topics-computer-programming-languages)

[108 Software Systems \(/courses/108-software-systems\)](/courses/108-software-systems)

[109/209/309 Topics in Computer Science \(/courses/109209309-topics-computer-science\)](/courses/109209309-topics-computer-science)

[178H/378H Undergraduate Topics in Computer Science: Honors \(/courses/178h378h-undergraduate-topics-computer-science-honors\)](/courses/178h378h-undergraduate-topics-computer-science-honors)

[340D Debugging & Verifying Programs \(/courses/340d-debugging-verifying-programs\)](/courses/340d-debugging-verifying-programs)

[341 Automata Theory \(/courses/341-automata-theory\)](/courses/341-automata-theory)

[341H Automata Theory: Honors \(/courses/341h-automata-theory-honors\)](/courses/341h-automata-theory-honors)

[342 Neural Networks \(/courses/342-neural-networks\)](/courses/342-neural-networks)

[342C Computational Brain \(/courses/342c-computational-brain\)](/courses/342c-computational-brain)

[343 Artificial Intelligence \(/courses/343-artificial-intelligence\)](/courses/343-artificial-intelligence)

[343H Artificial Intelligence: Honors \(/courses/343h-artificial-intelligence-honors\)](/courses/343h-artificial-intelligence-honors)

[344M Autonomous Multiagent Systems \(/courses/344m-autonomous-multiagent-systems\)](/courses/344m-autonomous-multiagent-systems)

[344R Robotics \(/courses/344r-robotics\)](/courses/344r-robotics)

[345 Programming Languages \(/courses/345-programming-languages\)](/courses/345-programming-languages)

[345H Programming Languages: Honors \(/courses/345h-programming-languages-honors\)](/courses/345h-programming-languages-honors)

[346 Cryptography \(/courses/346-cryptography\)](/courses/346-cryptography)

[347 Data Management \(/courses/347-data-management\)](/courses/347-data-management)

[349 Contemporary Issues in Computer Science \(/courses/349-contemporary-issues-computer-science\)](/courses/349-contemporary-issues-computer-science)

[350C Advanced Computer Architecture \(/courses/350c-advanced-computer-architecture\)](/courses/350c-advanced-computer-architecture)

[350F Operating Systems \(/courses/350f-operating-systems\)](/courses/350f-operating-systems)

[353 Theory of Computation \(/courses/353-theory-computation\)](/courses/353-theory-computation)
[354 Computer Graphics \(/courses/354-computer-graphics\)](/courses/354-computer-graphics)
[354R Game Technology \(/courses/354r-game-technology\)](/courses/354r-game-technology)
[354S Game Development Capstone: 2D Games \(/courses/354s-game-development-capstone-2d-games\)](/courses/354s-game-development-capstone-2d-games)
[354T Game Development Capstone: 3D Games \(/courses/354t-game-development-capstone-3d-games\)](/courses/354t-game-development-capstone-3d-games)
[356 Computer Networks \(/courses/356-computer-networks\)](/courses/356-computer-networks)
[356R Introduction to Wireless Networks \(/courses/356r-introduction-wireless-networks\)](/courses/356r-introduction-wireless-networks)
[361 Introduction to Computer Security \(/courses/361-introduction-computer-security\)](/courses/361-introduction-computer-security)
[361C Information Assurance and Security \(/courses/361c-information-assurance-and-security\)](/courses/361c-information-assurance-and-security)
[361S Network Security and Privacy \(/courses/361s-network-security-and-privacy\)](/courses/361s-network-security-and-privacy)
[363D Introduction to Data Mining \(/courses/363d-introduction-data-mining\)](/courses/363d-introduction-data-mining)
[370 Undergraduate Reading and Research \(/courses/370-undergraduate-reading-and-research\)](/courses/370-undergraduate-reading-and-research)
[370F Undergraduate Reading and Research: Writing \(/courses/370f-undergraduate-reading-and-research-writing\)](/courses/370f-undergraduate-reading-and-research-writing)
[371D Distributed Computing \(/courses/371d-distributed-computing\)](/courses/371d-distributed-computing)
[371G Generic Programming and the STL \(/courses/371g-generic-programming-and-stl\)](/courses/371g-generic-programming-and-stl)
[371M Mobile Computing \(/courses/371m-mobile-computing\)](/courses/371m-mobile-computing)
[371P Object-Oriented Programming \(/courses/371p-object-oriented-programming\)](/courses/371p-object-oriented-programming)
[371R Information Retrieval and Web Search \(/courses/371r-information-retrieval-and-web-search\)](/courses/371r-information-retrieval-and-web-search)
[371S Object-Oriented Software Engineering \(/courses/371s-object-oriented-software-engineering\)](/courses/371s-object-oriented-software-engineering)
[373 Software Engineering \(/courses/373-software-engineering\)](/courses/373-software-engineering)
[373S Software Design \(/courses/373s-software-design\)](/courses/373s-software-design)
[374L Longhorn Startup \(/courses/374l-longhorn-startup\)](/courses/374l-longhorn-startup)
[375 Compilers \(/courses/375-compilers\)](/courses/375-compilers)
[376 Computer Vision \(/courses/376-computer-vision\)](/courses/376-computer-vision)
[377 Principles and Applications of Parallel Programming \(/courses/377-principles-and-applications-parallel-programming\)](/courses/377-principles-and-applications-parallel-programming)
[377P Programming for Performance \(/courses/377p-programming-performance\)](/courses/377p-programming-performance)
[378 Undergraduate Topics in Computer Science \(/courses/378-undergraduate-topics-computer-science\)](/courses/378-undergraduate-topics-computer-science)
[378 Autonomous Intelligent Robotics I \(/courses/378-autonomous-intelligent-robotics-i\)](/courses/378-autonomous-intelligent-robotics-i)
[378 Computational Intelligence in Game Research - FRI \(/courses/378-computational-intelligence-game-research-fri\)](/courses/378-computational-intelligence-game-research-fri)
[378 Information Assurance and Security \(/courses/378-information-assurance-and-security\)](/courses/378-information-assurance-and-security)
[378 Introduction to Cyberphysical Systems \(/courses/378-introduction-cyberphysical-systems\)](/courses/378-introduction-cyberphysical-systems)
[378 Mobile Computing \(/courses/378-mobile-computing\)](/courses/378-mobile-computing)

