



KNUST
E-LEARNING
CENTRE



E-learning
International
Conference

PROGRAMME OUTLINE 2025



Transforming Education through
Responsible Innovation and Inclusion
in the Digital Era



Thursday July 24, 2025	
8:00 – 9:00	Registration of Participants
9:00 – 9:05	University Chaplain Opening Prayer
9:05 – 9:10	Prof. Eric Appau Asante (Director of E-Learning Centre, KNUST, Kumasi) Purpose of Conference and Expected Outputs
9:10 – 9:15	Interlude
9:15 – 9:25	Prof. Rita Akosua Dickson (Vice-Chancellor, KNUST, Kumasi, Ghana) Vice Chancellor’s Address
9:25 – 9:45	KEYNOTE ADDRESS Dr. Margaret Korosec Dean of Online and Digital Education University of Leeds Transforming Education through Responsible Innovation and Inclusion in the Digital Era
9:45 - 10:00	H.E. ROEY GILAD Israeli Ambassador to Ghana Special Address
10:00 – 10:05	Centre for National Culture, Kumasi Cultural Performance
10:05 – 10:30	Guest of Honour - Hon. Dr. Frank Amoakohene (Ashanti Regional Minister, Ghana) Harnessing Digital Technologies for Regional Development
10:30 - 10:50	Saqib Nazir, FinTech Entrepreneur Bridging the Digital Divide: Lessons from FinTech for Inclusive Digital Education

10:50 – 11:05	Presentation – Dr Michael Gallagher (Co-Director , Centre for Research Education,Edinburgh) Contemporary Trends in Digital Education. Virtual
11:05 - 11:15	Dr. Karen Rosemin, Head of the Digital Learning Innovation Centre, University of West Indies Global Campus Special Address
11:15 - 11:30	Launch of E-Learning Journal by Pro VC Prof Emmanuel Adinyira Assisted by E-Learning Director & Journal Committee
11:30 - 11:35	Prof. Rita Akosua Dickson (Vice-Chancellor, KNUST, Kumasi, Ghana) / Prof. David Asamoah (Pro Vice-Chancellor, KNUST, Kumasi, Ghana) Official Opening of Conference, Exhibition and Poster Presentation
11:35 - 11:45	Prof. Foster Frempong (Chairman, Planning Committee) Announcement
11:45 - 11:55	Group Photograph
11:55 – 12:15	Snack break/Exhibition/Poster Presentations
12:15 – 12:45	Panel Discussion – 1. Adwoa Fosuaa, Founder and CEO Women’s Haven Africa 2. Mr. Michael S. Gawugah, Head of Technology and Materials Development, CENDLOS 3. Marco Stanley NYARKO, Health Promotion & Disability Studies 4. Maxmillian Morimi, Student Tech for All: Building Inclusive Online Learning with Industry and Student Voices Moderator - Dr. Eliel Keelson
12:45 – 13:00	Niv Gross VP Technology, CET - The Center for Educational Technology, ISRAEL Guest Presentation
13:00	Coffee Break
MC: Ms. Anita Akua Kyerewaa Kuma Rapporteur:	

Parallel Session (Oral Presentations)

