



Why Computer Engineering?

The Computer Engineering courses prepare students for entry-level positions in the information technology industry. During the class, students will build, upgrade, troubleshoot, repair and maintain computers while preparing for and earning **CompTIA's A+** certification and the **Microsoft Technology Associate** certifications in Networking and Security Fundamentals.

The program is structured into two courses.

Certifications

Computer Engineering course offerings will provide the opportunity for students to prepare and pass **four industry-recognized certification** exams:

- CompTIA A+ 1001
- CompTIA A+ 1002
- MTA Networking Fundamentals
- MTA Security Fundamentals



Computer Engineering I

The level I course includes the hardware skills required for building, troubleshooting, repairing and maintaining computers. It includes objectives in computer operations basics, managing PC hardware, and networking; communication, mathematics, and science are reinforced. This course helps prepare students for the **CompTIA A+ 1001** and **Microsoft Technology Associate Networking Fundamentals** certifications.

Computer Engineering II

The level II course includes the software skills required for building, troubleshooting, repairing and maintaining computers. It includes operating systems, security, troubleshooting and mobility and cloud computing. Communications, mathematics, and science are reinforced. This course helps prepare students for the **CompTIA A+ 1002** and **Microsoft Technology Associate Security Fundamentals** certifications.

Computer Engineering Internship

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

Key Points

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

Training

In the Computer Engineering 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!

Contact Us!

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Computer Engineering I Frameworks

101. Understand fundamental procedures and expectations used in computer industry.
102. Understand the various uses, characteristics and functions of computer and device types.
103. Understand core PC components.
104. Understand additional PC components.
105. Understand compatibility and configuration.
106. Understand networking fundamentals.
107. Install and configure networks.

Computer Engineering II Frameworks

201. Apply troubleshooting theory.
202. Install and configure operating systems.
203. Understand other operating systems and technologies.
204. Understand mobile devices.
205. Understand cloud services.
206. Understand network security.
207. Apply security tools and methods.

Computer Engineering Internship

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

View Sample Resources
Password: ExplorNetGuest

Computer Engineering

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 help
 - ***Ongoing support***

Computer Engineering Pricing

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

- Computer Engineering Yearly Subscription ONLY \$595
- Second teacher at same school \$295, a 50% discount!
- Three-year subscription receives 10% discount!

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