



KENYA SMART BUILDINGS & AUTOMATION SOCIETY

KSBAS

Advancing Skills for Intelligent, Connected & Sustainable Buildings in Kenya

INDUSTRY PARTNER BRIEF

Smart Buildings & Building Automation: Professional Foundation Workshop

A structured, industry-aligned professional development programme. Delivered by certified practitioners with verified industry credentials.

DATE	TIME	VENUE	FEE
9 June 2026	9:00 AM – 4:00 PM	RTI Engineering Block, Nairobi	KES 3,500 / participant

*Prepared for: Industry Partners, Facility Management Companies & Sponsoring Organizations
Issued by: Kenya Smart Buildings & Automation Society (KSBAS) | kenyasmartbuildingsco.org /
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1. ABOUT KSBAS — KENYA SMART BUILDINGS & AUTOMATION SOCIETY

The Kenya Smart Buildings & Automation Society (KSBAS) is Kenya's national professional body dedicated to building competency, advancing industry standards, and accelerating career development in smart buildings, building automation, and HVAC-R technology. KSBAS was established to address a growing and urgent gap: Kenya's built environment is being transformed by intelligent technologies, yet the technical workforce has not kept pace.

KSBAS operates through a chapter system anchored at technical training institutions across the country. The Railway Training Institute (RTI) Chapter is among the Society's most active — a fitting home, given RTI's status as Kenya's foremost centre of technical and vocational excellence. KSBAS operates the RTI Smart Buildings Society (RTI-SBS) — an authorized examination and training centre for internationally recognized HVAC-R and building automation certifications at the RTI campus in Nairobi.

Authorized Certification & Examination Centre

RTI-SBS is an official examination centre for the following internationally recognized programmes:

- › **ESCO** Group — EPA 608 (Refrigerant Handling), EPA 609 (Mobile Air Conditioning), HVAC Excellence (Employment Ready, Professional, Master Specialist levels)
- › **Johnson** Controls — HVAC Mechanical Systems, Metasys® BMS, Facility Explorer®, A2L Refrigerants
- › **BACnet** Institute — BACnet Basics, BACnet Cybersecurity, BACnet Professional
- › **CDACC** RAC — Refrigeration & Air Conditioning Levels 1–5 (All levels)
- › **NITA** — Authorized short course examination centre

Our Online Presence

Platform	What It Is
kenyasmartbuildingsco.org	RTI Smart Buildings Society — training services, corporate programmes, certifications & contact
ksbs-website.pages.dev	National KSBAS Society — board structure, regional chapters, accreditation & membership
smartrti.pages.dev	RTI exam centre portal — HVAC-R international certification, exam registration & learning pathways

2. THE FACILITATOR — CREDENTIALS & VERIFIED EXPERIENCE

This workshop is designed and facilitated by Carlos K Sirma, Vice Chairperson of the KSBAS RTI Chapter and the technical lead behind the Society's digital infrastructure and examination centre operations. Every topic covered in this workshop is grounded in our facilitator's verified professional credentials and direct industry practice — not theoretical study.

Industry Certifications (Verified, 2025–2026)

Certification	Issuing Body
Introduction to HVAC: Environment	<i>Johnson Controls — OpenBlue</i>
Introduction to HVAC: Controls	<i>Johnson Controls — OpenBlue</i>
Introduction to HVAC: Systems	<i>Johnson Controls — OpenBlue</i>
A2L Refrigerants — Customer Edition	<i>Johnson Controls</i>
BACnet Basics	<i>The BACnet Institute</i>
BACnet Cybersecurity	<i>The BACnet Institute</i>
Discovering BAS-IP: Setup & Utilization of Devices	<i>BAS-IP Online Learning</i>
Best Practices for System Evacuation (Fieldpiece)	<i>Fieldpiece University</i>
History of Refrigeration Webinar (1 CEH)	<i>ESCO / Honeywell</i>
Addressing the Technician Shortage (1 CEH)	<i>HVAC Excellence</i>

Academic & Professional Qualifications

Qualification	Institution
CDACC Diploma in Refrigeration & Air conditioning	<i>Railway Training Institute</i>
Diploma in Technical Trainer Education — Computer Studies (2nd Class)	<i>Kenya School of TVET</i>
Diploma in Computer Studies — TEP (Pass-with-Credit, 7 papers)	<i>Kenya National Examinations Council (KNEC)</i>
Diploma in Computer Studies — Stages 1 & 2	<i>Rift Valley Technical Training Institute</i>
Certificate of Registration of Copyright Work — PARK IT (LT-13222)	<i>Kenya Copyright Board</i>
3rd Place — 54th National Kenya Science & Engineering (Computer Science)	<i>Ministry of Education</i>

3. THE WORKSHOP — RATIONALE & DESIGN

Kenya's built environment is undergoing a rapid and irreversible transformation. Commercial buildings, hospitals, hotels, data centres, manufacturing plants, and government facilities are adopting Building Management Systems (BMS), smart HVAC, IoT sensors, and automated energy management platforms at an accelerating pace. This is not a future trend — it is the present reality facing building owners, facility managers, and technical professionals across Nairobi and the wider region.

