

ERASMUS+ CAPACITY BUILDING IN HIGHER EDUCATION · STRAND 2

Smart City Higher Education Advancement Program in East Africa

Strengthening universities in Kenya, Somalia and Uganda to educate the professionals who will plan, build and govern sustainable, inclusive smart cities.

PROGRAMME PERIOD

Jan 2025 – Dec 2027

COORDINATOR

Moi University

CONSORTIUM

9 universities · 6 countries

EDITION

26 October 2026



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About this document

This brief summarises the SHAPE programme for decision-makers, partners and funders. It is generated from the live project website, so figures, statuses and dates reflect the position on 26 October 2026.

SECTION 1

Executive Summary

SHAPE is a 36-month Erasmus+ capacity-building programme in which 9 European and East African universities modernise higher education for smart, sustainable and inclusive cities.

Key messages

- The gap is skills, not ambition.** African cities are urbanising rapidly, yet most lack the planners, engineers and data specialists to make smart city strategies work.
- Universities are the lever.** SHAPE builds Master's-level curricula, micro-credentials and trained academic staff in Kenya, Somalia, Uganda.
- Learning by doing.** Open Innovation Labs and hackathons connect students with real city, industry and government challenges.
- Built to last.** An EU–East Africa Smart Cities Alliance sustains collaboration beyond 2027.

Programme at a glance

Funding	Erasmus+ CBHE, Strand 2 (EACEA)
Period	Jan 2025 – Dec 2027 (36 months)
Coordinator	Moi University — Prof. Kirimi Kiriamiti
Partners	9 universities in Kenya, Estonia, Germany, Somalia, Uganda, Lithuania
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Status snapshot · 26 October 2026



SECTION 2

Context and Rationale

The Smart City Higher Education Advancement Program in East Africa (SHAPE) is an Erasmus+ Capacity Building in Higher Education initiative designed to address the growing shortage of smart city skills across East Africa, particularly in Kenya, Somalia, and Uganda. Rapid urbanization in the region has created increasing demand for professionals capable of planning, designing, and managing smart, sustainable, and inclusive cities. However, higher education institutions currently lack specialized curricula, qualified academic staff, practical training facilities, and strong collaboration with industry and public institutions.

SHAPE responds to these challenges by modernizing higher education through innovative curricula, academic capacity building, digital learning, research collaboration, and open innovation. The project combines the technical expertise of European universities with the contextual knowledge of East African institutions to develop educational programmes that reflect the realities and priorities of African cities rather than replicating models developed elsewhere.

93%

of local governments in Africa report skills shortages as a major barrier to smart city development.

29%

of African cities currently have a smart city strategy in place.

Source: UN-Habitat, cited at the SHAPE launch (June 2026).



Figure 1. Rapid urbanisation is reshaping East African cities and the skills they require.

SECTION 3

Objectives and Approach

Goal

To strengthen higher education institutions in East Africa by developing innovative academic programmes, practical innovation ecosystems, and skilled graduates capable of designing, implementing, and sustaining smart, inclusive, and sustainable cities across Kenya, Somalia, and Uganda.

Mission

To modernize higher education through innovative curricula, digital technologies, industry collaboration, and capacity building that empower universities to produce professionals with the knowledge, skills, and leadership needed to drive sustainable smart city development in East Africa.

Four strategic pillars

PILLAR	WHAT SHAPE DELIVERS
Curriculum	New and updated Master's-level courses, open online courses and accredited micro-credentials.
Academic capacity	Train-the-trainer programmes equipping staff with modern teaching methods and smart city expertise.
Innovation	Open Innovation Labs and three hackathons linking universities with industry and government.
Sustainability	An EU–East Africa Smart Cities Alliance, dissemination and a sustainability strategy.

Thematic domains (12)

1. Smart Cities & Sustainable Urban Development

2. Artificial Intelligence & Data-Driven Decision Making

3. Open Data & Digital Governance

4. Smart Energy & Renewable Energy Systems

5. Smart Mobility & Intelligent Transport Systems

6. Smart Health & Digital Healthcare
7. Internet of Things (IoT) & Sensor Technologies

8. Community Engagement & Citizen Participation

9. Innovation & Entrepreneurship

10. Digital Transformation in Higher Education

11. Open Innovation Labs & Hackathons

12. Capacity Building & Curriculum Development

SECTION 4

Expected Outcomes and Impact

#	OUTCOME	DESCRIPTION
01	New Accredited Curricula	New accredited smart city curricula and micro-credential programmes introduced across partner universities.
02	Stronger Academic Staff	Academic staff equipped with modern teaching methodologies and advanced smart city competencies.
03	Open Innovation Labs	Open Innovation Labs established within East African universities to promote innovation, entrepreneurship, and applied research.
04	Deeper Collaboration	Stronger collaboration between universities, governments, industry, and local communities in addressing urban development challenges.
05	Employable Graduates	Enhanced digital, technical, and entrepreneurial skills among students and graduates, improving employability and regional economic growth.
06	International Collaboration	Increased international collaboration through virtual exchanges, joint research, and knowledge sharing between European and East African institutions.
07	A Lasting Alliance	A sustainable EU–East Africa Smart Cities Alliance established to continue collaboration beyond the project's lifetime.
08	Long-Term Regional Impact	Long-term contribution to inclusive, resilient, and sustainable smart city development across East Africa through higher education transformation.

