SEVEN KEYS TO HELP CREATE SAFER, MORE SECURE CAMPUS ENVIRONMENT

Securing your campus

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Abstract

At Siemens, we believe that students, staff, and faculty are free to focus on the core mission of education only when they all feel they are safe, secure, and comfortable. Today, this is a bigger challenge – and a bigger responsibility – than ever. Consider how, in 2021, the FBI reported 61 active shooter incidents across 30 states, with more than 240 casualties[1].

In this paper, we will present seven keys to help successfully create safer, more secure campus environments, and we will explore how the right partner in education and building technologies can bring a dedicated focus to develop, implement, and optimize the right strategies and technologies. It's a community effort, and together, we can secure our campuses.

Understanding the risks

Since the Virginia Tech mass shooting, the risks to our students have never been more clear. Educators, administrators, and campus security all expect and strive to achieve the least exposure to risk and danger—all while balancing the need for an open, comfortable, welcoming place for students to learn.

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Our colleges and universities face unique risks as they maintain an open campus environment, and maintaining that openness is essential to the success and well-being of our communities. As incidents continue to happen and these risks continue to evolve, the understanding of security is more prevalent and relevant than ever—and the public expects it.

The benefits of practice

Creating safe, secure, comfortable campuses starts with effective emergency plans and processes. What happens when there's a fire alarm? A problem with a campus lab environment? An active shooter? If dorms or academic buildings must be evacuated, where do you meet, and how do you account for people?
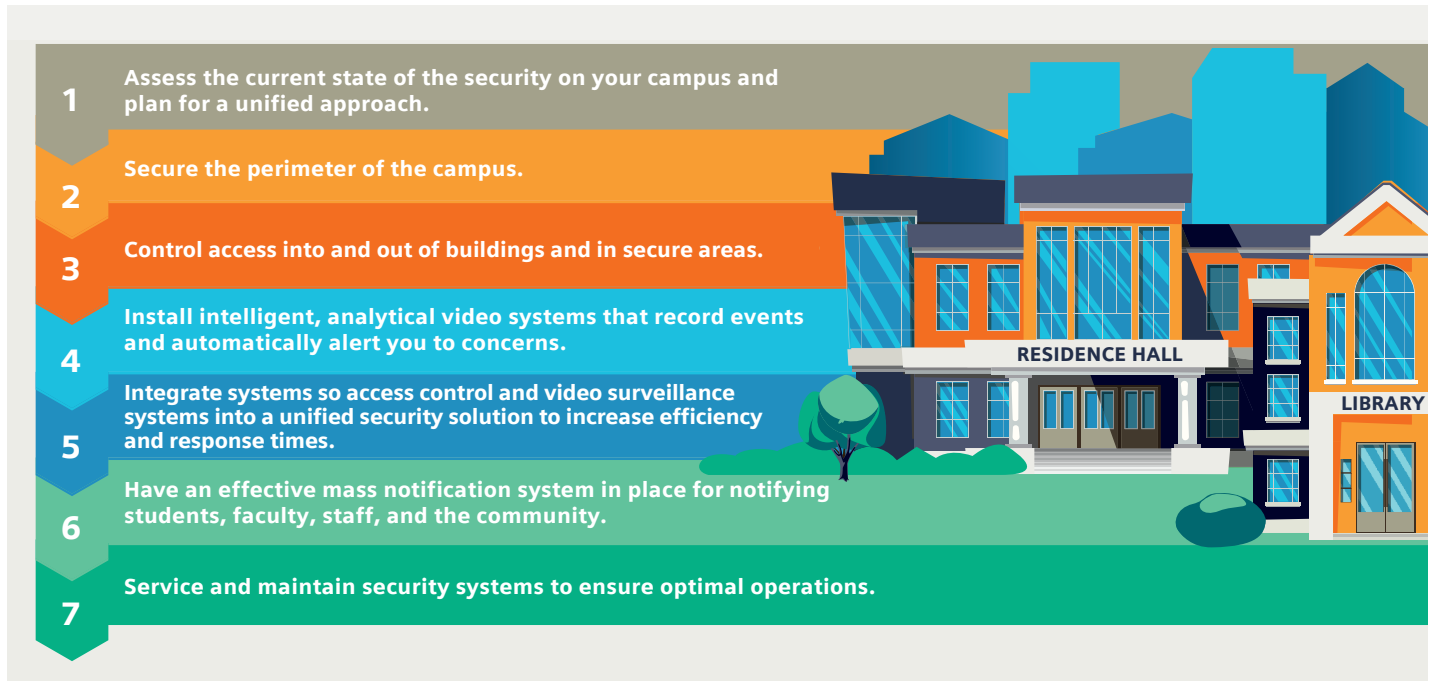
The expectation is that administrators will know exactly what to do in each of these situations. The time to understand and learn these processes is not during an emergency. Consider how athletes get ready for a game: they practice game situations, run drills, and study the opponent. Colleges and universities must follow the athletes' lead. Securing our campuses isn't just about having an emergency plan. It's about practicing that plan, running drills, and studying the research so that in the event of an emergency, everyone can react appropriately and have a positive outcome.