Room 1 – Expanding Access in the Digital Age through Inclusive and Adaptive E-Learning Chair: Prof. Anthony Andrews, Director IDL-KNUST & Prof. Bossa Yaovi Aymar Rapporteur: Rhoda Gasue Venue: Great Hall Main Auditorium Technical Head: Mr. Edwin Edem Adedze	
13:30 – 13:45	Ayotola AREMU Ph.D¹ and Olayemi O. OLALUDE Ph.D². ¹ Department of Science and Technology Education, University of Ibadan, Ibadan, Nigeria. ² Department of Educational Technology, Emmanuel Alayande University of Education, Oyo, Nigeria Impact of e-Book Instructional Package on Junior Secondary School Students' Attitudes and Entrepreneurial Intentions in Business Studies in Ibadan Metropolis, Nigeria
13:45 – 14:00	¹ Derick Folson and ² Francis Kwadwo Awuah ^{1,2} Kwame Nkrumah University of Science and Technology, Ghana Leveraging Digital Tools for Inclusive and Contextualized Teaching of Core Mathematics in Pre-Tertiary TVET: A Ghanaian Perspective
14:00 – 14:15	Fortunate Tinotenda Masudze¹ and Tafadzwa I Musinachirevo² ¹ E-Learning Support Assistant, Bindura University of Science Education, Bindura, Zimbabwe, ² eLearning Systems Analyst, Bindura University of Science Education, Bindura, Zimbabwe Overcoming Language Barriers in Global E-Learning Platforms
14:15 – 14:30	Michael Kwamena Eshun ¹ , Kwabena Abrokwa Gyimah ² , Desmond Opoku ³ , Joel Nii Adamafo ⁴ , Maame Yaa Afra Incoom ⁵ ^{1,2,3,4,5} Department of Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. Bridging the Digital Divide: Challenges and Lessons from Piloting an Asynchronous Stem Teacher Training in Ghana
14:30 – 14:45	Joyce Kpeglo ¹ and Emmanuel Hubin Kofi Mawutor ² , Eric Appau Asante ³ ^{1,2} Kwame Nkrumah University of Science & Technology, Kumasi, Ghana Early Access, Lasting Impact: The Case for E-Learning in Early Education
14:45 – 15:00	Seth Wiredu, Eric Appau Asante, Obed Isoyor Kallai, Frederick Kwaku Awotwi, Patrick Wiredu, Hannah Alagbe Empowering Communities through Digital Research Training: The Konandy Education and Research Foundation (Kerf) Model
15:00 – 15:15	Sylvester Kofi Narh¹, Mavis Osei², Steve Kquofi³ ¹ Faculty of Applied Arts, Accra Technical University, Accra, Ghana ^{2,3} Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana Investigation of Teacher Trainees of Accra College of Education on Dyslexia and their Level of Knowledge about Assistive Technologies

15:15 – 15:30	Guest Presentation- Dr. Frank Senyo Loglo Head of Distance Learning , Ghana Telecommunication University AI in Modern University Administration
15:30 – 15:45	QnA
Room 2 – Ethical AI and Digital Transformation in Advancing Social Sciences and Humanities Chair: Prof. Ebenezer Malcom, Ag. Pro VC, GCTU Rapporteur: Samuel Aklashie Venue: Gardiner Conference Room Technical Head: Jonathan Ativor	
13:30 – 13:45	Prince Lovelace Tetteh¹, Dennis Tandoh² ^{1,2} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana idigital: Revolutionizing Access to Identification Through Digitalization in Ghana
13:45 – 14:00	Prosper Setsoafia ¹, Juliet Appiah-Kubi ², Charles Atta Koduah³, Harry Barton Essel⁴, Andrews Kwaku Teda Madakena⁴ ^{1,2,3,4} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Are They AI-Literate? Exploring The Impact Of Generative AI Literacy on Academic Performance among Ghanaian University Students
14:00 – 14:15	Elvis Mwinsome Sobiesuo¹, Peter Dwumah ², Seth Christopher Yaw Appiah³ ^{1,2,3} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Perceptions and Predictors of Trust in Artificial Intelligence: Ethical Implications and Regulatory Oversight in Ghana – A Mixed-Methods Study
14:15 – 14:30	¹Solomon Mintah Afari and ²Francis Kwadwo Awuah ^{1,2} Kwame Nkrumah University of Science and Technology, Ghana Current Trends and Future Prospects Of AI Integration In Mathematics Education: A Systematic Review
14:30 – 14:45	Vincent Kofi Akwensi¹, Francis Kwadwo Awuah² and Kofi Agyekum³ ¹ Bongo Senior High School,Bongo, Upper East Region, Ghana ^{2,3} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Blending Intelligence: Using Artificial Intelligence (Ai) In Research Without Losing The Human Touch
14:45 – 15:00	Niv Gross VP Technology, CET - The Center for Educational Technology), ISRAEL Reimagining Teaching and Learning: Ethical AI and Digital Transformation in EdTech Innovation
15:00 – 15:15	Guest Presentation – Prof. Ebenezer Malcom, Ag. Pro VC, GCTU Ethical AI and Digital Transformation in Advancing Social Sciences and Humanities
15:15 – 15:30	QnA