The challenge is that the majority of the technical workforce currently operating and maintaining these buildings was trained for conventional systems. They lack the conceptual and practical vocabulary to operate, interpret, fault-find, or optimise smart building technologies. This is not a criticism of their skills — it is a structural gap created by how fast the industry has moved.

KSBAS has designed this Professional Foundation Workshop specifically to close that gap. It is a one-day, structured, professionally delivered programme that equips participants with a solid working understanding of smart building systems — covering BMS architecture, smart HVAC, IoT integration, energy efficiency, modern refrigerants, and career pathways. Every module maps directly to the facilitator's verified professional certifications and documented industry practice.

WHY THIS WORKSHOP IS DIFFERENT

- › Every topic taught has a corresponding certificate of completion from a recognised international body — Johnson Controls, BACnet Institute, BAS-IP, or ESCO Group.
- › The facilitator holds a Diploma in Technical Trainer Education from KTTC — trained not just as a practitioner, but as an educator.
- › Content is drawn from the same learning platforms used by global HVAC-R professionals, not generic internet research.
- › A2L refrigerants (the new global standard) are covered — a topic most Kenyan training providers have not yet incorporated.
- › BACnet protocol — the backbone of modern BMS communication — is covered at both foundational and Cybersecurity levels.
- › BAS-IP building intercom and access control integration is included — a practical smart building component rarely taught locally.
- › Participants receive a KSBAS Professional Certificate issued on the day.

4. WORKSHOP PROGRAMME — 9 JUNE 2026

Time	Module	Content & Learning Outcomes
9:00 – 9:30	Registration & Opening	Participant registration. Opening remarks by KSBAS RTI Chapter. Introduction to learning outcomes and how today's content connects to real career decisions.
9:30 – 10:45	Module 1 Introduction to Smart Buildings & Building Automation	What makes a building 'smart'? Core components: sensors, controllers, networks, human-machine interfaces. How automation adds value — energy savings, remote monitoring, fault detection. Real case examples from the Kenyan market. Facilitator credential: Johnson Controls OpenBlue — Introduction to HVAC: Environment, Controls & Systems (Feb 2026)
10:45 – 11:00	Break	<i>Refreshments & networking</i>
11:00 – 12:15	Module 2 Building Management Systems (BMS) — BACnet Protocol & Cybersecurity	BMS architecture: DDC controllers, field devices, supervisory layer. BACnet as the universal communication language of BMS — how devices from different manufacturers talk to each other. Reading live BMS dashboards. Alarm management. BACnet Cybersecurity — protecting building networks from threats. Facilitator credentials: BACnet Basics (Feb 18, 2026) & BACnet Cybersecurity (Feb 19, 2026) — The BACnet Institute
12:15 – 13:00	Lunch Break	<i>Provided — networking encouraged across Organisations</i>
13:00 – 14:00	Module 3 Smart HVAC, A2L Refrigerants & System Efficiency	Smart HVAC vs. conventional systems. Variable frequency drives, demand-controlled ventilation. System evacuation best practices for refrigerant handling. A2L refrigerants — why the industry is transitioning, safety classifications, and what technicians need to know now. Facilitator credentials: A2L Refrigerants — Customer Edition (Johnson Controls, Feb 2026); System Evacuation Best Practices (Fieldpiece University, Jan 2026)
14:00 – 14:50	Module 4 BAS-IP, IoT Devices & Modern Building Technologies	BAS-IP building intercom and IP device integration in smart buildings. IoT sensors and connectivity — how data flows from field devices to dashboards. Green building standards: LEED, EDGE and their impact on facility operations. Future trends in building automation. Facilitator credential: Discovering BAS-IP — Setup & Utilization of Devices (BAS-IP Online Learning, Feb 2026)
14:50 – 15:45	Module 5 Career Pathways in Building Automation	Professional roles: BMS Operator, Automation Engineer, Smart Facilities Manager, HVAC-R Technician (Advanced). Certification pathways: CDACC RAC Levels 1–5, EPA 608/609 (ESCO Group), BACnet Professional, HVAC Excellence. Salary benchmarks. How to position yourself in the Kenyan and international market. Facilitator credential: Diploma in Technical Trainer Education — KTTC (2022); HVAC Excellence: Addressing the Technician Shortage (2025)
15:45 – 16:00	Closing & Certificates	KSBAS Professional Certificates issued to all participants. Closing remarks. Networking session.