The National Fire Protection Association (NFPA) found the rising number of hostile incidents so alarming that they developed the Standard for Active Shooter / Hostile Event Response (ASHER)[2], which they established as NFPA 3000™. This standard addresses many aspects of emergency responses, from identifying hazards and vulnerability assessments to resource and incident management to recovery.

To take a proactive approach to emergency management and loss prevention, and to help ensure a reasonable level of security for all students, faculty, and staff, campuses must strategically align security into their daily operations. The other component to emergency plans that protect people and property, however, is communication. Administrators must be able to get the right messages out to the right people at the right time so that emergency responders can respond; so students, faculty, and staff know where to go and what to do; and so parents and the public can get accurate and most current information.

7 keys to creating a **safer, more secure campus**

1	**Assess the current state of the security on your campus and plan for a unified approach.**
2	**Secure the perimeter of the campus.**
3	**Control access into and out of buildings and in secure areas.**
4	**Install intelligent, analytical video systems that record events and automatically alert you to concerns.**
5	**Integrate systems so access control and video surveillance systems into a unified security solution to increase efficiency and response times.**
6	**Have an effective mass notification system in place for notifying students, faculty, staff, and the community.**
7	**Service and maintain security systems to ensure optimal operations.**

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In the event of an emergency, situational awareness is paramount; it's about knowing what's going on in and around the buildings so campuses are prepared to identify, process, understand, and respond to all of the information at any given time. Here, we present seven keys to helping create safer, more secure campuses that remain a welcoming place for students to learn:

1. Assess the current state of the security on your campus and plan for a unified approach.
While universities may share many of the same security concerns and objectives, each campus is unique with respect to location, buildings, students, community, and access to capital, to name a few. An effective security approach depends on the campus's security mission and objectives to determine the technologies and equipment that will be used in securing the campus. How the security will affect the campus population and surrounding community while creating an environment that cares about the security and safety of its occupants should be considered.

2. Secure the perimeter of the campus.
To keep intruders out and to regulate access to your campus facilities, secure your perimeter using security technologies; natural barriers; and other fortifications like window film and vestibules. Remember campus facilities can extend to your green spaces, athletic fields, and other gathering places, in alignment with your security objectives. Likewise, technologies such as exterior cameras, lighting sensors, and fencing can play a role in perimeter security.

3. Control access into and out of campus buildings and secure areas.

Access control systems include a range of technologies that control access in and out of buildings while also helping to harden the campus perimeter. These systems will:

- Generate an alarm if a door is propped open or if there is unauthorized access
- Manage entry into campus buildings and other secure areas
- Create a record of who enters or leaves buildings or areas
- Integrate with video platforms for verification and response or, if necessary, forensic review
- Integrate with identity and visitor management platforms to connect access using student, faculty, and staff directories, as well as to restrict access as necessary / appropriate

Access control is an ideal way to balance the need for an open, welcoming campus that also helps to protect the people within.