[378 Mobile News App Design \(/courses/378-mobile-news-app-design\)](/courses/378-mobile-news-app-design)

[378H Algorithms and Complexity: Honor \(/courses/378h-algorithms-and-complexity-honor\)](/courses/378h-algorithms-and-complexity-honor)

[379H Computer Sciences Honors Thesis \(/courses/379h-computer-sciences-honors-thesis\)](/courses/379h-computer-sciences-honors-thesis)

CS Classes for Non-Majors

[105C Computer Programming: C++ \(/courses/105c-computer-programming-c\)](/courses/105c-computer-programming-c)

[105P Topics In Computer Programming Languages \(/courses/105p-topics-computer-programming-languages\)](/courses/105p-topics-computer-programming-languages)

[108 Software Systems \(/courses/108-software-systems\)](/courses/108-software-systems)

[109/209/309 Topics in Computer Science \(/courses/109209309-topics-computer-science\)](/courses/109209309-topics-computer-science)

[302 Computer Fluency \(/courses/302-computer-fluency\)](/courses/302-computer-fluency)

[303E Elements of Computers and Programming \(/courses/303e-elements-computers-and-programming\)](/courses/303e-elements-computers-and-programming)

[313E Elements of Software Design \(/courses/313e-elements-software-design\)](/courses/313e-elements-software-design)

[323E Elements of Scientific Computing \(/courses/323e-elements-scientific-computing\)](/courses/323e-elements-scientific-computing)

[323H Elements of Scientific Computing: Honors \(/courses/323h-elements-scientific-computing-honors\)](/courses/323h-elements-scientific-computing-honors)

[324E Elements of Graphics and Visualization \(/courses/324e-elements-graphics-and-visualization\)](/courses/324e-elements-graphics-and-visualization)

[326E Elements of Networking \(/courses/326e-elements-networking\)](/courses/326e-elements-networking)

[327E Elements of Databases \(/courses/327e-elements-databases\)](/courses/327e-elements-databases)

[328E Topics in Elements of Computing \(/courses/328e-topics-elements-computing\)](/courses/328e-topics-elements-computing)

[329E Advanced Topics in Elements of Computing \(/courses/329e-advanced-topics-elements-computing\)](/courses/329e-advanced-topics-elements-computing)

[329E Elements of Computing in Society \(/courses/329e-elements-computing-society\)](/courses/329e-elements-computing-society)

[329E Elements of Navigating Cyberspace \(/courses/329e-elements-navigating-cyberspace\)](/courses/329e-elements-navigating-cyberspace)

[329E Elements of Web Programming \(/courses/329e-elements-web-programming\)](/courses/329e-elements-web-programming)