AfriRemoteLabs Consolidated Equipment and Budget

JOOUST Remote Laboratory Demonstration Centre



November 2026

Overview

Below are the operating costs cover all five implementation years.

Phase	Delivery	Stations	Total USD
1	Years 1–2	01, 04, 06, 09	$507,300
2	Years 3–4	02, 05, 08, 10, 11	$503,025
3	Year 5	03, 07, 12, 13	$485,125
Total	Five years	13 stations	$1,495,450

Planning allowances in USD. Instrument access, delivery costs and terms are subject to written quotations and site review.

Five-year funding plan

Phase	Stations	Shared setup	Operations	Contingency	Total USD
1	$197,000	$105,000	$160,000	$45,300	$507,300
2	$233,500	$30,000	$200,000	$39,525	$503,025
3	$307,500	$10,000	$120,000	$47,625	$485,125
Total	$738,000	$145,000	$480,000	$132,450	$1,495,450

Contingency is 15% of station allocations and shared setup. The station allocation includes partner-access packages where applicable.

Operating funds support all commissioned stations through the end of Year 5. The Year 5 rates cover centre operations. Partner SEM and TEM session packages are budgeted separately in the phases where each service is commissioned.

SEM and TEM allowances cover defined teaching and research access during Years 3-5 and Year 5 respectively. Written agreements must confirm eligible specimens, rates, booking capacity, live participation, data export and access terms. Partner operators run instruments and may deliver approved recordings and datasets when live participation is unavailable.

No new building is assumed. Budget packages should be procured within the shown ceilings, including applicable delivery and taxes. Confirm landed costs, site readiness, staffing and partner access before committing funds. Post-Year-5 operations are outside the implementation budget.

Station allocation by phase

Phase	Station	Lead discipline	Original USD	Revised USD
1	Mechanics and motion	Physics	$19,000	$19,000
1	Atomic force microscopy	Physics / materials	$119,000	$119,000
1	UV-Vis spectrophotometry	Chemistry	$32,000	$32,000
1	Digital microscopy	Biology	$27,000	$27,000
2	Thermal measurements	Physics	$11,000	$11,000
2	Scanning tunnelling microscopy	Physics / materials	$67,000	$67,000
2	Automated titration	Chemistry	$44,500	$44,500
2	Biological assays	Biology	$51,000	$51,000
2	Scanning electron microscopy	Shared / materials	$304,000	$60,000
3	Optical characterization	Physics	$23,500	$23,500
3	FTIR and Raman spectroscopy	Chemistry	$128,000	$128,000
3	Transmission electron microscopy	Biology / materials	$751,000	$135,000
3	Sensors and data acquisition	Shared	$21,000	$21,000

Phase 1 | Years 1-2

Shared setup

Item or requirement	USD
Portal, secure gateway and testing	$25,000
Networking and backup connectivity setup	$8,000
Storage and shared analysis hardware	$22,000
Electrical and earthing upgrades	$20,000
Initial benchwork and utilities	$15,000
Cooling and ventilation preparation	$15,000

Operating costs

Item or requirement	Annual USD	Phase USD
Staffing, training and employer costs	$50,000	$100,000
Local calibration, service and licences	$8,000	$16,000
Consumables and replacement stock	$8,000	$16,000
Internet, hosting and backup services	$6,000	$12,000
Electricity, water and cooling	$8,000	$16,000

Station equipment and services

Category	USD
Equipment	$130,000
Computing	$14,500
Software	$14,000
Integration	$23,000
Commissioning	$15,500

Phase 2 | Years 3-4

Shared setup

Item or requirement	USD
Additional cooling and ventilation	$10,000
Room preparation and isolation	$12,000
Controller UPS and protection additions	$8,000

Operating costs

Item or requirement	Annual USD	Phase USD
Staffing, training and employer costs	$58,000	$116,000
Local calibration, service and licences	$12,000	$24,000
Consumables and replacement stock	$12,000	$24,000
Internet, hosting and backup services	$8,000	$16,000

Item or requirement	Annual USD	Phase USD
Electricity, water and cooling	$10,000	$20,000

Station equipment and services

Category	USD
Equipment	$113,500
Computing	$11,500
Software	$12,500
Integration	$20,500
Commissioning	$15,500
Partner access	$60,000

Phase 3 | Year 5

Shared setup

Item or requirement	USD
Final room preparation and isolation	$3,000
Controller UPS and protection additions	$7,000

Operating costs

Item or requirement	Annual USD	Phase USD
Staffing, training and employer costs	$65,000	$65,000
Local calibration, service and licences	$18,000	$18,000
Consumables and replacement stock	$15,000	$15,000
Internet, hosting and backup services	$9,000	$9,000
Electricity, water and cooling	$13,000	$13,000

Station equipment and services

Category	USD
Equipment	$117,000
Computing	$11,000
Software	$12,000

Category	USD
Integration	$20,000
Commissioning	$12,500
Partner access	$135,000