

WHITEPAPER

# Wi-Fi 6 and Beyond: Your On-Ramp to the Connected Campus





With standards like Wi-Fi 6 and Wi-Fi 6E, your institution adds more lanes to the internet highway, increases the speed limit upstream and downstream, and removes many of the congestion, density, and security roadblocks that often hinder a truly connected campus.

The connected campus is flexible, easily adapts to change, and depends on a reliable, fast network infrastructure that's available anywhere, any time, to anyone. Professors, visitors, staff, and students view dependable, speedy Wi-Fi access as a must-have.

Providing this service is vital: [96% of students](#) ranked access to Wi-Fi as the most important technology for studying. That was in 2020, when most students had two connected devices, on average. In 2023, people will have [seven connected devices each](#), on average, and there'll be over 29 billion networked IoT devices too.

Already, some higher education institutions are pushing networks built on earlier Wi-Fi architectures beyond capacity. Students study, surf, and game campus-wide. IoT devices already dot grounds, car parks, and arenas. Stakeholders want their internet to push the pedal to the metal, and before Wi-Fi 6, that wasn't economically feasible.





## Wi-Fi 6 and Wi-Fi 6E deliver high-density performance and faster throughput.

The latest generations of Wi-Fi feature new capabilities specifically designed to support the best in connected devices, wearables, virtual and augmented reality, AI and ML, and analytics.

With always-on connectivity—without bottlenecks or degraded experiences—these latest versions of Wi-Fi were designed to wireless protocols developed, and was designed to operate efficiently across campuses, dorms, and classrooms.

# Revving higher education's engine



## IMPROVED EDUCATIONAL EXPERIENCES

Post-secondary institutions are expanding and enriching learning experiences with AR and VR, which have become more accessible. Prices have dropped significantly. Wi-Fi 6 and subsequent protocols deliver the low latency necessary for today's rich online learning experiences and give students the speed and performance they need.



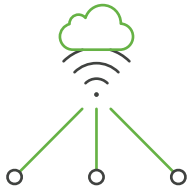
## NEW OPERATIONAL EFFICIENCIES

With extended use of [cloud-managed networked](#) IoT, campuses save energy with automated lighting and equipment controls, enhance safety using smart cameras, and monitor and protect high-value assets with sensors. Thanks to a longer battery life than prior models, connectivity based on Wi-Fi 6 and beyond helps create increased student engagement via connected campus and collaboration solutions.



### UPGRADED SECURITY

Wi-Fi 6 and Wi-Fi 6E include mandated support for [WPA3 security](#), which empowers colleges and universities to increase the use of physical security technologies like cameras or smart access controls. With the higher-bandwidth capabilities this standard delivers, improved video quality and analytics help make schools a safer place for students, staff, and educators. Now, you can meet the dual demands of increased cybersecurity risk and smaller or stagnant budgets with solutions that do more.



### HIGHER CAPACITY

Previous Wi-Fi standards were unable to provide the increased bandwidth needs of video calls, cloud applications, and all the devices brought to campuses today. With Wi-Fi 6 and beyond, busy areas like arenas, lecture halls, dining rooms, libraries, and outside parks can easily manage all users' upstream and downstream demands.

## Higher education IT leaders share their results

After deploying the Cisco Meraki cloud-managed platform, institutions can deploy faster, more reliable, and scalable Wi-Fi across buildings, grounds, and campuses. And it's all operated and updated via a single dashboard, on any device.

[See more Meraki higher education case studies →](#)





## Learn more about how we help higher education here.

Sharing ideas has always been at the heart of higher education. Today, collaboration and knowledge-sharing requires reliable, fast, and secure connectivity. Meraki can help.