



Corning® Everon™
Network Solutions



Education

Over
300

live-in students

88-Acre
property

Network Needs:

1. Sustainability
2. Longevity
3. Security
4. Reliability
5. Affordability

Products Deployed:

Fiber to the Edge
 Software-Defined LAN
 Power Supply Units
 ActiFi® Composite Cable
 CCH & SPH Hardware

www.corning.com/everon

North Carolina School of Science and Math

FTTE Enables the Ultimate Campus Experience

Fiber to the Edge = Software-Defined Network + Long-Reach Power and Data

The Customer

The North Carolina School of Science and Math (NCSSM) is a publicly funded STEM-based high school that models how a statewide approach to collaboration and the use of physical and virtual spaces can create tremendous innovation in public education. The Morganton campus is a mixture of historic and new buildings, including dorms, where students live full time. Delivering state-of-the-art technologies seamlessly across the campus was key to creating a safe and collaborate environment for students and faculty.

The Challenge

Blending old and new construction.

Bringing technology into a mix of old and new buildings requires unique considerations. Historic buildings generally lack the needed pathways for telecom and connectivity. Security cameras and blue phones needed to be installed throughout the campus both indoors and outdoors, and ubiquitous wireless communication was a necessity. The technology needed to be affordable and sustainable long term while being flexible enough to adapt to different spaces and needs.

“Being able to put all the infrastructure in now and know 10, 20, 50 years down the road that the infrastructure will still be here and still be functional - that's kind of the value we were looking for.”

Nathan Harmer
 Sr. Network & Systems Administrator
 NCSSM

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The Solution

Corning's Everon portfolio provided technology that was both flexible and scalable. A state-of-the-art software-defined network (SD-LAN) was distributed over a fiber to the edge and remote-DC power architecture. ActiFi® composite cable with copper conductors and optical fiber in one flexible cable spanned distances greater than traditional copper, streamlining the architecture with less space required and brought power and bandwidth to a variety of edge devices. Corning's broad portfolio of fiber optic cable, hardware and connectivity provided a tip-to-tip, durable and reliable network infrastructure.

The Impact

NCSSM created a seamless user experience across the campus, regardless of the building's age or architecture, for the students and faculty. The implementation of Corning's Everon solutions enabled the school to have oversight over everything — allowing them to see daily graphs of how much traffic each device was using, where it was going, and manage it effectively. The solution was affordable, sustainable, and flexible, ensuring that the school could use it for the next few decades without investing further funds.

“In a campus like this it becomes very important when we adapt to all these different spaces to have different types of technologies, different types of solutions that can all deliver different needs.”

- Nathan Harmer

Sr. Network & Systems Administrator
NCSSM