





## ELECTRONIC & COMPUTER CIRCUITRY (P-TECH)

## **PROGRAM OVERVIEW**

The Electronic & Computer Circuitry (ECC) program at Saunders High School offers students a hands-on, comprehensive education in the fields of electronics, computer systems, and circuitry. Through a combination of classroom instruction and practical experience, students learn to design, build, and troubleshoot electronic circuits and devices, gaining valuable skills in areas like microelectronics, robotics, and circuit board design. The curriculum includes topics such as digital electronics, circuit analysis, and computer programming, preparing students for careers in the growing fields of technology and engineering.

As part of the P-TECH (Pathways in Technology Early College High School) program, the ECC track provides students with the opportunity to earn both high school and college credit, setting them on a pathway to earn an associate degree in a related field. P-TECH students also gain industry-relevant certifications and engage in real-world internships, allowing them to build a strong portfolio of skills and experience. This dual-focus approach ensures that graduates are well-prepared for higher education or immediate employment in the fast-paced technology sector.

ARTICULATION AGREEMENTS: Westchester Community College, College of Westchester MAGNET EXIT PROJECT: Tech Prep Day

## **TECHNICAL SKILLS**

Use of basic hand tools, Soldering, Use of Digital Multimeters, Use of Oscilloscope, Use of Printed Circuit Board, Design Software, AutoCad, AutoDesk Inventor, Use of Arduino, Use of 3D printers, Use of routing table, Fabrication of networking cables, Building and troubling PCs, Use of Computer Aided Engineering Software, Use of Wifi/Bluetooth capable microcontrollers and sensors

## **CAREER OPPORTUNITIES**

Computer programmer and analyst, robotics, technical support specialist, web developer, systems engineer, network engineer, field service technician, IT support technician, IT support administrator, electronics technician, bench technician