

# INFORMATION TECHNOLOGY

## A GUIDE TO PURSUING YOUR CAREER PATH

### PROGRAMMING >>>

People who work in Information Technology have a wide array of career paths available. Some may help organizations select the correct information technology for their needs. They may also install IT systems, write and update documentation about those systems, and help people troubleshoot IT problems. Others deal with the design and creation of interactive multimedia products and services.

Computer networks are the lifeblood of most organizations. Networks provide a means for people to share information while working on different computers in the same building or in different locations altogether. Networks must be built and maintained by people who are specially trained.

People who work in programming and software development create the programs and software packages people use for business, education, or just for fun. Working in this pathway, as with most other areas of the information technology cluster, requires a good understanding of various computer operating systems and programming languages, as well as the needs of the audience for whom the software is intended.

### HIGH SCHOOL PATHWAY CLASSES >>>



**INTRO TO DIGITAL TECHNOLOGY** is designed for students to understand, communicate, & adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course.



**COMPUTER SCIENCE PRINCIPLES/AP COMP. SCI. PRINCIPLES** engages your creativity, demonstrates and build your problem solving ability all while connecting the relevance of computer science to the society! Focuses on building a solid understanding and foundation in computer science and emphasizes the content, practices, thinking and skills central to the discipline of computer science. **This course also meets the fourth mathematics or world language requirement; two computer science courses from the same pathway will satisfy two years of sequenced foreign language courses for USG admissions.**



**PROGRAM, GAMES, APPS & SOCIETY** is designed to strategize, design, and develop games and mobile and desktop applications that can be produced in the real world. Students will learn about life-cycles of project development and use models to develop applications. Attention will be placed on how user interfaces affect the usability and effectiveness of a game or an application. **This course meet the fourth science requirement and is recognized by the Board of Regents as such. This course also meets fourth mathematics or world language requirement; two computer science courses from the same pathway will satisfy two years of sequenced foreign language courses for USG admissions.**



### CAPSTONE: WBL INTERNSHIP >>>

**WBL (WORK-BASED LEARNING)** connects skilled, knowledgeable and driven students to local businesses every year. Students who participate in the Information Technology program and have been selected to participate in WBL will leave school early to work with our fantastic business partners. Benefits to students include a chance to put skills learned in the classroom to use in an authentic setting, getting a competitive advantage on their career and networking with industry leading professionals all while still in high school. [www.hallcowbl.org](http://www.hallcowbl.org)



### CAREER TECH STUDENT ORGANIZATIONS >>>

**FBLA Georgia FBLA** is a nonprofit student organization committed to preparing today's students for success in business leadership.

FBLA is an important partner in the success of school-to-work programs, business education curriculums, and student leadership development. FBLA is recognized by the U.S. Departments of Education and Labor as an integral part of a co-curricular approach to business and leadership education.

The FBLA mission is to bring business and education together in a positive working relationship through innovative leadership and career development programs. We bring our mission to life through the application of our motto: Service, Education, and Progress.

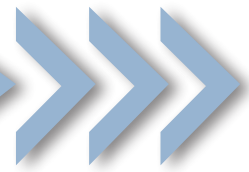


### POTENTIAL CAREERS >>>

- Video Game Designers
- Technical Writers & Editors
- Technical Support Specialist
- Computer & Video Game Designer
- Graphic Designer
- Multimedia Sound Worker
- Computer Programmers
- Graphics Programmers
- Software Designers
- Video Animator
- Software Engineers
- Computer Hardware Engineers

# PROGRAMMING

## CAREER PATHWAY - PLAN OF STUDY



### GRADUATION REQUIREMENTS >>>

#### ENGLISH/LANGUAGE ARTS

4 Units *Must Include:*

9th Grade Literature & American Literature

#### SOCIAL STUDIES

3 Units *Must Include:*

World History, US History, Government & Economics

#### MATHEMATICS

4 Units *Must Include:*

GSE Algebra I, GSE Geometry & GSE Algebra II

+

one additional GSE/AP/IB/DE Math course

OR

GSE Accelerated Algebra I/Analytic Geometry A,

GSE Accelerated Geometry B/Algebra II, GSE Precalculus

+

one additional GSE/AP/IB/DE Math course

#### SCIENCE

4 Units *Must Include:*

Physical Science or Physics; Biology;

Chemistry, Earth Systems, Environmental Science or AP/IB course

+

one additional Science course

#### HEALTH & PERSONAL FITNESS

1 Unit *Must Include:*

1/2 unit of each

#### CAREER, TECHNICAL & AGRICULTURE EDUCATION (CTAE)

3 Units *Must include:*

Introduction to Digital Technology, Computer Science Principles or AP, Program, Games, Apps & Society

#### ELECTIVES

4 Units

\*Students planning to attend most post-secondary institutions must take 2 units of the same modern language.

#### TOTAL UNITS REQUIRED

23 Units

### PERSONAL APTITUDES >>>

#### ACTIVITIES THAT DESCRIBE WHAT I LIKE TO DO:

- Work with computers.
- Reason clearly & logically to solve problems.
- Use machines, techniques, & processes.
- Play video games & figure out how they work.
- Concentrate for long periods without being distracted.



#### PERSONAL QUALITIES THAT DESCRIBE ME:

- Logic/analytical thinker
- Persistent
- See details in the big picture
- Good concentration skills
- Precise & accurate

#### WANT MORE INFORMATION ON YOU?

YouScience is the science of YOU – how your mind is wired, what makes you tick, the skills and knowledge that set you apart. You have talent and there's a path that's right for you – we can help you find it.



Login to Infinite Campus and locate the SLDS Portal link on the left. Once logged in, click on "My Career Plan" then choose "Go to YouScience".

#### WHAT YOU LEARN IN SCHOOL MATTERS

You're learning skills and knowledge that can make you a qualified candidate for in-demand careers. Industry-recognized certifications, available to all pathway students, are great signals to employers that you have the skills they're looking for. Certifications help validate what you know, so other people know, that you know it.

#### QUESTIONS?

Contact your CTAE teacher, WBL Coordinator or School Counselor

## PATHWAY TO FUTURE CAREER OPTIONS >>>

### HIGH SCHOOL

#### Pathway Courses

Introduction to Digital Technology  
Computer Science Principles or AP  
Program, Games, Apps & Society

#### Capstone

WBL Internship  
Dual Enrollment

### POST-SECONDARY

#### Technical College

Certificate  
Diploma Program  
Degree Program

#### 4 Year College/University

Bachelor Degree  
Masters Degree  
Graduate Studies