

**2592 Computer Science Principles – AP**

Credit: 1

Prerequisite: None

Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. Computer science experience has become an imperative for today's students and the workforce of tomorrow. AP Computer Science Principles has the goal of creating leaders in computer science fields and attracting providing students with essential computing tools and multidisciplinary opportunities. Students taking this course will be prepared and are expected to take the AP test upon completion. Carefully read the section describing PAP and AP in the "High School Overview" section of this catalog under "Planning Your Schedule."

**2533 Computer Science I**

Credit: 1

Prerequisite: Computer Science Principles-AP.

Students will have the opportunity to gain knowledge in the use of hardware components and software programs, acquire information from electronic sources, use computer-based productivity tools, format digital information for effective communication and deliver products electronically in a variety of media.

**2573 Computer Science I - PAP**

Credit: 1

Computer Science Principles-AP

This is an introductory course into computer science. The course covers how to make basic console and graphical computer programs. Topics include: input/output, data storage, selection/repetition statements, and mathematical/comparison operations. Carefully read the section describing PAP and AP in the "High School Overview" section of this catalog under "Planning Your Schedule."

**2593 Computer Science A – AP (Math)****5007 Computer Science A- AP (LOTE)**

Credit: 2 (1 Math credit and 1 LOTE credit)

Prerequisite: Computer Science Principles-AP

The course is an advanced computer science course that allows students to work on large-scale projects. Topics include: advanced data structures, searching/sorting algorithms, recursion, algorithm efficiency and Graphic User Interfaces. This AP course will require students to dedicate themselves to study required by rigorous college-level standards. Students taking this course will be prepared and are expected to take the AP test upon completion. Carefully read the section describing PAP and AP in the "High School Overview" section of this catalog under "Planning Your Schedule." This course requires two class periods and students must be enrolled in both course numbers.

**2574W Advanced Computer Science II**

Credit: .5 - 1

Prerequisite: Computer Science A- AP or, Computer Science I or Computer Science I PAP

Computer Science II will foster students' creativity and innovation by presenting opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course.

**2583W IS: Technology Applications**

Credit: 1

Prerequisite: Advanced Computer Science II or Computer Science A- AP

This course is an advanced computer science course that allows students to work on large scale projects. Topics include: databases, networking, managing sounds, graphics, collision detection and threads.

**Practicum in Information Technology – Dual with TSTC**

7946AD (Fall)

7946BD (Spring)

Credit: 2

Prerequisite: Computer Maintenance Lab or Computer Science I or Computer Science PAP. Student must complete TSTC online application; provide Permit to Register, transcripts, shot record; and attend a meeting with TSTC Academic Advisor. See TSTC for additional enrollment and orientation process requirements. This

course is taken as part of TSTC dual credit pathway for Cybersecurity Technology through the Information Services or Programming and Software Development pathways. Successful completion will result in TSTC credit. Course will take place at the TSTC campus and possibly online. Transportation provided. \*Not all Dual Credit courses are offered at all campuses. This course is not eligible for semester exam exemptions.

**Networking – Dual with TSTC**

7931AD (Fall)

Credit: 1

Prerequisite: Practicum in Information Technology - Dual Student must complete TSTC online application; provide Permit to Register, transcripts, shot record; and attend a meeting with TSTC Academic Advisor. See TSTC for additional enrollment and orientation process requirements. This course is taken as part of TSTC dual credit pathway for Cyber Security Technology. Successful completion will result in TSTC credit. Course will take place at the TSTC campus. Transportation provided. \*Not all Dual Credit courses are offered at all campuses. This course is not eligible for semester exam exemptions. This course is taken as part of TSTC dual credit pathway for Cybersecurity Technology through the Information Services or Programming and Software Development pathways.

**Computer Programming I – Dual with TSTC**

7942BD (Spring)

Credit: 1

Prerequisite: Networking - Dual

Student must complete TSTC online application; provide Permit to Register, transcripts, shot record; and attend a meeting with TSTC Academic Advisor. See TSTC for additional enrollment and orientation process requirements. This course is taken as part of TSTC dual credit pathway for Cyber Security Technology. Successful completion will result in TSTC credit. Course will take place at the TSTC campus. Transportation provided. \*Not all Dual Credit courses are offered at all campuses. This course is not eligible for semester exam exemptions. This course is taken as part of TSTC dual credit pathway for Cybersecurity Technology through the Information Services or Programming and Software Development pathways.