Room 3 - Shaping the Future of Art and Architecture through Digital Creativity and Inclusive Design

Chair: Prof. Ebenezer Kofi Howard, Dept. of Industrial Art, KNUST

Rapporteur: John Sosu

Venue: Great Hall Upper Foyer

Technical Head: Theophilus Abaka Aggrey

<p>13:30 – 13:45</p>	<p>Hippolite Atintono¹, Desmond Opoku¹, Samuel Owusu Afram¹, Kwabena Abrokwa Gyimah¹ and Micheal Nii Addy² ¹Department of Architecture, Kwame Nkrumah University of Science and Technology, Kumasi ²Department of Construction Technology and Management, Kwame Nkrumah University of Science and Technology, Kumasi</p> <p>A Theoretical Review of AI Tools In Museums: A Catalyst to Improve Visitor Experience and Cultural Heritage Preservation in Ghana</p>
<p>13:45 – 14:00</p>	<p>Desmond Opoku¹ Hippolite Atintono¹, Emmanuel Owusu Banahene¹, Kofi Agyekum² and Justice Kwame Offei-Nketiah³ ¹Department of Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. ²Department of Construction Technology and Management, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. ³Department of Construction Technology and Management, Sunyani Technical University, Sunyani, Ghana.</p> <p>User Acceptance of AI Tools as a Catalyst to Improve Visitor Experience and Cultural Heritage Preservation in Museums in the Northern Region of Ghana</p>
<p>14:00 – 14:15</p>	<p>Emmanuel Boahen¹, Stephanie Ofori-Asare², Herbert-Browne Asunsua³, Desmond Opoku⁴, Fredua Agyemang Kyei Bonsu⁵ and Charles Essel⁶ ^{1, 2, 3, 4, 5, 6} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana</p> <p>Away From Tradition: An Enquiry into User Acceptance of AI As A Tool To Manage Electricity Usage In Residential Buildings</p>
<p>14:15 – 14:30</p>	<p>Edwin Edem Adedze¹ and Prince Lovelace Tetteh² ^{1,2} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana</p> <p>Beyond Borders: A Virtual Gateway To Global Universities</p>
<p>14:30 – 14:45</p>	<p>Jacob Nyong Faal Kofi Nakpan¹, Desmond Opoku², Kwabena Abrokwa Gyimah³, Dennis Kwame Domfeh Bandoh⁴, Emmanuel Owusu Banahene⁵ and Henry Kofi Dansu⁶ ^{1, 2, 3, 4, 5, 6} Department of Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana</p> <p>The Realities of the Advancement of AI Tools in Architectural Pedagogy in Universities in Ghana</p>
<p>14:45 – 15:00</p>	<p>Michael Kwamena Eshun¹, Kwabena Abrokwa Gyimah², Desmond Opoku³, Joel Nii Adamafo⁴, Maame Yaa Afra Incoom⁵ ^{1,2,3,4,5} Department of Architecture, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.</p> <p>Bridging The Digital Skills Gap In Ghana’s Construction Industry Through Technical Vocational Education</p>
<p>15:00 – 15:15</p>	<p>Kofi Agyekum^{1,2} Samuel Aklashie¹, Mavis Acquah Agyekum³, Eric Tutu Tchao^{2,4} and Paul Kwadwo Addo³ ¹Department of Construction Technology and Management, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana ²The Responsible Artificial Intelligence Lab, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana ³Department of Teacher Education, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana ⁴Department of Computer Engineering, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana</p> <p>The Role Of Generative AI In Built Environment Research: A Systematic Literature Review</p>

