

# Welcome to the Rising 9th Grade Elective Fair

Gwinnett Online Campus

### CAREER & TECHNICAL EDUCATION CAREER PATHWAYS



Career Pathway	Course 1	Course 2	Course 3
Business & Technology	Introduction to Business & Technology*	Business and Technology	Business Communication
Business Accounting	Introduction to Business & Technology*	Financial Literacy	Principles of Accounting I
Financial Services	Introduction to Business & Technology*	Financial Literacy	Banking, Investing & Insurance
Computer Science	Introduction to Software Technology	Computer Science Principles	AP Computer Science A (Java)
AP Computer Science	Introduction to Software Technology	AP Computer Science Principles	AP Computer Science A (Java)
Cybersecurity	Introduction to Hardware Technology	Introduction to Cybersecurity	Advanced Cybersecurity
Engineering & Technology	Foundations of Engineering & Technology	Engineering Concepts	Engineering Applications
Marketing & Management	Marketing Principles*	Marketing Management	Marketing and Entrepreneurship

# 9th GRADE CAREER & TECHNICAL EDUCATION ELECTIVES



- Intro to Software Technology CS Pathway
- Intro to Hardware Technology Cybersecurity Pathway
- Intro to Business Technology Business Pathways
- Marketing Principles Marketing & Management Pathway
- Foundations of Engineering Engineering & Tech Pathway

# CAREER & TECHNICAL EDUCATION ELECTIVE Intro to Hardware Technology



Are you interested in the Cybersecurity Pathway? This is the class for you! Intro to Hardware Technology is a year-long course where we will explore the following topics through interactive labs and activities:



Information Technology Basics



Internet Technologies



**Programming** 



Computer Hardware



Networking



Information Systems



Computer Software



Databases



Cybersecurity

### CAREER & TECHNICAL EDUCATION ELECTIVE Intro to Software Technology



Do you want to learn about Computer Science and Programming? Intro to Software Tech is a year-long course where students will explore the following topics through interactive lab experiences. This course begins the Computer Science Pathway.

### Digital Citizenship and Cyber Hygiene



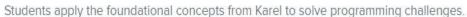
Students learn topics on Internet etiquette and how to stay safe on the world wide web. Students will look at the potential effects of their digital footprints, how to protect information from online risks, and the importance of creative credit.

### **Programming With Karel**



Students learn foundational skills in programming with Karel by simplifying JavaScript to four simple commands. Using these commands, students solve increasingly difficult problems and explore how complex programming languages can be developed from simple commands.

### Karel Challenges



### JavaScript and Graphics



Students learn the basics of JavaScript, including variables, user input, mathematics, and basic graphics.

### **Computing Basics**



Students will learn about the physical elements of computers and networking such as motherboards, RAM, routers, and the use of port numbers, ethernet, and wireless devices.

### Operating Systems and Software



Students will compare and contrast common operating systems (Windows, Linux, OS) and explain the importance of compatibility. Students will also explore software and apps while discussing software licenses and running through the software development life cycle.

### A

### Project: IT Professional

In this project, students explore career pathways and build skills that will be needed within these fields such as communication.

### Web Design

Students are led through a high-level introduction to HTML and CSS to create several simple web pages.

### Web Development



Students will learn and apply the basic elements of web development, such as using JavaScript and the DOM, collecting and storing data, and using file structure.

### Computer Science Careers



Students take some time to explore and discover different computer science careers. They will also examine inclusive coding and how to avoid bias in computer programming.

# CAREER & TECHNICAL EDUCATION ELECTIVE Intro to Business Technology



This year-long course is the foundational course for the Business & Technology, Business Accounting, and Financial Services pathways. IBT provides an overview of business and technology skills required for today's business environment.

- Employability Skills
- Digital Citizenship
- Word Processing
- Communication Skills
- Marketing
- Entrepreneurship
- Leadership/Management
- Financial Literacy
- Risk Management
- Human Resources Management
- Accounting



## CAREER & TECHNICAL EDUCATION ELECTIVE Marketing Principles





- Learn how to professionally brand and present yourself for 21st Century college, jobs and career.
- Learn how to develop leadership skills.
- Learn why and how marketing plays an important role in business decisions for a product or a service.
- Learn to think critically and problem solve, whether you want to work for a company or start your own business!

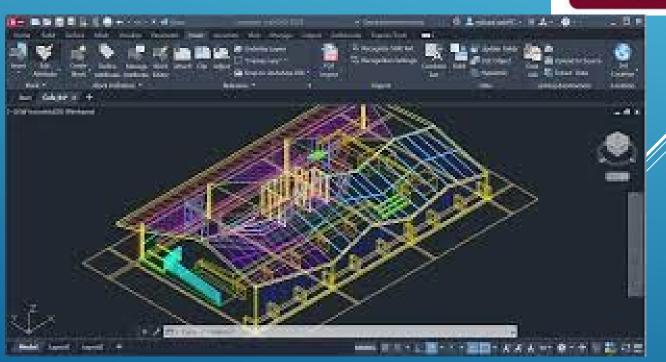
### CAREER & TECHNICAL EDUCATION ELECTIVE Foundations of Engineering & Technology



Interested in Engineering? This is the course for you! Foundations of Engineering is the first course in our Engineering and Technology Pathway!



- Learn AutoCAD!
- History of Engineering
- Ethics in Engineering
- Engineering Design Process
- Technology Systems
- Engineering Design
- Manufacturing
- Assemblies
- Transportation
- Appropriate Technology







CyberPatriot WHAT IS CYBERPATRIOT?

Sponsor: Dr. Renee Smith renee.j.smith@gcpsk12.org

Mission/Purpose/Description

CyberPatriot is the National Youth Cyber Education Program created by the Air Force Association to inspire K-12 students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's future. At the core of the program is the National Youth Cyber Defense Competition, the nation's largest cyber defense competition that puts high school and middle school students in charge of securing virtual networks. Other programs include AFA CyberCamps, an elementary school cyber education initiative, a children's literature series, and CyberGenerations –a cyber safety initiative geared toward keeping senior citizens safe online.

https://www.uscyberpatriot.org/