

# WiCon SMART HOME SOLUTION FOR DIGITAL EDUCATION: Building the Future of Technology in Cameroon

# **Program Overview**

The WiCon Smart Home Solution For Digital Education is a comprehensive training program designed to equip the next generation of innovators with the skills to lead Africa's digital transformation. Based in Buea, Cameroon, this intensive 6-month program focuses on the rapidly growing fields of Internet of Things (IoT), WiCon Technology, and Software Development.

Our mission is to bridge the gap between traditional electrical work and modern smart solutions, fostering local talent and creating a sustainable tech ecosystem in the Southwest Region.

# Why Choose the Program?

We believe in learning by doing. Our program is built around three core principles:

- Real-World Impact: You won't just learn theory; you'll solve actual, local problems.
  Projects include developing smart lighting for city streets, automated irrigation for local farms, and energy monitoring for the University of Buea.
- Gamified Learning: Stay engaged and motivated with our unique achievement system.
  Earn badges for mastering skills, gain experience points for daily challenges, and unlock milestone rewards as you progress.
- Industry Integration: We provide direct connections to job opportunities. You'll gain insights from guest experts, participate in company visits, and have direct access to our job placement assistance and alumni network.

# Three Specialized Training Tracks

Choose your path and become an expert in a high-demand field. You can select a single track or take the comprehensive program covering all three.

## 1. Software Development: Code the Future

This track is for aspiring developers who want to build the digital backbone of a smart world.

- Core Skills: Master essential web foundations from HTML/CSS and JavaScript to advanced backend development with APIs and data modeling.
- Modern Frameworks: Learn to build powerful, responsive applications using



technologies like React and Next.is.

• Capstone Project: Design and build a full-stack Smart Control Cloud Platform with user authentication, live data dashboards, and AI-powered anomaly detection.

### 2. IoT Solutions: Connect Everything

This track is for hands-on builders who want to create the physical smart world.

- **Electronics & Hardware:** Get a deep understanding of electronics, from basic circuits to advanced sensors and actuators.
- **IoT Networking:** Master key networking protocols like MQTT and learn how to build reliable, local-first devices with over-the-air (OTA) updates.
- Capstone Project: Build a secure Smart Energy Node, a complete sensor and relay system with encrypted communication and real-time monitoring.

### 3. WiCon Controller: Master the Power

This track is a deep dive into our proprietary technology for aspiring electrical system experts.

- **System Mastery:** Understand the architecture of WiCon's wireless technology and learn professional installation and configuration for residential and commercial spaces.
- Advanced Programming: Tailor WiCon systems to specific needs and integrate them with other technologies like solar panels, security systems, and CCTV.
- Capstone Project: Take on the Master Installer Challenge, completing a complex, real-world installation project and earning your official WiCon Certification.

# The Great Integration Challenge

After completing your individual track, you'll join a cross-functional team of software developers, IoT specialists, and WiCon experts. Your team will tackle a major challenge:

- Smart Campus Solution
- Commercial Building Intelligence
- Community Impact Project

This is where all your skills come together. You'll build, integrate, and demo a complete system to a panel of industry professionals and WiCon leadership, competing for awards, job opportunities, and startup incubation support.

# A Pathway to Success

Graduates of the WiCon Academy receive more than just a certificate. You will leave with a powerful portfolio of projects, access to a vibrant alumni network, and direct job placement assistance to kickstart your career.

Join us and become a leader in the next wave of technological innovation.