# LEVELING UP WITH CAMPUS SAFETY

Explore emerging video technologies for higher education campuses.

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# Contents

# Campus Security and Safety Essential for Higher Education

One cornerstone of a positive experience for the current generation of college students is the sense of safety and security while on campus.
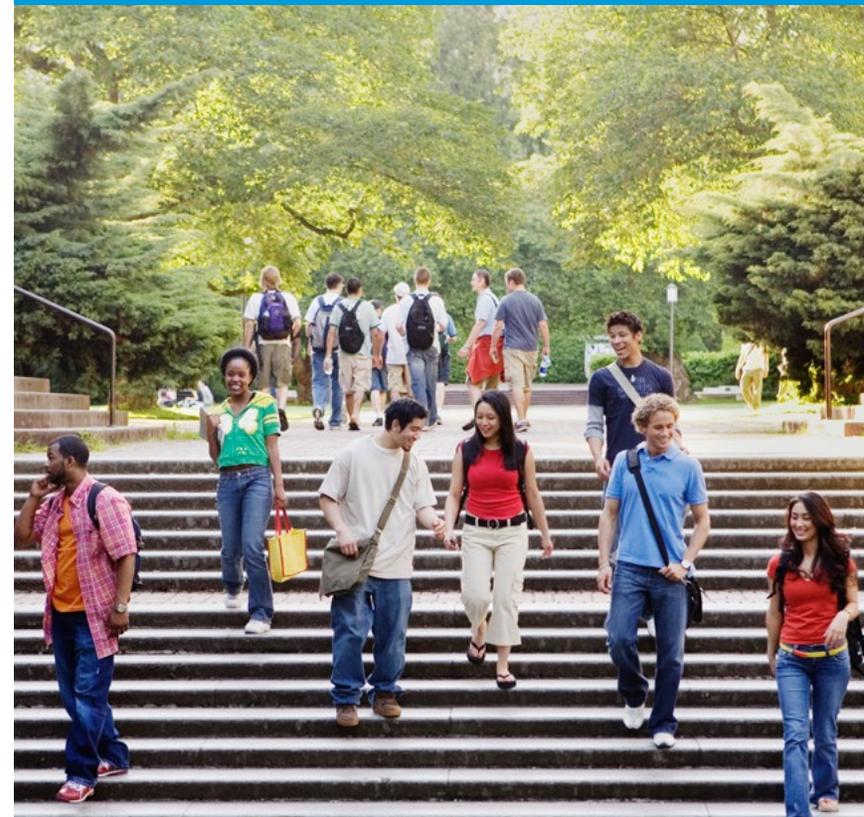
Academic performance, programs, and professional post-graduate prospects are essential criteria for college and university rankings, but reviewers look at additional standards when deciding the order of hierarchy. Higher education rankings now reflect the growing realization that great universities must holistically serve and support their students. As such, institutions must differentiate themselves based on the student experience offered – this includes their sense of safety and security while on campus.

Crime is a particular focal point for students and parents when choosing a university. Furthermore, campus security departments and police forces continually deal with many concerns, including common crimes like theft, burglary, and vandalism. The Office of Postsecondary Education of the U.S. Department of Education, along with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, requires institutions to be more transparent around crime data and report accurate campus safety and security statistics. This data is provided to the public through the Department of Education's Campus Safety and Security website, allowing students and parents to easily access and consider accurate crime data when choosing a university. Institutions that do not have adequate campus-wide surveillance often see enrollment impacted as parents and college-rating services use campus security as an essential criterion in their college selection decisions.

> Empowering students to become and achieve their best is the top priority for higher education institutions. This primary function of the university, however, is unattainable if students don't feel safe and secure on their campus.

# Meeting Students' Expectations

Students want more from their university than good teaching and exciting career prospects. They desire a streamlined campus experience that reflects their use of technology.

Today's college students are true digital natives and interact seamlessly with their smartphones, computers, and other devices. The rise of mobile credentials, for example, pays testament to this by enabling students to access campus facilities through the devices that they carry every day. As a result, institutions must innovate and evolve as quickly as their students.