15:15 – 15:30	Guest Presentation – Prof. Daniel Yaw Addai Duah Dean, International Programmes Office Shaping The Future Of Art And Architecture Through Digital Creativity And Inclusive Design
15:30 – 15:45	QnA
16:15 – 16:35	PLENARY DISCUSSION Chair: Prof. Marian Nkansah , Director, DOSA
16:35 – 16:40	Chairman, Planning Committee Closing Remarks
16:40	Break
Friday July 25, 2025	
8:00 – 9:00	Registration of Participants
9:00 – 9:05	Opening Prayer
9:05 – 9:20	(Chief Rapporteur) A recap of key activities for day 1
9:20 – 9:40	Special Guest Presentation - Ing. Felix Atsrim CEO at Fedems Ltd. AI, Automation, and the Future of Engineering Education
9:40 – 10:00	Special Guest Presentation - Dr. Margaret Korosec Virtual Labs and AI in Expanding Access to Scientific Discovery
10:00 – 10:10	Video Documentary KNUST E-learning Initiatives
10:10 – 10:20	Snack break/Exhibition/Poster Presentations
MC: Rapporteur:	

Parallel Session (Oral Presentations)

Room 1 – Next-Gen Entrepreneurs: Shaping the Future Workforce with Digital Technologies Chair: Philip Boateng, Ag. Head center for outreach and distance learning, ITPDLL - AAMUSTED Rapporteur: Kezia Nana Yaa Serwaa Sackey Venue: Gardiner Conference Room Technical Head: Jonathan Ativor	
10:30 – 10:45	Ephrem Bokuma¹, Edward Ayebeng Botchway², Kwabena Abrokwa Gyimah³, Desmond Opoku⁴ ^{1,2,3,4} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Smart Infrastructure for a Digital Ghana: Leveraging Drone Technology and E-Malls to Expand E-Commerce
10:45 - 11:00	Francis Paschal Kabenla Amenlemah¹ and Kwame Owusu Fordjour² ^{1,2} Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Exploring Problem Orientation and Project Work Outcomes in the BA Integrated Rural Art and Industry Program at KNUST
11:00 - 11:15	Selorm Asiedu-Addo, Jesse Senyo Kokroko Digital Transformation in Startups: Educating the Future Entrepreneurs
11:15 - 11:30	Samuel Boah Department of Information Technology, Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development (AAMUSTED) Using Remote Sensing And Drones In Smart Agriculture Training Programs: A Systematic Review
11:30 - 11:45	Selorm Asiedu-Addo¹, Jesse Senyo Kokroko², Nana Kwame Appiah³, Justice Mensah Ephraim⁴, Mohammed-Awwal Delmwin Bakang⁵, Nii Ayi Tagoe⁶, Emmanuel Forson Ansah⁷, John Achaw Tabi⁸, George Akoumany⁹. Cloud Computing Adoption and Impact on SMEs Performance
11:45 – 12:00	Guest Presentation – Mr. Dan Acquaye, CEO- Agri-Impact Ltd Next-Gen Entrepreneurs: Shaping the Future Workforce with Digital Technologies
12:00 – 12:15	QnA

13:15 - 13:45	Closing Keynote– Dr. Kim Welch Principal International Instructional Designer and Trainer at Arizona State University Ethical Considerations in Digital Education
13:45 - 14:10	Brig Gen Zibrim Bawah Ayorrogo Deputy Commandant, KAIPTC Special Address
14:10 – 14:40	Award Presentation - Kwasi Debrah/ Anita Kumah/Awards Committee
14:40 – 14:45	Keynote Speaker’s Final Reflections
14:45 – 14:55	Prof. Rita Akosua Dickson (Vice-Chancellor, KNUST, Kumasi, Ghana) Closing Remarks
14:55 – 15:00	(Chairman, Planning Committee) Announcement
15:00 – 15:05	University Chaplain Closing Prayer
15:05 – 15:45	Break
MC: Kwasi Debrah / Anita Kumah	