Target groups



SECTION 5

Consortium and Governance

Moi University coordinates the programme, with Prof. Kirimi Kiriamiti as Project Coordinator. Each work package is led by a partner institution.

INSTITUTION	COUNTRY	ROLE	LEADS
 Moi University	 Kenya	Coordinator	WP1
 University of Tartu	 Estonia	Academic Partner	WP4
 Otto-von-Guericke-University Magdeburg	 Germany	Academic Partner	—
 Red Sea University	 Somalia	Academic Partner	—
 Open University of Kenya	 Kenya	Academic Partner	WP2
 Mogadishu University	 Somalia	Academic Partner	WP5
 Makerere University	 Uganda	Academic Partner	—
 Kampala International University	 Uganda	Academic Partner	WP3
 Lithuanian University of Health Sciences	 Lithuania	Academic Partner	—

Associated partners

Konza Technopolis Development Authority	 Kenya	Case studies, curriculum input, regional outreach
Université du Burundi	 Burundi	Case studies, curriculum input, regional outreach
Institute of Social Policy and Research	 South Sudan	Case studies, curriculum input, regional outreach

SECTION 6

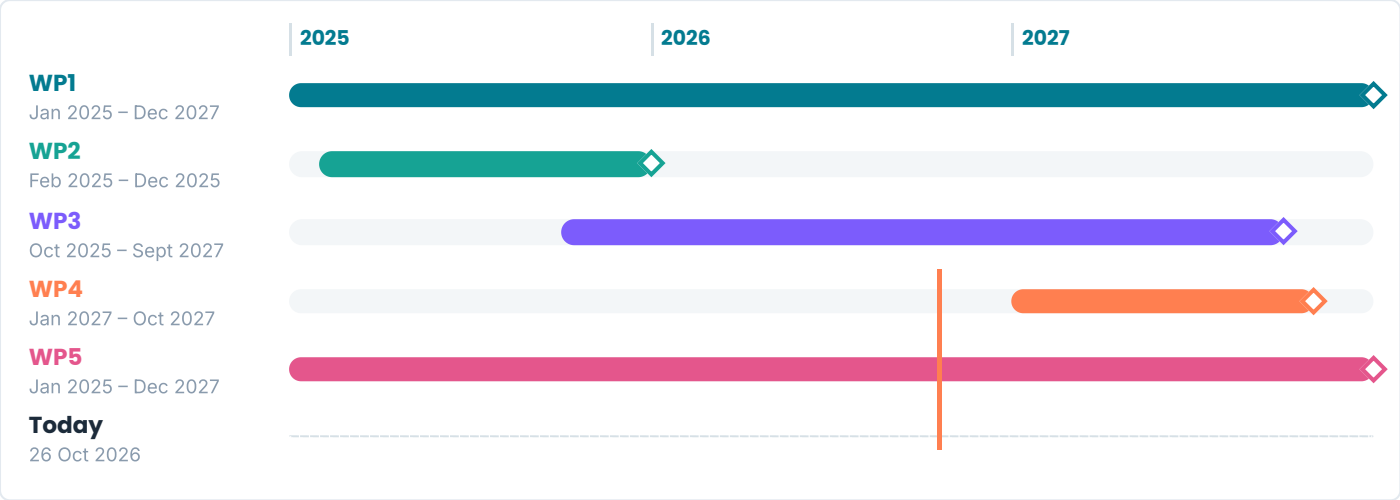
Work Plan

Five coordinated work packages carry SHAPE from research through to a lasting EU–East Africa alliance.

WP	TITLE AND SCOPE	LEAD	PERIOD	STATUS
WP1	Project Management & Coordination Activities Oversees day-to-day coordination, quality assurance, and reporting to keep SHAPE on schedule and aligned across every partner institution. 3 deliverables	Moi University	Jan 2025 – Dec 2027 M1–M36	In Progress
WP2	Establishing Design Requirements for Smart Cities in Sub-Saharan Africa Assesses regional needs and educational gaps to shape a strategic roadmap for a smart city curriculum built for East Africa's realities. 3 deliverables	Open University of Kenya	Feb 2025 – Dec 2025 M2–M12	Completed
WP3	Building a New Educational Curriculum for Smart Cities Develops and pilots new Master's-level courses, open online learning, and trainer programmes spanning smart city disciplines. 5 deliverables	Kampala International University	Oct 2025 – Sept 2027 M10–M33	In Progress
WP4	Implementation of Smart City Acceleration & Open Innovation Programme Establishes Open Innovation Labs and hackathons, and launches the EU–East Africa Smart City Alliance, turning research into practice. 5 deliverables	University of Tartu	Jan 2027 – Oct 2027 M25–M34	Upcoming
WP5	Dissemination, Exploitation, Sustainability & Communication Builds SHAPE's public presence and long-term sustainability through communication strategy, outreach, and digital channels. 4 deliverables	Mogadishu University	Jan 2025 – Dec 2027 M1–M36	In Progress

