



NORTH

Smarter
Campuses

Integrated technology solutions that maximise
the potential of educational environments.

Stronger networks, smarter places

We make your world a smarter place.

We design, deliver and manage integrated systems that improve people's lives - keeping them better connected, safer, more secure and healthier.

We build stronger, more efficient, robust and reliable networks from the ground up. Our smarter place technologies, from intelligent CCTV to environmental monitoring, can dramatically reduce your operating costs whilst also helping you meet sustainability goals.

Our people are industrious and inventive, and we take great pride in what we build. We work closely with our clients as part of their team, to better understand their sectors, their environments and their challenges. However complex the places we work in may be, we use technology to make them simpler to manage, safer to be in and more efficient to run.

Stronger networks, smarter places

Introducing the Smart Campus

North helps make schools, colleges and universities smarter, more efficient, and safer places. We bring you the latest, futureproofed technologies that can increase safety, improve sustainability metrics, and reduce your operational costs. This is all underpinned by our stronger networks and smarter systems which enable you to improve learning environments and outcomes, and introduce immersive technologies such as AI and AR/VR that will transform the learning experience.

Interoperability

Most campuses already have networked systems – wireless network access, CCTV, PA systems – but we can supercharge these technologies, retrofit and add to them. From there, we can connect them all together on a common, secure and unified IT network, so that they can be better managed through a single integrated control centre.

Data analytics

By implementing stronger networks and sensor-led devices, you can gain actionable insights into the data they provide to make more informed and impactful decisions that enhance the student, staff and visitor experience. You can both monitor and improve environmental factors, energy use, people and asset movement, building access and building use. The data collected here is invaluable when planning effective estate consolidation.

Martyn's Law

The introduction of The Terrorism (Protection of Premises) Bill – known as Martyn's Law – requires all venues with a capacity of more than 200 to be better prepared in case of an attack on their premises. Smart technologies such as Access Control and Intelligent CCTV will be essential to increase protection and preparedness.

Overall, these technologies don't just allow your campus to become smarter, they ensure that it is compliant, futureproofed and operating at its optimum level, every single day. This means you can build on your reputation as a modern, progressive, innovative educational establishment, whilst cutting your costs at the same time.

Stronger networks

North are experts in the design, installation and management of structured cabling, fibre and network infrastructure at a large scale – building the foundations that your connectivity rests upon. And our integrated WLAN and Wi-Fi solutions bring immediate operational benefits to any campus network.

Whether it's wired or wireless, we deliver flexible, fast, resilient and secure networks that we can support remotely 24/7/365, keeping your critical systems not just running, but constantly optimised. We can develop a network strategy that supports on- or off-campus learning and delivers education everywhere, be it online, in-person, or hybrid.

The combination of stronger, faster, more robust networks, and simpler, more secure and reliable connectivity helps you to deliver modern, flexible learning at pace and at scale, improving the student experience at every touchpoint.

Comprehensive connectivity

We have experience of working in complex environments, integrating old and new systems, and connecting everything from teaching rooms to communal areas and public spaces. Our connected technologies can advance speeds across your entire campus, even if it's a vastly distributed site with multiple buildings, or a heritage site with listed buildings. In every case, we respect the fabric of the environment we work in.

From seamless student roaming across campus, to steady Wi-Fi connections in every space, to private 5G networks for research and development – the opportunities you have are endless. All of our network solutions are flexible and scalable too, which means we can continue to improve and build upon your initial setup based on your evolving needs and developing technology trends.

Network security

Our extensive experience in campus physical security, building systems, IT networks and IoT means we can develop a comprehensive security policy for your converged IT-OT networks and assets, providing the visibility, control and reporting capabilities that are now essential.

Knowing your network and your vulnerabilities is key, and so a Network Security Threat and Operational Technology Assessment is just one of the services North offers to support our customers in an evolving threat landscape. Our approach identifies security risks, malware, any attacks that are making it through your security systems and which devices and users are at risk, with guidance on how to make improvements.



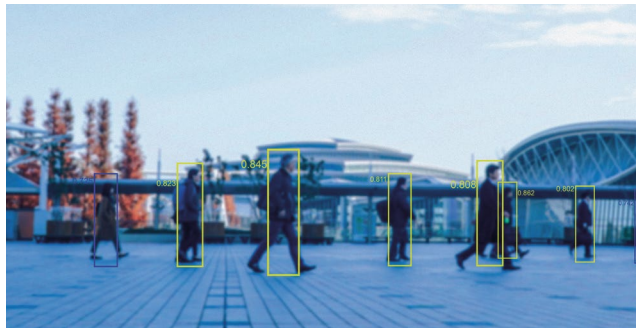
Smarter Campus solutions

Smart Access Control

Allows mobile credentials to be used to gain entry to campus buildings, enhancing safety and security, as well as giving you a clearer picture of attendance and occupancy, whilst also improving the overall user experience. Reducing the number of access cards required also cuts costs and improves sustainability.

