

## Technology-Business-School Relationships

Computer Science requires a close relationship between the school and the technology and business communities. Some aspects of this relationship are specified by state and federal laws and regulations, while others are determined by the desires, interests, and willingness of school personnel and, the technology and business leaders in the local community. The relationship between school and, the technology and business communities can be immensely beneficial to all parties involved.

## Student Work Experience

As students begin to plan careers, they must have opportunities to visit, tour, and work at local industries and businesses. Real-world experiences such as cooperative education, internships, apprenticeships, and job shadowing contribute to the work-based, service-based, and project-based learning that enhances classroom instruction.

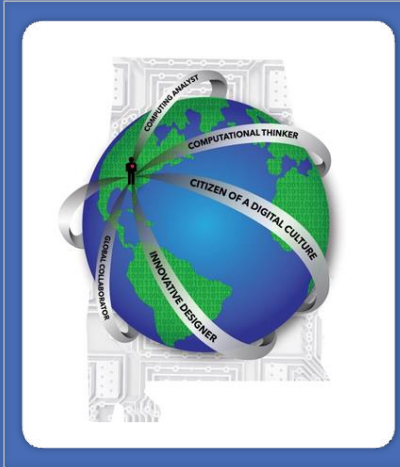
## Advisory Councils and Partnerships

The advisory council made up of representatives of the local business community that provides professional, real-world input regarding equipment needs, curriculum emphases, technical updates, and problem-solving. This link to business and industry may also provide external support by supplying equipment, resource materials, or qualified speakers. Community partners may provide program sponsors, judges for student career development events, financial support, scholarships, field trip sites, and other program needs.

## Cluster Instructor

*T. Donald Walls, D.Ed.*

Computer Science education courses are organized with pathways, which are aligned with national standards.



### Career Technical Mission

The Career and Technical Education/ Workforce Development Division is focused on helping students achieve success through leadership development, career awareness, and academic excellence.



## Commerce and Technology Academy

[Center Point High School](#)  
1000 Eagle Drive  
Center Point, AL 35215  
Phone: (205-)379-3400  
Fax: (205)-379-3425

*"Developing students who are prepared to meet the demands of the 21st Century."*

## Commerce and Technology Academy Computer Science Cluster



# CPHS

## Computer Science Cluster

Computer Science courses are designed to equip students with the skills needed to prepare for higher education and for success in careers such as computer game simulator, data analyst, designer, programmer, technical support, or software developer. Professions in this industry require technical skill proficiency, competency-based applied learning, higher-order reasoning, teamwork, and problem-solving skills. The course work integrates core academic subjects with elements of computation thinking and design thinking, visual design, digital, audio and video, storyboarding, and collaboration to attain the knowledge, skills, and attitudes necessary to compete successfully in the Computer Science industry.

- **AP Computer Science Principles**
- **Business and Consumer Mathematics**
- **Business Software Applications I**
- **Business Software Applications II**
- **Career Pathway Project in Business Management and Administration**
- **Computer Game and Simulation Programming**
- **Computer Science for Business**
- **CTE Lab in Business Management and Administration**
- **Digital Publications Design**
- **Exploring Computer Science**
- **Information Management**
- **Mobile Applications**
- **Web Development**
- **Introduction to Computer Science**

## Industry Credentials

**With each course, students will obtain national certification as an IC3 G6 Digital Literacy Master or Microsoft Office Specialist.**

- **Specialist in two different areas - PowerPoint, Word, Access, Excel, Outlook.**
- **Master in one area- Word Expert or Excel Expert.**

## Classroom and Laboratory Environment

The effective Computer Science classroom should be a safe environment which is fully equipped with current and emerging technologies, supplies, and materials needed for instruction, where students can increase their skills. Students and teachers should have access to laboratory environments on campus and in the community where students can experience practical, real-world circumstances in the Computer Science.

### Technology, Equipment, and Facilities

Classroom technology must be readily available, efficiently maintained, and routinely upgraded according to a regular schedule. Students and teachers utilize equipment to conduct a variety of classroom instruction and learning activities. Using up-to-date technology enhances the learning environment and prepares students for future career opportunities.

## CTSO ORGANIZATION

Technology Student Association (TSA) makes a positive difference in the lives of students by developing their potential for leadership, personal growth, and career success through . The purpose of these organizations is to help students develop an understanding of all aspects of industry and technology while learning teamwork and leadership skills. The importance of CTSOs is



indicated by their inclusion in the foundational standards to be taught in every Computer Science course. Goals of student organizations include:

- ◆ developing individual potential;
- ◆ developing effective leadership and citizenship skills through social, economic, scholastic, and civic activities;
- ◆ increasing knowledge and understanding of an ever-changing society;
- ◆ learning to embrace the use of technology in every aspect of our lives;
- ◆ assisting in the exploration of occupational choices and the development of essential workplace skills;
- ◆ participating in career development events; and
- ◆ serving the school and community through community service projects.

### Computer Science CTSO's

- ◆ TSA
- ◆ EagleBots
- ◆ NTHS

## Postsecondary & Higher Education Credit

Students benefit in a variety of ways when cooperation exists between secondary and postsecondary institutions. One of the benefits is the earning of postsecondary credit in conjunction with work completed while the student is still in secondary school.

Dual Enrollment for Dual Credit is an enrichment opportunity allowing eligible high school students to earn high school and college credits for courses taken through an Alabama Community College System (ACCS) institution or an Alabama college or university while still enrolled in high school. Articulated credit is awarded when a student enrolls and satisfactorily completes work in a postsecondary institution that has an articulation agreement with that student's participating school.

AP Computer Science Principles Exam assess student understanding of computational thinking practices and learning course objectives.