5. TARGET PARTICIPANTS

This workshop is designed for working professionals currently engaged in, or transitioning toward, building technologies and facilities management. It is equally valuable for Organisations seeking to bring their technical teams up to speed with modern intelligent building operations.

Professional Profile	Why This Workshop is Directly Relevant
HVAC & Refrigeration Technicians	Expand into smart HVAC, BMS integration, A2L refrigerants, and IoT-connected systems — the fastest-growing area of the trade. Workshop content directly maps to CDACC RAC and EPA 608 certification pathways.
Electrical Engineers & Technicians	Understand how BACnet protocol, DDC controllers, and IP-based systems connect the electrical and automation layers of modern buildings. Directly applicable to building control panel work.
Facility & Building Managers	Gain the technical fluency to specify, manage, and audit BMS systems and the professionals who operate them. Understand energy monitoring dashboards and fault management.
Maintenance Supervisors	Build structured knowledge of automated fault detection, alarm management, and smart system maintenance — reducing response time and operational costs.
TVET Trainers & Technical Educators	Stay current with where the industry is heading. Content is drawn from Johnson Controls, BACnet Institute, and BAS-IP — the actual platforms shaping global HVAC-R education.

6. VALUE TO INDUSTRY PARTNERS

What Sending Your Staff Delivers

- ✓ **Certificated CPD:** Every participant receives a KSBAS Professional Certificate — a credible, documented record of staff development that can be reported to clients, referenced in tenders, and retained in personnel files.
- ✓ **Applied Knowledge from Day One:** Content is drawn from the same platforms used by global employers — Johnson Controls, BACnet Institute, BAS-IP, ESCO Group. Staff return from the workshop with vocabulary and concepts directly applicable to their current roles.
- ✓ **A2L Refrigerant Readiness:** A2L refrigerants are the global industry transition — HFO blends replacing R-22 and R-410A. Most Kenyan practitioners have not received structured training on A2L safety, handling, or compliance. This workshop addresses that directly.
- ✓ **BACnet Literacy:** BACnet is the communication backbone of virtually every modern BMS. Technicians and engineers who understand BACnet protocol can work with systems from any manufacturer — Siemens, Honeywell, Schneider, Johnson Controls — without vendor lock-in.
- ✓ **Staff Retention Signal:** Investing in structured professional development communicates organisational commitment. It reduces attrition and increases engagement, particularly in technically demanding roles where growth opportunities are valued.
- ✓ **Brand Acknowledgement:** Organisations sending three or more staff will be acknowledged by name at the workshop and in KSBAS post-event communications shared across the professional network.

Participation Options for Organisations

Participation Option	Investment	Includes
Individual Delegate	KES 3,500 per person	Full-day workshop, training materials, refreshments, KSBAS Professional Certificate, access to professional community
Team — 3 to 5 Staff	KES 3,000 per person	All of the above + organisation name acknowledgement during the workshop
Corporate Group — 6+ Staff	Contact us for group rate	All of the above + customised group invoice + priority seating + post-event summary report

7. LOGISTICS & REGISTRATION

Date	Tuesday, 9 June 2026
Time	9:00 AM – 4:00 PM (Registration opens 8:45 AM)
Venue	Engineering Block, Railway Training Institute (RTI), Nairobi
Capacity	Limited to 40 participants — first come, first confirmed
Registration Deadline	Friday, 5 June 2026
Fee	KES 3,500 per participant — includes training materials, refreshments & KSBAS Professional Certificate
Payment	M-Pesa or bank transfer — details provided at registration
Register	WhatsApp/Call: +254 706 127 107 workshops@kenyasmartbuildingsco.org
Confirmation	All registrations confirmed within 24 hours with full payment receipt and joining instructions

Each Participant Receives

- › Full-day facilitation across 5 structured technical modules
- › Printed training reference guide and module notes
- › Morning and afternoon refreshments plus full lunch
- › KSBAS Professional Certificate of Completion (issued on the day)
- › Access to KSBAS professional community — ongoing resources and networking
- › Post-workshop certification pathway guide for CDACC, EPA 608, BACnet, and HVAC Excellence

8. CONTACT & NEXT STEPS

We welcome your organisation's participation. We are happy to arrange a briefing call, provide a customised group invoice, or assist your HR or training team in processing team registrations.

TO REGISTER YOUR TEAM OR ENQUIRE

Contact Person: Carlos K Sirma
Title: Vice Chairperson — RTI Chapter, Kenya Smart Buildings & Automation Society
WhatsApp / Call: +254 706 127 107
Website: kenyasmartbuildingsco.org
Exam Centre: smartrti.pages.dev
Society: ksbs-website.pages.dev

To register your team, mail workshops@kenyasmartbuildingsco.org the names, job titles, and organisation for each participant.

A registration confirmation and payment instructions will follow within 24 hours.

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