Intelligent CCTV

Uses AI powered CCTV & analytics to protect student and staff safety, analyse demographics and movement patterns, design buildings and pathways, all resulting in improved efficiency and a better user experience.



Environmental Monitoring

Improves the management and monitoring of CO₂ levels, air quality, damp, temperature, noise pollution and more, all in real-time. Allows you to optimise learning environments, increase student attentiveness, improve building efficiency and monitor building safety, particularly within student accommodation.

Intelligent Lighting Systems

Used to keep external pathways and internal rooms and corridors brightly lit when needed and in an energy efficient state at other times, contributing to social wellbeing and safety as well as a massive reduction in energy use and costs.

Asset Tracking

Allows for accurate cross-campus tracking of important or high value assets, such as vehicles, tech devices and lab equipment, as they move from one destination to another. Real-time data provides insights that allow you to make better strategic decisions, improve day-to-day operations, and ultimately cut costs.

Smarter Campus

Intelligent CCTV

Uses AI powered CCTV & analytics to protect student and staff safety, monitor demographics and movement patterns.

Reliable Public, Private and Low Power Wireless

Support modern learning techniques and campus operations with reliable access to secure networks for students, staff and devices.

Asset Tracking

Accurate cross-campus tracking of important or high value assets.

Smarter Access Controls

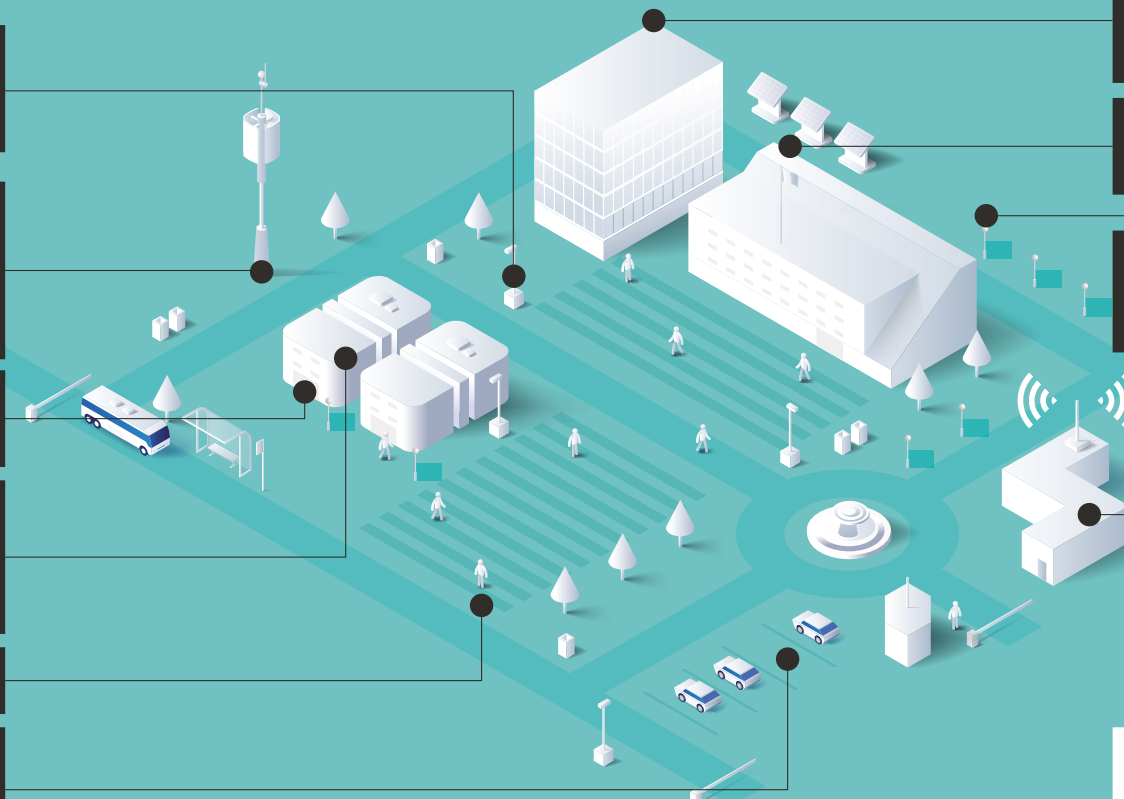
Allows smarter access to campus buildings, enhancing safety and security. Giving you a clearer picture of attendance and occupancy, whilst improving the user experience.