While campus security is more accessible than ever, protection no longer stops at the campus gates. With the growing need for remote and online education, more students choosing off-site living, and regular ventures into city centers and beyond, a university's duty of care is widening. As a result, more security teams are exploring innovative ways to support students living and visiting off-campus through geo-fencing and smartphone apps.

Campus infrastructure must continue to evolve and stay on top of their students' emerging needs and expectations and the emerging technologies available to exceed their expectations.

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**The Needs and Concerns of Parents**

Parents are often the most influential voices and decision-makers for prospective students considering their university options. As such, administrators must consider the views and priorities of parents. They want to trust that the university they send their child to will holistically care for their safety as effectively as they care for their educational growth. The rise of gun violence and reported sexual assaults on campuses has only increased parents' concerns in recent decades. Therefore, campus security must be proactive in alleviating these concerns by reducing the campus violence risk.

All safety and security solutions and processes must be of the highest standards and up to date. The standards are essential from a public relations standpoint, and to protect campus occupants from risks.

**Security as a Differentiator**

Security has become a selling point for forward-thinking institutions. To have students to protect, universities must first successfully recruit them. Safe campuses attract students, while unsafe campuses repel them. Asset management is necessary to consider, but so is reputation management.

Although their mainstay will always be education, it's relevant to see the commercial operations behind universities today. They must continue to attract students and meet enrollment numbers year-in, year-out. University officials cannot afford negative impacts on their public perception that could cause fear or hesitation from a prospective student. One viral social media post about something gone awry on campus could dent a university's recruitment efforts and, as a result, their bottom line.

> To have students to protect, universities must first successfully recruit them. Safe campuses attract students, while unsafe campuses repel them.

# 6 Challenges Universities Face

To meet changing expectations, universities must ensure robust, up-to-date security systems. Yet, many face challenges that hinder their progress.

### Area of Coverage
Universities see increased challenges—students live both on and off-campus, students take night classes that require unique time-based access levels, cameras are needed to see in a wide variety of conditions, for example. When that university system is extensive—not one campus but 20—there are even more considerations.

### Security Budget
Most colleges cannot afford security forces large enough to keep watch over thousands of students and monitor buildings around the clock. Consequently, colleges and universities look increasingly to the added eyes of video surveillance to assist in campus safety. As a result, many institutions are seeking ways to shift more security costs to an operational, recurring cost rather than a significant capital expense. Cloud technology assists with this, enabling security leaders to pay monthly costs towards upgrading and maintaining their systems instead of one-off initial investments. Furthermore, some are taking a modular approach to add to a security system over several years where upgrades are needed.

### Legacy Infastructure
Older institutions face the additional challenge of upgrading their legacy infrastructure. Here are a few of the challenges administrators face:

- **System maintenance**
- **Legacy camera hardware**
- **Integration of newer technology**
- **Operational use policies**
- **Personnel training issues**

### Technical Integration
Of the technical challenges facing campus deployments, integration with other public safety and security systems such as access control, intrusion, and fire systems, are reported as most problematic. Furthermore, some security technologies require complete overhauls of an existing system which adds additional expense. Due to this, more universities are exploring open platforms that can integrate with legacy systems and add modern functionality to this infrastructure.

### Historic Architecture
Likewise, there may be a mix of modern and historical buildings to support and protect, depending on the institution. Alternatively, security teams may have to protect buildings in rural or suburban areas versus city centers. These require a range of approaches to secure and affix sensors and cameras to the building fabric and to meet the different challenges posed by busy or quiet areas. In turn, modern security systems must integrate with many different device types to consolidate the many cameras, access control, HVAC, lighting, and temperature sensors across other campuses.

### Siloed Departments
For comprehensive integration of all technologies on-site, there must be close collaboration between security and other teams, such as IT, facilities, and public safety. Unfortunately, security departments can find themselves siloed and unable to communicate with different departments in many institutions. Moreover, some systems, like access control, are often controlled by non-security teams such as facilities management.

