



MIDLANDS STATE UNIVERSITY

NELSON MANDELA
UNIVERSITY

Midlands STEM Leadership & Strategy Symposium

Theme: *Pioneering a Digital Future through Education and Innovation*

Date: 23-25 July 2025

Location: Midlands State University (MSU), Gweru, Zimbabwe

Co-Hosted by: MSU Faculty of Education & NMU Department of Computing Sciences

1. Background

In today's rapidly evolving digital landscape, STEM (Science, Technology, Engineering, and Mathematics) education is a crucial driver of economic development, innovation, and global competitiveness. Among the most impactful elements of STEM education are coding and robotics, which equip learners with essential skills for problem-solving, creativity, and technological innovation. **The Midlands STEM Leadership & Strategy Symposium** will place a special emphasis on coding and robotics education as a cornerstone for advancing digital literacy and fostering a culture of innovation. By bringing together academic institutions, government bodies, and industry leaders, the symposium aims to develop sustainable strategies for enhancing STEM education in Zimbabwe and across the region, with a focus on integrating coding and robotics into schools and communities.

2. Objectives

- Strengthen regional and international collaborations in STEM education.
- Develop strategic plans for implementing coding and robotics in Zimbabwean schools and correctional facilities.
- Address challenges and opportunities in digital skills development.
- Showcase best practices and success stories from global STEM initiatives.
- Facilitate knowledge-sharing among educators, students, policymakers, and industry experts.
- Hands-on practical training for our faculty, educators and students

3. Key Themes

- **Digital Skills for the 21st Century:** Preparing students and educators for the digital economy.
- **STEM and Innovation in Africa:** Leveraging technology to solve socio-economic challenges.
- **Global Best Practices in STEM Education:** Learning from South Africa, the U.S., and other leading nations.
- **The Role of Public-Private Partnerships:** Enhancing collaboration between academia, industry, and government.
- **The Inmate Innovation Initiative:** Merging Rehabilitation and Innovation to provide second-chance education for inmates.



Keynote Speakers

- Minister of Higher and Tertiary Education, Innovation, Science and Technology Development, Zimbabwe
- Minister of Primary and secondary education Zimbabwe
- The Vice Chancellor, MSU
- The Vice Chancellors' Office: Nelson Mandela University

Guest Speakers, Presenters & Facilitators

- **Faculty of Education Dean:** Midlands State University: Zimbabwe
Presenter: Dr Annah Moyo
- **CEO:** Clear Mobitel: USA-UK-Australia
Presenter: Mr Harpal Mann
- **President/ Vice Chancellor:** State University of New York Polytechnic Institute: USA
Presenter: Prof Winston Soboyejo
- **Executive Director:** SIRDC. Zimbabwe
Presenter: Dr Tawanda Mushiri
- **Head of Africa, Europe & Asia [HAEA]** Micro:bit Education Foundation United Kingdom
Presenter: Aimee Fagan or Team
- **Director: First Lego League:** Pretoria, South Africa
Presenter: Dr Patricia Gouws,
- **Head of Department:** Department of Computing Studies, Port Elizabeth South Africa
Presenter: Prof Jean Greyling
- **Faculty Dean:** Clark University School of Business. USA
Presenter: Dr David Jordan: Clark University
- **Zero Robotics:** Massachusetts Institute of Technology USA
Presenter: Dr Danielle Wood/Kathleen Magrane
- **Distinguished Professor** of Sustainability Engineering and Future Technologies, UNISA
Presenter: Professor Charles Mbohwa,
- **Director:** African Community Education Director USA
Presenter: Mr Kasaka Yawo

4. Expected Outcomes

- A roadmap for **nationwide implementation of coding and robotics in Zimbabwean schools.**
- Strengthened **collaborations** between MSU, NMU, Worcester Institute of Technology, and other global partners.
- A framework for **exchange programs** and training opportunities for African educators.
- Strategies for **scaling STEM education initiatives across Southern Africa.**
- **Launch of the Inmate Innovation Initiative**

5. Target Participants

- **University Leaders & Academics** (MSU, NMU, MIT, SUNY Polytechnic Institute, etc.)
- **Government Representatives** (Ministry of Education, Ministry of Science & Technology)
- **STEM Educators & Students**
- **Industry Experts & Entrepreneurs** (Tech companies, robotics organizations, and digital infrastructure providers)
- **International Partners & NGOs**
- **Zimbabwe Prisons and Correctional Services**

