QTL ExplorNet's Computer Science Integration

Why Computer Science Integration?

The Computer Science Integration (CSI) program provides students an opportunity to further their education in a Computer Science course with an emphasis in Networking and Hardware. It is designed to develop students' skills in the areas of computer hardware, networking, and security. It also includes computational thinking, block and text-based programming, collaboration, and creativity to solve problems. This curriculum aligns with the ***Arkansas Computer Science*** standards.

The Computer Science Integration program is currently structured and sequenced into a three-year program of study.

Certifications

Computer Science Integration course offerings will provide the opportunity for students to prepare and pass four industry-recognized certification exams including ***CompTIA A+ 1001 and 1002, MTA Networking and MTA Security Fundamentals***.

Computer Science Integration I

This one-semester course is designed to provide students with an overview of computer science basics. Students will understand the various use, characteristics, and functions of computers while being able to differentiate the core PC components and understand how those components function.

Computer Science Integration II

This one-semester course is designed to build upon the skills acquired from CSI I. Students will learn how to apply troubleshooting theory, understand mobile devices and cloud services, and analyze networking protocols and services.

Computer Science Integration III

This one-semester course, CSI III is designed to engage students further in computer networking. Students will understand network security, how to apply security tools, methods to prevent common security issues, and learn how to install and configure operating systems.

Computer Science Integration IV

This one-semester course is designed to equip students with operational procedures best practices. In addition to learning about operational procedures, students will gain knowledge and skills in software development with a key emphasis on programming.

Computer Science Integration Internship

Add an ***internship*** within the school district or in a business as a capstone to create a ***Computer Science Integration Program of Study***.

CompTIA A+

Microsoft Technology Associate

Key Points

- Developed by teachers and industry experts.
- Updated annually.
- Aligned with ***CompTIA A+ and MTA certifications***.

Training

In the Computer Science Integration training participants will be provided in-depth training in the course resources and best-practice strategies for teaching the courses. In addition to learning curriculum and instruction, teachers build a complete computer that they will bring back to their classroom. They'll learn to teach the process of computer assembly, repair, maintenance and troubleshooting and learn to implement the content effectively in their classroom. If you are a new teacher who is in need of professional development to improve your technical skills and course teaching skills then sign up!

We can come to you!

Learn More

Contact Us!

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CSI I Frameworks

101. Understand the various uses, characteristics and functions of computer and device types
102. Understand core PC components.
103. Understand additional PC components.
104. Apply troubleshooting theory.

CSI II Frameworks

201. Understand mobile devices.
202. Understand cloud services.
203. Understand networking fundamentals.
204. Install and configure networks.

CSI III Frameworks

301. Understand network security.
302. Apply security tools and methods.
303. Install and configure operating systems.

CSI IV Frameworks

401. Implement procedural best practices.
402. Demonstrate programming basics.

Computer Science Integration Internship

Add an internship as a capstone to create a ***Computer Science Integration Program of Study***.

View Sample Resources
Password: ExplorNetGuest

Sample Resources

Computer Science Integration

Resources

Course resources are ***created by a team of teachers and industry experts*** and are ***updated annually***. Resources include:

- PowerPoints to introduce key terms and concepts for each objective
- Two-column note-taking guides for each PowerPoint
- Key terms and definitions for each objective
- Student activities sheet with suggested activities, links, videos and accompanying documents
- Teacher lesson guides
- Test question bank
- Best practice strategy recommendations
- ***Aligned to industry certification tests***

Access to course resources available in two ways:

1. ***Blended learning environment*** using Moodle or Canvas includes:
   - Pre-built courses with all resources as listed above
   - Pre-built unit assessments for review or tests
   - Quizlet/crossword/word games for vocabulary review
   - ***Customizable***; teachers can add or remove documents, links, videos, etc.
   - Secure log-in
   - Teacher Resources Moodle for access to resources, sharing ideas, and asking and receiving help
   - ***Ongoing support***

2. ***Downloadable Resources***
   - If you use an alternative learning management system such as Google Classroom or no online system at all, we will provide all resource documents in a downloadable format
   - Teacher Resources Moodle for access to resources, sharing ideas, and asking and receiving help
   - ***Ongoing support***

Subscribe Now!

Computer Science Integration Pricing

The Computer Science Integration courses are available through a subscription which includes all resources for all courses per teacher per school. ***NO PER STUDENT FEE!*** Subscription valid July 15 - June 15 each year.

- Computer Science Integration Yearly Subscription ONLY $695
- Second teacher at same school $345, a 50% discount!
- Three-year subscription receives 10% discount!

Click below to download a pricing sheet for subscriptions and training.

Pricing Sheet