



Southwest High School

Computer Maintenance Technology & IT Certification Program

Information Technology Career Cluster

Overview

A two decade old program of study, the Computer Maintenance Technology & IT Certification Program at Southwest High School in San Antonio, Texas has expanded dramatically since 2009. The program of study now offers rigorous academic and technical courses with pathways to postsecondary and the workforce through dual enrollment and industry-recognized certifications opportunities. All students are immersed in hands-on activities that allow them to gain knowledge and experience necessary for their future careers. With a focus on both IT and the emerging field of CyberSecurity, this program of study poises students for lifelong success.

Students (149)	Percentage
Male	74%
Female	26%
Low-income	72%
Minority	91%
Gifted and Talented	18%
Dual Credit Students (20)	Percentage
Male	70%
Female	30%
Low-income	65%
Minority	90%

Work-based Learning at Core of Program of Study

Students have opportunities for authentic experiences and application of IT skills both in the classroom and in the field. Local companies such as Digital Defense Inc., CyberTexas and Rackspace provide mentorship, guidance and clinics for students, and U.S. Air Force professionals visit the campus weekly to work directly with students. While in the classroom, students are trained in real-world applications through labs, work-simulated scenarios and the TestOut simulator, which offers simulated work-based environments. Southwest High School also only has one full-time IT professional on staff, so students regularly are called upon to assist the 200 faculty and staff on their technical needs.

Credentials Offer Pathway into Postsecondary Education and the Workforce

The certification and dual enrollment programs are also strong, providing students with a solid pathway to either college or career upon graduation. Students can earn up to nine industry-recognized certifications, such as CompTIA A+, CompTIA Security+ and Cisco networking, some of which are performance-based, testing student's ability to solve problems in a simulated environment. Its designation as a Pearson VUE Authorized Testing Center removed transportation barriers by allowing students to test directly on campus, while also providing a service to the entire community where alternative high school students and community members are able to take their GED exams.



Since 2010, the program's primary instructor has been certified through the Advance Technical Credit (ATC) program. This certification allows high school students to receive credit at participating community colleges across Texas if they take certain enhanced technical courses during high school. All participating community colleges have agreed to offer students credit for these courses, provided the college offers the course and the student meets certain criteria.

In a new partnership with St. Phillip's College, a satellite campus of Alamo Colleges, students can begin to earn credits as early as their sophomore year, with plans to expand the program of study to offer as many as 27 credits that will transfer to any of the Alamo Colleges and Texas A&M.

Recognition Highlights High-Quality Program of Study

The program of study's offerings have resulted in recognition from the local to national level. Every year, students are honored at the San Antonio's Mayor Cyber Cup Luncheon, an event held in partnership between the mayor and Chamber of Commerce that showcases student work. The event boasts over 550 attendees, many of whom are students themselves, and highlights the important role this program plays in creating a pipeline of highly-skilled employees in this critical industry to employers, industry leaders, military personnel, government departments and others.

"The students are an inspiration – demonstrating dedication, enthusiasm and respect for the programs, leaders and mentors – all important ingredients to high levels of achievement." – Larry Hurtado, President & CEO, Digital Defense Incorporated

Additionally, the National Center for Women & Information Technology has honored some of the program's exemplary female IT students over the past three years through their Award for Aspirations in Computing. Award recipients are selected based on their aptitude and aspirations in technology and computing, leadership skills, academic record, and plans for post-secondary education.

Success by the Numbers

With strong educational and industry partnerships and backing by the broader community, the IT program of study prepares students for a lifetime of future success.



78%

Earned Industry-recognized
Credential



100%

Graduated High School

Data based on 2014-2015 school year

Advance CTE

www.careertech.org