6. Program Highlights

- **Keynote Address:** *Driving Regional Innovation Through Strategic STEM Partnerships*
- **Workshops & Panels:** Covering coding, robotics, AI, and emerging technologies.
- **Public Lectures:** Featuring top educators and industry leaders.
- **Hands-on Training:** Teacher pilot training on integrating coding and robotics into education.
- **Strategic Planning Sessions:** Formulating an action plan for Zimbabwe's Coding and Robotics for STEM education reform
- **Institutional Visits:** Tours of local schools and correctional facilities implementing Coding and Robotics programs

7. Funding & Partnerships

To successfully execute the STEM Leadership & Strategy Symposium, we seek financial and strategic partnerships to ensure its sustainability and impact.

Funding Requirements:

Proposed budget and expenses. The estimated budget for the symposium is \$101, 300. Funds will cover the following:

- Logistics (venue, accommodation, and transportation for Key participants and speakers).
- Equipment for hands-on training (computers, robotics kits, and coding tools).
- Development and distribution of resource materials.
- Sponsorship of participants from under-resourced communities and institutions.
- Marketing and publicity to maximize attendance and engagement

Benefits to Funders and Partners:

- Recognition as official sponsors in all symposium materials and publicity campaigns.
- Opportunities to network with key stakeholders, including government representatives, educators, and industry leaders.
- Showcase of your organization's products or services at an exclusive exhibition.
- Contribution to advancing STEM education and innovation in Africa, with measurable impact.

Call to Action:

We invite corporate organizations, international development agencies, philanthropic foundations, and government entities to partner with us in making this symposium a transformative event. Interested parties can contact the organizing committee at stem2025@msu.ac.zw or info@worcesterintech.org for detailed partnership opportunities and sponsorship packages.

7. Conclusion

The **Midlands STEM Leadership & Strategy Symposium** will serve as a catalyst for transforming STEM education in Zimbabwe. By bringing together key stakeholders, the symposium aims to **equip the next generation with critical digital skills**, strengthen regional cooperation, and position Zimbabwe as a leader in STEM education and innovation.

Midlands STEM Leadership Symposium 23 to 25 July, 2025 Draft Budget

Category	Sub-Category	Quantity	Unit Price (USD)	Total Cost (USD)
Accommodation				
	Deluxe Room (Bed & Breakfast) (5 nights)	20	\$125	\$12 500
	Executive Suite (Bed & Breakfast) (5 nights)	5	\$250	\$6 250
Total Accommodation				\$18 750
Dinner Meals				
	Three-Course Dinner (3 evenings)	25	\$25	\$1 875
	Dinner Refreshments (3 evenings)	20	\$5	\$ 300
Meals at Conference venue	Morning teas (3 days)	300	5	\$4 500
	Afternoon cool refreshments (3 days)	300	5	\$4 500
	Lunch (3 days)	300	15	\$13 500
Total Meals				\$24 675
Conference Facilities				
	Gala Dinner@ Village Lodge	300	\$25	\$7 500
Total Conference Facilities				\$7 500
Transportation				
	Air fares from South Africa	25	\$504.55	\$12,700
	Shuttles (3 days)	300	\$5	\$4 500
Total Transportation				\$15, 700
Miscellaneous Costs				
	Media and Publicity	1	\$2,000	\$2,000
	Event Décor	1	\$1,500	\$1,500
	Contingency Fund	1	\$10,000	\$10,000
	Branded golf T-shirts	100	\$15	\$1500
	Branded stationery(pens, bags, folders, pads)	300	\$15	\$4 500
	Branded caps and Conference IDs	300	\$15	\$4 500
Total Miscellaneous Costs				\$24 000
Total Estimated Budget				\$82 125

Notes:

- **Currency:** All prices are in USD, as per The Village Lodges' quotation.
- **Payment Terms:** Full payment is required for bookings to be confirmed.
- **VAT:** VAT is included in the prices provided by The Village Lodges.
- **Contingency:** A contingency fund of \$10,000 is included to cover any unforeseen expenses.
- The **Total Estimated Budget** is calculated by summing up all the **Total Cost (USD)** values.
- The budget is based on the assumption of 300 guests including invited and MSU lecturers and 3 days of events.