4. Install an intelligent, analytical video systems that record events and automatically alert you to concerns.

The latest video surveillance platforms rely on smart cameras that provide high-quality, searchable digital videos. Today's intelligent cameras can analyze the scene and recognize people and objects that are out of place and inconsistent with typical campus activities.

For example, when the campus perimeter is properly set up and configured with an intelligent video system and license plate recognition, the video platform will automatically recognize when a vehicle has driven around the campus multiple times over the course of a day, flagging the incident for additional investigation.

Gone are the days of setting up a single person to watch the security cameras; these new platforms automatically detect motion and begin recording. Not only does this help activate emergency plans when necessary and can simplify follow-up investigations, but it also means campus security personnel can more easily and visually verify alarms created by the camera's intelligence.

And when video platforms are bolstered by cloud-based access, campus security teams can take advantage of solutions that require minimal onsite hardware and the latest in artificial intelligence (AI), machine learning, and advanced analytics for even greater protection.

5. Integrate systems so access control and video surveillance systems into a unified security solution to increase efficiency and response times.

In the event of an emergency, every second counts. Many campuses may rely on a range of disparate, disconnected systems that independently monitor and manage access control, video, and other building systems. And because most of these systems require a high level of human interaction, the risk of human error may increase along with the potential for delayed response times and an inability to effectively respond to an emergency.

By integrating these systems into a single, multi-discipline platform, however, administrators and campus security teams gain more visibility and therefore better situational awareness. Add-on modules, such as gunshot detection platforms, can make the integrated system even more robust and supportive of effective emergency planning and response.

The latest advancements in building systems provides for intelligent solutions in the areas of security and fire & life safety, as well as energy performance, lighting, automation, and more. As these systems further develop, AI, deep learning, and shared data across platforms continue to be in demand, and campuses must consider how an integrated security system fits within their future roadmap. Today, data is considered the world's most valuable resource. As data from integrated security solutions are provided to other building systems for interoperability, the groundwork is set for a highly efficient, smart campus environment—and it all starts with intelligent and integrated security systems.

6. Have an effective mass notification system in place for notifying students, faculty, staff, and the community.

Research shows that people are more likely to take a warning seriously if they receive it more than once and from multiple sources. The right mass notification system will quickly, reliably, and accurately get both emergency and routine communications sent to and received by the right people, no matter where they are or what they're doing. These solutions, when properly implemented and configured, can support organizational efforts to comply with NFPA 3000 while also leveraging and integrating existing infrastructure for improved safety, security, and control.

7. Service and maintain security systems to help ensure proper operation

Security systems function day and night, 365 days a year, always prepared for the unknown. As important as it is for any building system, it is also critical to maintain and upgrade the components that make up a system that protects building occupants. A gap in maintenance could put security system functionality at risk. Whether it is camera re-adjustment or wiring decay, security systems have a lifecycle that can be overlooked if not maintained regularly. All security devices and systems require scheduled maintenance, as defined by the manufacturer and regulatory agencies. Better still, proactive, preventive maintenance helps ensure that your access control, intrusion detection, video surveillance, and other security systems are fully functional and available 24/7/365 to secure the campus, its people, and your assets.

A partner in education

It is time for colleges and universities across the U.S. to elevate their expectations for their building technologies and security providers. Instead of simply providing access cards and surveillance cameras, campuses should instead rely on a partner who understands that the very mission of today's campuses is to create the ideal environment for students to learn.

Siemens can partner with your campus to evaluate specific needs around safety and security, including NFPA 3000, to help protect students, faculty, and staff and to coordinate effective emergency responses. From technology planning, design, and implementation to commissioning, software maintenance, and system service, Siemens is a partner in education, helping create a comprehensive security strategy that aims to keep campuses safer, more secure, and more comfortable.

[1] Campus Safety Magazine | link

[2] NFPA.org | link