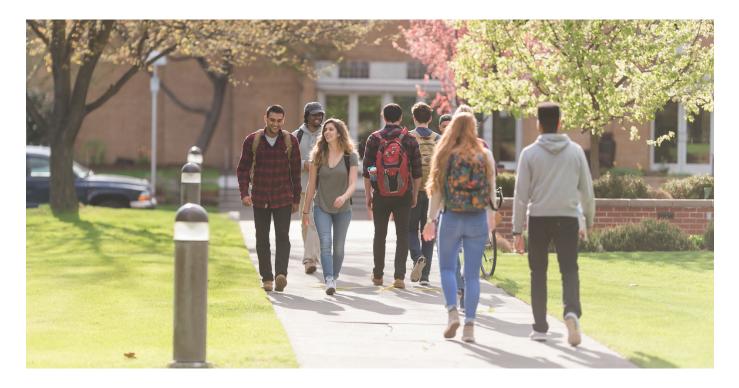


White Paper

At Siemens, we believe that a perfect place for learning is one where students, staff, and faculty all feel they are safe, secure, and comfortable, so they can focus on the core mission of education. Today, this is a bigger challenge and a bigger responsibility than ever.

From April 2017 to March 2018, 320 people were shot on college and university campuses in the U.S.¹ Incidents of violence on college campuses continue to rise, and have an impact on students' academic performance and emotional wellbeing.¹¹

In this white paper, we will present seven keys to success to help create a safe, secure campus environment, and we will explore how the right partner brings dedicated focus to create and implement the right strategies and technologies. It's a community effort, but together, we can secure our students.



Understanding risks

In the decade since the Virginia Tech mass shooting, the risks to our students has 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.

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 it's expected by the public.

The benefits of practice

Creating safe, secure, comfortable campuses starts with effective emergency plans and processes. What do you do when there's a fire alarm? A problem with a campus lab environment? An active shooter? If the 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. Consider how an athlete gets ready for an important game: she practices game situations,

runs drills, and studies her opponent. Schools must follow athletes' lead. Securing our students isn't just about having an emergency plan, it's about practicing that plan, running drills, and studying the research so in the event of an emergency, everyone can react appropriately. The time to understand and learn these processes is not during an emergency.

In fact, the National Fire Protection Association (NFPA) has found the rising number of hostile school incidents so alarming that they have developed a new provisional standard: NFPA 3000TM (PS). This standard is designed to identify minimum program elements needed to organize, manage, and sustain Active Shooter / Hostile Event Response (ASHER) programs to reduce risks, effect, and impact on schools and other organizations.

To take a proactive approach to emergency management and loss prevention and ensure a reasonable level of security for all students, staff, and faculty, 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 faculty, staff, and students know where to go; and what to do, so parents and the public stay informed.

7 keys to know Creating a safe, secure campus environment Define your organization's security objectives. 01 02 Control access into and out of the campus buildings and 03 in secure areas. Install intelligent, analytical video systems that record 04events and alert you to concerns. Integrate systems so access control, video, and command & 05 control systems create efficiencies and better situational awareness. Have an effective mass notification system in place for 06 notifying students, faculty, staff, and the community. Service and maintain security systems to ensure proper operations. 07

7 keys to helping create a safe, secure campus

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

1. Define your organization's security objectives.

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 in order 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.

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

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

- Generate an alarm if a door is propped open or there is unauthorized access
- Help control entrance to the campus and other secure areas
- Create a record of who enters or leaves buildings or areas
- Integrate with video for verification and response or forensic review

Access control is an ideal way to balance the need for an open and welcoming campus that protects the people within.

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

The latest video surveillance technologies rely on smart cameras that provide high-quality, searchable digital video. 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 with license plate recognition, the system will recognize when a vehicle has driven around campus multiple times over the course of a day and flag the incident for additional investigation.

Gone are the days of setting up a single person to watch the security cameras; these new systems automatically detect motion and begin recording, which helps activate emergency plans when necessary and can simplify follow-up investigations.

5. Integrate systems so access control, video, and command & control systems create efficiencies and better situational awareness.

In the event of an emergency, every second counts. Many campuses rely on a range of disparate systems to monitor and manage access control, video, and other building systems—and most of these systems require a high level of human interaction. As a result, the disconnected nature of building systems increases the risk of human error, delays response times, and impedes the ability to respond effectively to an emergency.

By integrating these systems, however, administrators and campus security gain more visibility and therefore better situational awareness. The addition of outside solutions, such as shot detection devices, make the integrated system even more robust and supportive of effective emergency plans.

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 emergency and routine communications sent to and received by the right people, no matter where they are or what they are doing. These solutions, properly implemented and configured, can support colleges' and universities' efforts to comply with the NFPA 3000 provisional standard, as well.

Moreover, the right mass notification solution will serve as the integrator for the range of building systems—from fire safety and security to building automation. It will leverage and integrate existing infrastructure for improved safety, security, and control.

7. Service and maintain security systems to 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 site, its occupants, and your organization's assets.

A partner in education

It is time for universities across the U.S. to elevate their expectations for their building and security system providers. Instead of simply providing access cards and surveillance cameras, administrators should instead rely on a partner who understands that the very mission of today's campuses is to create the perfect place for learning.

Siemens can partner with you to evaluate your specific needs around safety and security, including the new NFPA 3000 provisional standard, to protect your students, faculty, and staff and to coordinate an effective response in the event of an emergency situation. From technology planning, design, and implementation to commissioning, software maintenance, and system service, Siemens becomes a partner in higher education, helping create a comprehensive security strategy that helps keep campuses safe, secure, and comfortable.

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The information in this document contains general descriptions of the technical options available, which may not apply in all cases. The required technical options should therefore be specified in the contract.

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Sources

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