Student Safety

Lone student app to call campus security.

Smart Parking

Real-time management of parking capacity, directing drivers to available spaces quickly to relieve campus congestion.



Environmental Monitoring

Allows you to optimise learning environments, improve student attentiveness and building efficiency.

Intelligent Lighting

Keep external pathways and internal rooms and corridors brightly lit only when needed.

Intelligent Control Centre

Centralise and harness data that streamlines services, improve safety, and transform the way you operate.



Public, Private and Low Power Wireless

Provision of multiple fibre, wireless, IoT and 5G networks for connecting people and devices.

Intelligent Integrated Control Centre

A centralised control centre is the heartbeat of any Smarter Campus. From here, we can harness data that allows us to streamline services, improve safety, and transform the way a school, college or university operates.

Operational performance

North are specialists in using IoT technologies to better understand the operational performance of campus environments. We are able to collect, correlate and analyse the data generated by all of these sensor-led devices to provide valuable insights and opportunities for optimisation. This could involve finding more efficient ways to allocate your resources, pinpointing areas where safety measures should be improved, or redesigning an estate to create better learning outcomes.

Situational awareness

A key advantage of the centralised approach is that you can monitor your entire campus in real-time and react accordingly. This is particularly important for enhancing safety and security. Advanced analytics allow you to direct CCTV or raise lighting in response to an incident, or use access control to monitor a student's attendance at lectures, flagging a potential mental wellbeing risk that can then be investigated by student welfare teams.

Working with the best

We take pride in having deep expertise and a superior understanding of the leading analytics platforms that we implement. The strategic relationship that we have built with these key vendors allows us to maximise the value of their products, ensuring optimal results for our clients.



Joined-up solutions

We understand that having multiple departments within an educational organisation can create barriers and challenges. Very often, the required data exists but is sitting in silos. Managing multiple stakeholders is a big part of what we do, and once those lines of communication are open, we can get a holistic view of the full potential of a campus and what might be achievable.

Added value

Implementing a control centre opens up a world of possibilities. Often, clients want to install a specific system for a specific purpose, but in most cases, this also creates opportunities for us to deliver a number of other services and functions. It may also be possible to share the use of your control centre to cover the management of a neighbouring school, college or university, thus generating a revenue stream.

Benefits – at a glance

Experience and efficiency

The use of IoT connected devices and sensors to improve things like security and tracking, safety, air quality, lighting, and learning, both enhances and streamlines campus life and create a better overall experience.

Improved sustainability

Smarter infrastructure and sustainable technologies help to create more energy-efficient buildings, improve air quality, and enhance waste management – all of which appeals to environmentally conscious students.

Better connected places

Smart infrastructures built on the latest Wi-Fi and wired networking standards and common Zero Trust Network Access security policies create a much safer and far better connected campus. Management and monitoring can also be centralised through smarter campus control centre.

Better informed decisions

The data that is collected and analysed can help universities to understand how their campus is used day-to-day and point to potential efficiencies, or be used in real-time to identify and intervene in situations where students may require support.



Control over compliance

Smarter technologies can assist with reporting on building condition to ensure compliance with building standards. They can also improve safety standards by enhancing campus coverage and identifying attendance and occupancy within buildings and, where required, restricting and managing access.

Reputational rewards

Universities that invest in smarter approaches and intelligent technologies can use this to differentiate themselves and demonstrate their commitment to innovation and progressive learning techniques. It can help you score highly in university league tables and attract UK and international students who are looking for the best technology and campus experience.

End-to-end expertise

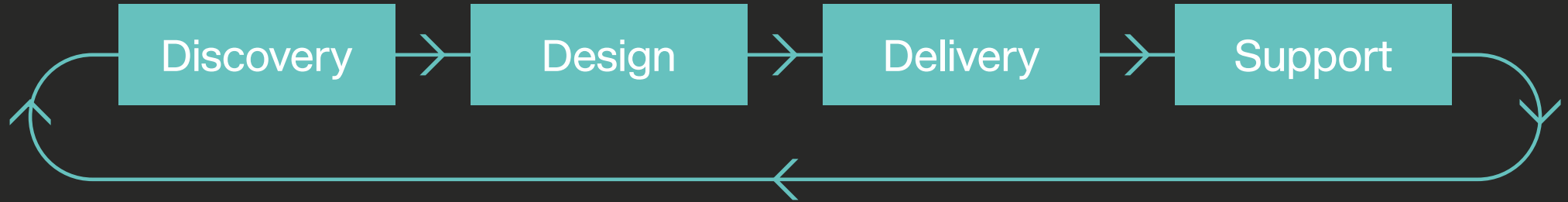
North is uniquely positioned to deliver and manage every single aspect of a Smarter Campus deployment – the infrastructure design and network delivery, IoT device implementation and configuration, control centre management and support.