SECTION 7

Timeline and Milestones



Key milestones

DATE	MILESTONE	STATUS
18 Jun 2026	SHAPE Project Official Launch · Online	Held
28 Sept 2026 – 2 Oct 2026	International Partners Meeting · Mombasa, Kenya	Held
Jan 2027	Train-the-Trainer Sandbox · Partner universities	Planned
Jan 2027 – Oct 2027	Open Innovation Hackathons (×3) · East African partner universities	Planned
Sept 2027	Pilot Courses — First Student Cohort · Partner universities	Planned
31 Dec 2027	WP1 deliverables due (D1.1, D1.2, D1.3)	In Progress
31 Dec 2025	WP2 deliverables due (D2.1, D2.2, D2.3)	Completed
30 Sept 2027	WP3 deliverables due (D3.1, D3.2, D3.3, D3.4, D3.5)	In Progress
31 Oct 2027	WP4 deliverables due (D4.1, D4.2, D4.3, D4.4, D4.5)	Upcoming
31 Dec 2027	WP5 deliverables due (D5.1, D5.2, D5.3, D5.4)	In Progress

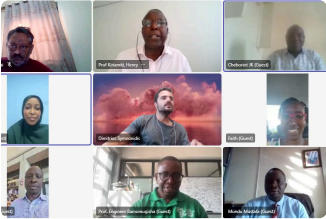
SECTION 8

Deliverables Register

CODE	DELIVERABLE	DUE	STATUS
D1.1	Data management plan	Dec 2027	In Progress
D1.2	Progress Report to EU	Dec 2027	In Progress
D1.3	Quality assurance: MEAL — monitoring, evaluation, accountability and learning strategy	Dec 2027	In Progress
D2.1	Report on needs and competencies for smart cities in East Africa	Dec 2025	Awaiting publication
D2.2	Report on educational reform needs in partner universities in East Africa	Dec 2025	Awaiting publication
D2.3	Strategic roadmap for East African partner universities to develop a comprehensive smart city curriculum	Dec 2025	Awaiting publication
D3.1	Master's-level new and updated educational curriculum on smart cities and their different aspects (e.g. smart energy, smart health etc.)	Sept 2027	In Progress
D3.2	Open online courses	Sept 2027	In Progress
D3.3	Train the Trainer sandbox — first cohort of trained trainers	Sept 2027	In Progress
D3.4	First cohort of students from pilot courses — feedback and refinement	Sept 2027	In Progress
D3.5	Accreditation of developed micro-credentials and updated master's programmes	Sept 2027	In Progress
D4.1	Handbook on training of trainers for open innovation / smart city labs	Oct 2027	Upcoming
D4.2	Open innovation labs in partner universities of East Africa	Oct 2027	Upcoming
D4.3	3 Open Innovation Hackathons	Oct 2027	Upcoming
D4.4	Initiation document for the EU–East Africa Smart City Alliance	Oct 2027	Upcoming
D4.5	Report on virtual exchanges	Oct 2027	Upcoming
D5.1	Dissemination, communication and networking strategy	Dec 2027	In Progress
D5.2	Website and social media pages development	Dec 2027	In Progress
D5.3	Sustainability strategy	Dec 2027	In Progress
D5.4	List of outreach activities	Dec 2027	In Progress

SECTION 9

Progress to Date



18 JUN 2026 · ONLINE

SHAPE Project Official Launch

Consortium partners from Kenya, Uganda, Somalia, Estonia, Germany and Lithuania met to establish a shared vision and align on the implementation plan.



28 SEPT 2026 – 2 OCT 2026 · MOMBASA, KENYA

International Partners Meeting

Hosted by Moi University: partners aligned on objectives, launched key work packages, visited Fort Jesus and the Mama Ngina Waterfront, and held technical workshops.

Next steps

Jan 2027	Train-the-Trainer Sandbox	First cohort of trained trainers for the new smart city curriculum (deliverable D3.3).
Jan 2027 – Oct 2027	Open Innovation Hackathons (×3)	Three hackathons run through the new Open Innovation Labs, connecting students with city, industry and government challenges (deliverable D4.3).
Sept 2027	Pilot Courses — First Student Cohort	First students take the pilot smart city courses; feedback drives refinement before accreditation (deliverable D3.4).

SECTION 10

Contact

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Website host	Open University of Kenya



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