### Conclusion
The answer to many of the challenges universities face comes from Milestone Systems. We have decades of experience helping educational institutions solve these problems. XProtect® Video Management Software (VMS) is an enterprise-level video technology platform that enables university administrators to improve their security and operational needs on campus.

**Challenges Facing Universities (cont.)**

Longtime Milestone Systems customer Western Kentucky University (WKU) has been a leader using open platform video management software to bring added services to the campus in innovative ways and aid in protecting its student body and employees. The close collaboration between the university's IT Division and its police department has been central to its successful video services.

"The university's decision to institute an open platform system that is easily scalable has allowed us to integrate new technologies and address new requirements as needed," said Jeppie Sumpter, Assistant Vice President of Information Technology at WKU.

Finally, to become more of a value driver in the institution, security teams must become more flexible and find new ways to share the insights from security systems with other departments. Sharing operational information will improve planning, staffing, and efficiencies. For example, real-time intelligence, powered by advanced video analytics and automation, will help security teams quickly respond to dangerous behavior, unusual events, or crowds forming. Meanwhile, occupancy and usage trends can influence staffing, maintenance, and cleaning schedules.

# Tactics to Protect Students Today

### Boosting Flexibility

Higher education campuses include various facilities that share a common goal: provide for the education, comfort, and security of people at all times. A focus on increasing the flexibility of security systems will enable universities to scale with ease to future needs or innovate with new technologies. For example, adding cameras in new buildings and campuses is simple with Xprotect open platform VMS.

### Freedom of Choice

Indeed, open platforms provide autonomy and flexibility over a security system. With Milestone's ability to support multiple integrations, university leaders are free to choose whatever devices and functionality best suit their campuses' needs instead of being locked into a limited number of selected hardware vendors. As a result, integration with legacy systems, and new solutions, is straightforward.

### Continuous Training

Teams should train in best practices to provide high-quality security services. Personnel skills need constant review to meet the latest processes and risks. Today's frontline security staff need training in data and digital skills, communication, student well-being (mental and physical), and cultural sensitivity. Video technology provides the resources to review and evaluate staff practices and efficiencies.

### Optimizing Resources

With budgets stretched, more universities seek to improve efficiency and optimize their existing resources. Automation can help security personnel rapidly identify and assess threats and risks and respond to campus emergencies. University leaders must strike the right balance between people, processes, and technology within a team to deliver the best outcomes for students.

### Using Data

The data generated by a security system that consolidates CCTV, access control, and sensor information will provide valuable insights for security, operations, facilities management, senior leadership, and other teams. In addition, surfacing the data through smart video walls and dashboards makes it easily accessible and understandable to all who require it.

### Increasing Trust

How security forces appear on campus can influence how the student body perceives them. Security teams should transparently communicate their use of security technology across campus. To increase awareness of the protections available to students and build trust that the technology is for the good of everyone on campus.

# Technologies to Secure Your Campus

The technology present in a modern security environment is ready to interface with the entire security enterprise. Systems work together to leverage the capabilities of a platform environment. As a result, the technology works better together than as single components.

### Body-worn Cameras
Wearable cameras are used by on-site staff to provide evidence from their shifts. Recorded video aids investigations and post-event reporting.

### Rapid Video Search
XProtect Rapid REVIEW includes video analytics that leverage existing video surveillance networks to derive searchable intelligence from recorded video content.

### Access Control
Controlling the entry and exit of people around campus can include restricting access to some areas, such as server rooms or potentially dangerous buildings.

### Automation and Video Analytics
Advanced video analytics provide additional context for security teams to assist them with understanding everything that happens on-site.

### Internet of Things (IoT)
IoT sensors, such as temperature control, lighting control, equipment, and air quality, can be integrated with a VMS to issue automated alerts, including THC use and vaping.

### LPR
License Plate Recognition can control entry and exit to a site. With automation, it can also automatically allow pre-authorized vehicles through traffic control gates, streamlining the work done by security.

