



CISD/WTAMU Computer Science Track

FALL JUNIOR

- **Pre-Calculus or MATH 1316**
- **CS 1301 & 1301L – Introduction to Computer Science**

A comprehensive introduction to computer science, including algorithmic problem solving, data representation and abstraction, operating systems, programming languages, software engineering, graphics, database systems, artificial intelligence and theory of computation. This course is taken on campus during the school day at WTAMU.

SPRING JUNIOR

- **Pre-Calculus or MATH 1316**
- **CS 1337 & 1337L – Programming Principles I**

Students will be introduced to fundamentals of developing computing solutions to solve problems. Topics include: algorithmic thinking, primitive data types, operators, selection and repetition structures, lists/arrays, testing and debugging, top-down design, good coding practices, and a basic introduction to object-oriented programming. This course is taken on campus during the school day at WTAMU.

FALL SENIOR

- **Calculus AP**
- **CS 2321– Discrete Structures I**

Foundations of discrete mathematics as they apply to computer science, focusing on solid theoretical foundation for further work. Includes Functions, relations, sets, simple proof techniques, Boolean algebra, propositional logic, digital logic, elementary number theory and the fundamentals of counting. This course is taken on campus during the school day at WTAMU.

SPRING SENIOR

- **Calculus AP**
- **CS 2337 & 2337L – Programming Principles II**

Advanced topics of object-oriented programming will be covered, including variables and classes, advanced data types, exception handling, recursion, parameterized types, and Abstract Data Types such as bags, sequences, and stacks. Development environment and code repositories will be introduced. This course is taken on campus during the school day at WTAMU.