

Empowering Digital Learning

with **Wi-Fi 6** and Analytics
at Salesianos **Santísima**
Trinidad School, Seville



CONNECTING YOUR WORLD

Introduction

Salesianos Santísima Trinidad School in Seville faced growing demands for reliable, high-capacity wireless connectivity to support digital classrooms and administrative oversight. Wavesight, partnering with Galgus, designed and deployed a Wi-Fi 6 network combined with location analytics and network management tools to enhance connectivity, classroom streaming, and secure user access, transforming the school's learning environment.

About the Client

- Salesianos Santísima Trinidad is a leading educational institution in Seville, Spain.
- The school serves a diverse community of over 1,600 students and employs more than 100 teaching staff.
- Known for embracing digital transformation, the school aims to foster excellence in teaching through smart, connected infrastructure.
- Committed to providing a safe, interactive, and data-driven educational experience.

The Challenge

- Existing Wi-Fi infrastructure struggled with performance under heavy load from hundreds of devices, impacting teaching, streaming, and collaboration tools.
- Lack of real-time network visibility limited the administration's ability to manage connectivity quality and user behavior.
- Needed secure authentication mechanisms to control access and restrict inappropriate internet use.
- Required support for educational technologies such as Chromecast for wireless content sharing in classrooms.

Solution Overview

- Comprehensive 3D Site Planning: Wavesight and Galgus created detailed 3D designs to identify optimal access point placement and eliminate coverage blind spots.
- Deployment of Galgus DragonFly Wi-Fi 6 Access Points: High-density Wi-Fi 6 (802.11ax) APs provide faster speeds, greater capacity, and improved spectrum efficiency across classrooms and communal areas.
- Cloud-Based Network Manager: Centralized dashboard for monitoring, configuration, and analytics, enabling proactive management and simplified updates.
- Enhanced Authentication & Filtering: Role-based user access control ensures secure connectivity and limits inappropriate browsing for students via the Network Enhancer system.
- Integration with Classroom Tools: Full compatibility with Chromecast devices enables wireless screen sharing and interactive lessons.
- Location Analytics: Real-time metrics and heatmaps help administration track usage patterns and optimize network resource allocation while ensuring GDPR compliance.

Results & Benefits

- Robust Connectivity for Learning: Reliable, high-speed Wi-Fi 6 supports seamless video streaming, downloads, and collaborative tools for students and teachers across campus.
- Improved Network Management: Cloud analytics provide actionable insights into device traffic and usage, enabling data-driven IT operations.
- Secure, Controlled Access: Multi-tier authentication safeguards sensitive educational data and maintains a safe browsing environment.
- Enhanced Classroom Experience: Wireless casting with Chromecast facilitates interactive and engaging lessons.
- Future-Proof Infrastructure: Scalable design accommodates growing wireless demands and emerging educational technologies.

Why Wavesight?

- Extensive experience deploying Wi-Fi 6 and analytics solutions in educational environments across EMEA.
- Seamless integration with Galgus hardware and cloud management platforms for optimized Wi-Fi performance.
- Strong focus on security, compliance, and user experience tailored to academic institutions.
- Dedicated local and international support for design, deployment, and ongoing maintenance.