### Mobile Credentials
Entry authorization credentials on smartphones, along with key fobs and other forms of touchless access control technology, are helping students to access facilities through their connected devices.

### Smart Wall
The XProtect Smart Wall displays consolidated information on a large screen. The video wall could include camera feeds, audio alerts, and sensor or access control data in a Security Operations Center (SOC).
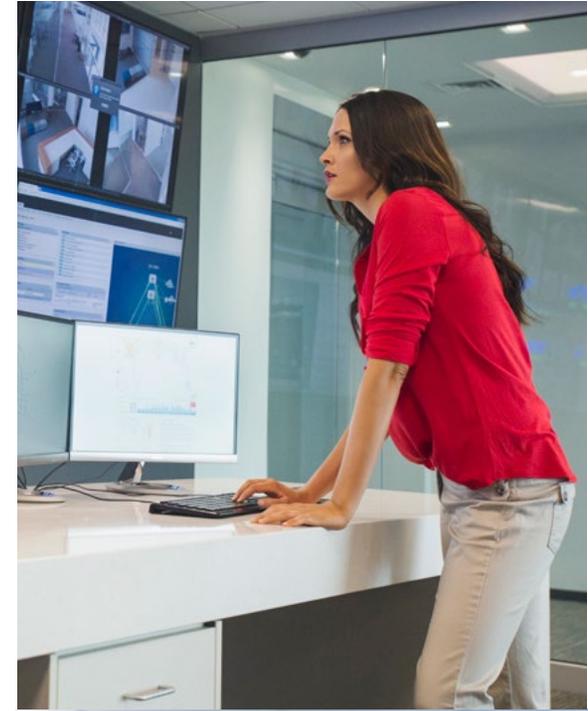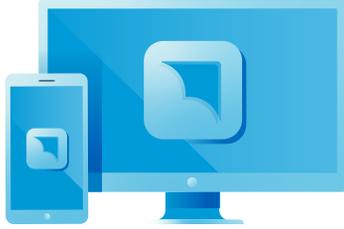
### VMS
The VMS consolidates all camera and sensor feeds for quick review by security teams. An enterprise-level platform, like XProtect VMS by Milestone, provides advanced capabilities for complex university needs.

### CCTV
Video surveillance is a force multiplier for security teams. With cameras in critical locations around campus, security teams can proactively monitor activity and respond when incidents are detected.

# Milestone Kite Offers Easy Cloud-Delivered Video Surveillance for University Campuses

School security remains a top priority for education campuses. However, while schools have invested in video surveillance, they often have disparate systems, outdated technology, and limited staff with training to operate, manage, and maintain the system.

### Smaller Campuses are Facing Infrastructure Growing Pains

While sizeable universities or more often have the staff and budget to deploy and maintain effective on-premise video surveillance systems, small-to-mid-sized campuses might require a different approach to deploy system-side video surveillance. Additionally, they may need more money to afford the workforce to operate and maintain the on-premise systems.

It's essential for colleges in the modern age to have video surveillance that provides extensive interior and exterior coverage, captures high-quality video, and offers ease of use and accessibility. In addition, video analytics are quickly becoming a must-have tool. Finally, security staff needs quick and reliable access to video to investigate threats and wrongdoing and as a tool for crime prevention and a proactive response to incidents.

### Time to Retire Dated and Disconnected Systems

Schools using video security solutions over many years might have a diverse mix of systems with various video surveillance tools across campuses. Furthermore, they could have cameras that don't work with more than one platform or a solution that doesn't have technologically-advanced features like analytics. As a result, these systems may not be interconnected or perform at their peak capabilities.

Higher education campuses should routinely evaluate their video surveillance systems to determine whether systems are operational and keeping up to date with the ever-changing needs in campus security. Unfortunately, yesterday's security systems won't always meet today's expectations. The good news is that with innovations in the cloud, analytics, and technology, feature-rich options that provide comprehensive – and more affordable – video surveillance are emerging.

