

BRITISH COUNCIL INNOVATION FOR AFRICAN UNIVERSITIES PROGRAMME

CARBON LITERACY FOR YOUTH EMPLOYABILITY AND JOB CREATION IN SUB-SAHARAN AFRICA PROJECT

ADVERTISEMENT FOR POSTGRADUATE and POST-DOCTORAL STUDENTS

The Carbon Literacy for Youth Employability and Job Creation (CL4YEJC) in Sub-Saharan Africa (SSA) Project is a British Council funded research and innovation project under its Innovation for African Universities Programme. The CL4YEJC in SSA is a transdisciplinary Network Partnership project, which the Durban University of Technology (DUT) (South Africa) is undertaking in partnership with the Sheffield Hallam University (UK), Kisii University (Kenya), Ladoke Akintola University of Technology (Nigeria) and Innovate Durban (South Africa).

The CL4YEJC in SSA project has two-fold objectives which are:

- To strengthen the capacity of SSA Universities to participate and provide meaningful contributions as key players within the Green Innovation and Entrepreneurship (GIE) Ecosystems (GIEEs) in their respective countries
- To strengthen GIEEs and enhance the capacity of SSA youths to exploit the GIE opportunities for employability and job creation.

The DUT and its partners seeks to recruit serious and hardworking postgraduate (Masters and Doctoral) and postdoctoral students into various Faculties who are interested in conducting research and innovation in the partner institutions, any of the following areas:

1. Natural Language Processing Pipeline Tasks and lexical resources generation for Climate Change applications
2. Technology-enabled Climate Change Engagement
 - Eco-Feedback Technology-enabled Environmental Awareness
 - Chatbots-enabled pro-environmental behavioural change motivation
 - Chatbot-enabled model and tool for Environmental Literacy
 - Carbon Footprint Calculation Modelling and Programming
 - Carbon Footprint Calculation and Evaluation Methodology for Sustainable Innovation in Intangible Assets
 - Comparative experimental study of Carbon Footprint calculator design and user interaction features
 - Carbon Footprint Optimisation models
 - Building Information Modelling for CFP optimisation
 - IOT-driven energy consumption optimization in higher education institutions
3. Environmental Literacy Contextualisation- Frameworks, Models and Tools
 - Contextualising Computer-Assisted Translation Tools and Modelling Their Usability
 - English-African Indigenous Language translation and transcreation in Environmental Literacy Knowledge Domain - Frameworks, Models, Tools and Applications
 - African Contextualised Carbon Footprint Calculation and Programming Models
 - SSA-Contextualized Environmental Literacy Tool Kit- Framework and Online Resources
4. Language Translation and Transcreation Technologies
 - Multilingual Computer-Aided Language Translation and Transcreation Systems

- Experimental comparative analysis of Computer-Aided Technologies in Environmental Domain Knowledge translation
 - Language Services Ecosystem and Business Modelling
5. Environmental Indigenous Knowledge Systems
 - Indigenous Knowledge based Environmental Literacy
 - A framework for Indigenising Environmental Literacy
 - Indigenous game automation for Environmental Literacy training
 - A framework for Indigenous Food System Knowledge Management
 6. Gamification in Climate Change Engagement
 - Gamification of Environmental Literacy training
 - Gamifying Carbon Footprint
 7. Ontology Engineering and Management
 - Environmental Literacy Knowledge Domain Ontology Engineering and Management
 - Curriculum Ontology for Environmental Literacy Knowledge Domain
 - Learning Management System Ontology for Environmental Literacy Knowledge Domain
 8. Environmental Literacy and Tool Kit Assessment Frameworks, Models, Tools and Applications
 9. Environmental Management Accounting (EMA) – Frameworks, Models, Tools and Applications
 - EMA Conceptual models
 - EMA Information Systems
 - EM Cost Accounting
 10. Green Innovation and Entrepreneurship (GIE):
 - Ontology of GIE Business Opportunities, Models and Ecosystem
 - Leveraging Carbon Literacy for GIE- Frameworks, Models, Tools and Applications
 - Multimedia platform for GIE Knowledge resources
 - SSA-Contextualized GIE Business Modelling
 11. Knowledge Management (KM) for Climate Change and Sustainable Development
 - Knowledge Management for Environment and Climate Change
 - Climate Change and Knowledge Management Architecture
 - Knowledge management for Kenya/Nigeria/South Africa Action Plan on Climate Change
 - Frameworks and models for Climate Change Capacity Building and Knowledge Management
 12. E-Learning Technology and Learning Management Systems for Environmental Literacy-Framework, Models, Tools and Applications
 - An Effective E-Learning Framework for Carbon Literacy Knowledge Delivery in an Infrastructurally Resource-constrained Context
 - Ontology-driven Learning Management System for Environmental Literacy
 - Language immersion and humanoid instructor
 - Climate Change and sustainable development Digital literacies in knowledge dissemination for youths
 - Digital pedagogies frameworks, models , tools and application for carbon literacy knowledge delivery to youths
 - Learner diversity-aware Pedagogical Models for Carbon Literacy in SSA context
 - Leveraging Social Media and Data Science for CL4YEJC in SSA
 13. Carbon Literacy for Youth Employability and Job Creation (CL4YEJC) Digital Storytelling
 14. Integrating CL4GIE into Higher Education Curricula – Frameworks, Models, and Applications

Training Workshops: The ethos of research and innovation-driven entrepreneurship is integral to the strategic thrust of the mission of the DUT and its partners in the CL4YEJC project network partnership. Therefore, in furtherance of the objectives of the CL4YEJC project, the training and mentorship of successful applicants for postgraduate and postdoctoral studies will include a series of workshops and summer schools to enhance their capacity for successful research, innovation, and entrepreneurship endeavour. The capacity enhancing training will focus on African language services and green innovation and entrepreneurship. The training would enable them to run their research projects entrepreneurially and produce business plans for potential job creation.

Eligibility, Procedure and Support: An internationally recognised Doctoral qualification for postdoctoral applicants, Master's qualification for doctoral applicants, and Honours qualification for Master's candidates. For admission into DUT, South African Qualification Authority (SAQA) evaluation certificate is required for every qualification not obtained in South Africa.

Applications will go through a rigorous screening process, and successful candidates will be provided funding support details of which will be made available to successful applicants.

Supervision and mentorship of the postgraduate and postdoctoral students will be conducted by well-experienced and seasoned academics drawn from the CL4YEJC project partner institutions.

Inquiry: Direct your inquiry to any of the following:

Prof Sunday O. Ojo- SundayO1@dut.ac.za

Prof Justice Emuoyibofarhe- joemuoyibofarhe@lautech.edu.ng

Dr Fredrick Awuor – fawuor@kisiiversity.ac.ke

Dr Bee Yee Gan- b.y.Gan@shu.ac.uk

Chantelle Hickley- Chantelle@innovate.Durban