LAB MEETS LIFE
WHERE EDUCATION AND INDUSTRY CONVERGE

SIT's Living Lab Network (LLN) is the University's digital platform that harnesses real-time data from live systems across the Punggol Campus to power hands-on learning, applied research, and industry innovation. Set for completion by end-2025, the LLN is central to SIT's Campus as a Living Lab initiative embedding experiential learning in every corner of the campus. Connected to over 20,000 IoT sensors, the LLN enables students, faculty, researchers, and industry partners to co-develop, test, and scale data-driven solutions in a real-world environment.

Secure Environment
A safe, controlled space for experimentation

Data-Rich
Access to live campus data for deeper learning

Authentic Applications
Real systems, real data, real insights

Testbed-as-a-Service
For industry pilots, and research trials

Applied Learning in Action

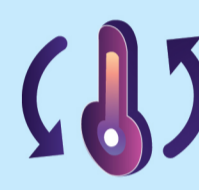The LLN allows students to apply theory using live campus systems:

Integrated Building Management System (IBMS)
Study building responses to occupancy and energy optimisation using real-time data.

Multi-Energy Micro-Grid (MEMG) (with SP Group)
Explore how solar panels, batteries, and the grid interact to deliver reliable, sustainable energy.

District Cooling System (DCS) (with ENGIE)
Access real-time data for cooling system performance and troubleshooting across the campus.

Engineering students leverage live campus data to model and optimise power systems like solar PV and smart grids.
Information Security students engage with realistic simulations of cyberattacks, malware, and red-blue team exercises on the LLN, including critical infrastructure drills.

Partnering for Innovation

Plug-and-Play "Testbed-as-a-Service"
Allow partners to trial and validate new technologies in live settings, accelerating commercialisation.

Cybersecurity Testing
In partnership with AiSP, initiatives like the ASEAN Bug Bounty Programme improve business security while deepening student learning.

Energy Solutions
SIT-Hitachi collaboration to optimise energy use and integrate renewables for greener buildings.

Infrastructure Partner
NEC Asia Pacific supports the LLN's development, helping build an ecosystem for talent development and applied research.

Connect with Us

If you are a student, industry partner, or just curious about the future of smart campuses, the LLN offers you a chance to learn, collaborate and create solutions that matter.

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