**Cloud-Delivered Video Surveillance to the Rescue**

Milestone Systems has recently released Milestone Kite™ – a cloud-delivered Video Management Software (VMS) designed for small- to mid-sized businesses and organizations like school districts and smaller universities. One factor that makes Milestone Kite a perfect fit for small or growing campuses is easy installation – anyone can configure and install the gateway and connect it to the cloud with minimal effort. In addition, the user interface is simple and easy to understand. Furthermore, Milestone Kite is suitable for single-site or multi-site surveillance deployments. The fact that it does not require an expensive or expansive infrastructure is a bonus. University IT professionals and those in charge of security no longer need to visit multiple sites or spend time on-site for maintenance. Instead, they can install a Milestone Kite gateway and connect the cameras with little effort.

Milestone Kite offers flexible hybrid video storage with low bandwidth needs, where video data can be stored in the cloud or at the edge, depending on available bandwidth. Furthermore, with a foundation in Milestone's open platform model and powered by the Arcules cloud platform, Milestone Kite supports more than 6,000+ camera models from 100+ manufacturers to work seamlessly with an existing video security deployment. In addition, Kite includes maintenance and cybersecurity.

**Brad Cary is the Milestone National Business Development Manager for Education. His experience working in the education market is extensive, and he says schools are asking for cloud-based video surveillance. "Milestone Kite provides affordable technology allowing smaller schools to implement a level of security that has predominately been associated with large enterprise systems," adds Cary.**

Kite leverages the Google Cloud Platform. As a result, the cloud platform delivers 6-layer deep security and extremely low latency. So, you can be sure Milestone Kite provides continuous security updates and global backup to guard against failure.

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**Milestone Kite is:**

- **SIMPLE** – No IT skills are needed to install or run the platform.
- **SECURE** – Access your video footage securely from any location.
- **SCALABLE** – Cloud-native architecture grows along with any organization.
- **COST-EFFECTIVE** – Reduce your school district's capital, investment, and operational costs.

**Video Analytics Provide Investigative Tools for Campuses**

Milestone's sister company, Arcules, powers built-in analytics that small to mid-sized campuses might need. If you haven't seen video analytics demonstrated, you may be interested to learn about people and vehicle detection, object counting, heat maps, forensic search, and more. Analytics give university administrators an array of tools that improve security and help manage campus operations more efficiently. For example, instutions of higher education can use the system to monitor building capacity, parking lot activity, and more.

**Integrated Access Control Improves Verification Capabilities**

Another essential component of campus security is access control. While many campuses have access control in place, integrating it with video is an enhanced option that opens more than just doors. Through integration with Axis Communications, Milestone Kite automatically combines access control data with incoming video data to enable access-based video verification, view camera feeds, and obtain immediate situational awareness. As a result, campus administratorsor security officers can configure door modes and unlock schedules, set up rule-based alarm/notification triggering for events, and manage access parameters for up to 50 doors. With these capabilities, campus security moves to the next level, backed by the reliability of the cloud.

## Campuses Can Monitor Air Quality and Other Conditions With Kite and Halo Sensors

Kite also offers integration with Halo sensor analytics. The Halo sensor, by IP Video, helps you monitor air quality and other detectable conditions at your location. The sensor can watch for the following conditions:

- **Panic Button**
- **Aggression**
- **Carbon Monoxide**
- **Carbon Dioxide**
- **Nitrogen Dioxide**
- **Gunshot Detection**
- **Calls for Help (Spoken Key Word)**
- **Temperature/Humidity**
- **THC (Marijuana)**
- **Vape Detection**
- **VOC (Volatile Organic Compounds)**
- **Particulate Matter**

When the Halo senses one of these conditions, Kite can use a rules engine to create actions for a proactive response. For example, monitors could receive an audible alert to air quality changes. Then, monitors could review live or recorded video from cameras associated with the Halo sensor that detected the condition. This detection and instant alert could also trigger a proactive response to stop the activity before it becomes a significant problem.

