



Terms of Reference for an external education consultant to carry out need assessment for curriculum review.

Duration: Two Weeks

Start Date: September 2017

Background: The Nelson Mandela African Institution of Science and Technology (NM-AIST) aspires to provide high quality and internationally competitive delivery of teaching and learning for top-notch Masters and PhD graduates in Science, Engineering and Technology. It is the goal of NM-AIST be a world class and a centre of excellence in Science, Engineering and Technology education in Africa.

Background of the Consultancy: Three schools of NM-AIST (schools MEWES, CoCSE, and BuSH) are currently reviewing their existing curriculum for Masters and PhD programm, with the aim of making NM-AIST a Research Intensive University. The centre for Water Infrastructure and Sustainable Energy Futures (WISE – Futures) in collaboration with the schools MEWES, CoCSE, and BuSH would like to engage a consultant to carry out a needs assessment on the core areas of specialisation of the schools.

The Consultant is meant to look at the balance between the current curriculum and the vision Nm-AIST wants to achieve in order for the university to be more research focused and become a renown Research Intensive University and centre of excellence.

Objective of the consultancy: The Consultant is meant to carry out a needs assessment to support the strengthening of the current NM-AIST curriculum to ensure that courses offered in each school addresses the needs of key stakeholders (e.g. students, employers, industries) in Tanzania and the region. We are looking for a consultant that can tell us what courses or degree program is likely to be relevant in in the short, medium, and long term. The long term here is 10 - 20yrs time. Here the focus should be in the areas of water resources, sanitation, energy (renewable, petroleum, geothermal, nuclear and energy materials), business studies and humanity, computation science and engineering.

The consultant will work with all three schools and relevant departments to conduct needs in the areas of water resources, sanitation, energy, business studies and humanity, computation science and engineering to be used to strengthen the existing courses, as well as come up with new courses, based on the findings.

Scope of Work: The consultant will be responsible for delivering short-term support to three schools MeWES, CoCSE and BuSH to conduct need assessment towards an outcome based curriculum development.

Proposed Methodology: The process requires an intensive consultation with internal and external stakeholders and collect evidence on the gaps and strength of the current courses offered by the three schools of NM-AIST. Both qualitative and quantitate methods to be used, data collected through interviews, focus group discussion, document review observation. The consultant will be required to



collect data from the east African region. However, travels for this exercise will be limited to within Tanzania only.

Deliverables:

1. The consultant needs to submit technical and financial proposal to be reviewed by WISE – Futures and three schools. Once the proposal is approved, the consultant will be asked to submit an inception report outlining methods to be used, work plan & budget break downs.
2. Provide the first draft of the revised courses/curriculum to be reviewed by WISE – Futures and the management of the three schools.
3. Incorporate any additional comments to the first draft and present the second draft in a verification workshop, where stakeholders and relevant people will participate
4. Incorporate the comments given by the participants of the verification workshop and provide the final version of the revised curriculum in a soft and hard copies to WISE – Futures centre manager at NMAIST.

Required experience of the consultant:

- At least 7-10 years of experience in development, assessment & evaluation of curriculum, teaching & learning resources required for higher education.
- Professional experience working in a higher education institution
- Demonstrated ability to work closely with curriculum department and diverse team of expertise
- Experience in providing support in the assessment of the curriculum design and providing recommendations for improving of the new curriculum framework
- Experience in facilitating consultation, work groups, workshop and discussion forums and good interpersonal and team work skills
- Good command of English & Swahili language (both oral & written) and strong analytical and reporting writing skills.

Academic Qualifications

An advanced university degree (PhD, Master degree level) in the area of Higher Education, Curriculum development.

How to apply

Interested individuals who meet the required qualifications and experience should submit their proposals and CV's by email to wise.admin@nm-aist.ac.tz Deadline is on 15th September 2017. The technical proposal should not be more than 10 pages. The consultant is advised to acquaint himself with our existing program when preparing their technical proposals.