We are the one and only provider you need, offering one streamlined service from beginning to end. Our team have industry-leading expertise across every department and can fit every piece of the puzzle together, always to the highest standard. No challenge is too difficult, nor environment too complex.

At each stage, we bring innovation to the table, whilst keeping disruption to a minimum throughout the delivery. What's more, we can seamlessly scale your systems over time to accommodate for your evolving needs and requirements.



North's four-stage service



Our extensive discovery service is designed to provide you with a deeper understanding of your networks, systems, and estates. We build each project on robust research, real customer understanding, and a collaborative agreement of needs and expectations.

Our expert design teams work alongside you to plan integrated solutions that deliver clear benefits. We bring over 20 years' experience in bespoke network and project design – informed equally by our partnerships with leading tech vendors and our wealth of experience in practical delivery.

We pride ourselves on smooth, efficient delivery of even the most complex combined technologies. From construction to fit out and installation, we're the safest pair of hands you can find. Your critical operations keep running smoothly, and your projects are delivered on time and to budget.

Our flexible support solutions and managed services are here to help you 24/7/365 as an extension of your own teams, onsite or on-demand. Our proactive approach maximises network uptime and keeps your places running optimally. Customised support solutions are designed to meet your exact needs.

The key to a better campus experience

The University of Birmingham

North is a trusted partner of the University of Birmingham, one of the world's top 100 universities, supplying, installing and maintaining the university's extensive Access Control system. The university contracted North to support a large, complex and time-sensitive project – the design and installation access control for more than 30,000 students and 6,000 doors across all its campus sites.

One of the biggest challenges faced was the project timescales, with only two months to install the system and get it operational. This required careful synchronisation with building management who were renovating rooms at the same time. Another significant challenge was to integrate a new access control management platform with the existing university room management system. Our project team delivered everything on time and budget, creating a seamless user experience.

Rather than students spending their first day awaiting room key distribution, the new system allows the university to send key cards out in advance as part of a welcome pack, enhancing the arrival experience. Operational costs have been significantly reduced, and staff time freed up.

The system also provides a huge improvement in security. Smart card usage data at the beginning of the new term shows the university who has arrived and who hasn't, and allows staff to check on the well-being of students by monitoring access.

The Access Control system has now been expanded throughout the university campus allowing management of accessibility for students and staff within both teaching and accommodation buildings.



UNIVERSITY OF
BIRMINGHAM

Modern, intelligent CCTV for a leading heritage university

The University of St Andrews



University of
St Andrews

Renowned as a leading University worldwide, the University of St Andrews has earned accolades for delivering an exceptional academic experience, ranking it as the UK's best according to the National Student Survey 2023.

As its legacy Video Management System (VMS) reached its limitations, the University sought an innovative new solution with the flexibility to support a range of integrations and adapt to the future, whilst maintaining peak performance.

The University of St Andrews engaged North to transition from a single-vendor video management setup to an advanced video management and analytics platform complete with enhanced features and functionalities. North's unique independence allowed us to implement a video management overlay and migration from the University's legacy CCTV camera system.

Underpinned by a cutting-edge VMS platform, North delivered a solution that seamlessly connects the University's entire security camera estate. Furthermore, with the addition of customisable features, like advanced search capabilities - all accessible through a single user-friendly interface, the University has created safer, more efficient environments for its students, staff and visitors.

Futureproofing was a key driver in the University's decision-making. North advised the University on advancements in surveillance and analytics technologies to support autonomy and flexibility and provide the functionality necessary to accommodate emerging technologies and capabilities.

North now supports the University in developing campus-wide systems, ensuring uninterrupted functionality, and enhancing safety and security for staff and students by using the latest technologies to streamline operational efficiencies and improve their security landscape.

“We are delighted to have entered into a successful partnership with North to deliver a new, highly functional, video management system for the university. The adopted solution has provided enhanced functionality for our CCTV operators within our Control Room and has delivered improved operational performance.”

Andy Edmonston
Security Manager
University of St Andrew



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