## Milestone Kite is the Logical Choice for Cloud-Delivered VMS

As more small-to-mid-sized campuses search for video surveillance solutions that are easy to deploy, simple to use, have low bandwidth requirements, and are scalable and secure — Milestone Kite becomes the most logical choice. University officials used to dismiss analytics as an expensive luxury, but Milestone Kite makes analytics for advanced, cloud-delivered VMS a realistic, affordable, and feature-filled option.

# Leverage Security Tools for Non-Security Purposes

Campus security tools assist with a wide range of tasks. In addition, they provide operational insights beyond security.

### Adding Value

Insights from sensors and counters across campus can influence many processes, including building management and maintenance, building planning, and staff scheduling. For example, students can learn about busy and quiet areas to choose study locations and times. Furthermore, if campus planners use heat-mapping to learn where walking paths are laid out inefficiently, then they can create new sidewalks to improve the pedestrian experience.

The University at Buffalo is a Milestone customer that's using XProtect VMS across many departments. In recent years as new projects and departments come on board, the university continues to develop best practices. Over time, they are building a centralized platform. Campus police have access to camera views across the campus, but they share the management responsibilities with Central Computing.

Michael Blumenson heads Digital Surveillance Solutions at the University of Buffalo. Blumenson says, "We're trying to move the whole university toward an efficient, full centralization of all cameras and surveillance recording systems. It requires a great deal of coordination … on a very big university platform." In choosing Milestone, the University of Buffalo found that academic departments could take advantage of the new security system. For example, the chemistry department had material handling issues and used the security system to ensure the dangerous chemicals remained secure.

**Beyond Security**

Analytics and automation can streamline campus operations and decision-making. Video investigations, for instance, can be more efficient with forensic analytics, such as XProtect Rapid REVIEW.

- **The add-on security tool pinpoints objects and people of interest in minutes rather than multiple hours of manual searching.**
- **During large-scale events, such as athletic competitions, cameras can pan to areas of interest and concern.**
- **Visitors can gain entry to a parking lot using authorization via automated access control. For example, the video system grants entry when it recognizes the vehicle's license plate number.**

These different areas can add up to offer a seamless, intelligent campus experience.

**The Open Platform Fosters Scalability**

Innovating with emerging technology is made easier with an open platform. For example, administrators can quickly add a device to the system for a testing pilot and remove it later. Likewise, administrators can add new buildings or campuses as needed. XProtect stands toe-to-toe with the competition, yet with our open platform, you have a choice to tap into the solutions our technology partners provide. We collaborate, develop, and test our products with the best quality and your user experience in mind.

# Key Takeaways

Modern-day campus security has an enormous scope of responsibility that encompasses student safety, well-being, and the university's reputation.

By investing in the right tools, security teams can better meet the expectations of today's college students while improving efficiency and response times to ensure their safety and protection. Forward-thinking institutions are employing a range of tools to meet new needs, including advanced video analytics, automation, IoT devices, people counters, and more.

Even after  accomplishing day-to-day security, more value is available in an advanced security system and VMS. Data insights can help inform building maintenance, layout, and staffing. Collaboration is necessary between security, IT, and other departments.

Investing in an open platform is critical when building a flexible and scalable security system that can adapt to changing expectations, growing campuses, and taking advantage of new technologies.

The choices that security leaders make today will reverberate for years to come—both in the safety of a campus and a university's reputation, as well as students' performance and professional prospects.

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Milestone is a leading VMS provider for many higher education institutions in the Americas region that benefit from the flexibility and scalability of the open XProtect platform. In addition, the Milestone Kite cloud-delivered VMS provides options for a VSaaS platform that is perfect for smaller institutions. To understand more about how Milestone can future-proof and enhance your campus security, contact our team of security experts.

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**For more information visit:
milestonesys.com**

**Have questions for your campus? Book a demo
with a local product specialist.**

**See it in action. Read more about SUNY Buffalo
and Western Kentucky University expanding their
campus-wide security with Milestone.
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