THE NELSON MANDELA AFRICAN INSTITUTE OF SCIENCE AND TECHNOLOGY (NM-AIST)

EMPLOYMENT OPPORTUNITIES

1. BACKGROUND

The Nelson Mandela African Institute Science and Technology (NM-AIST) has been established under the Tanzania's Universities Act No. 7 of 2005, and as part of a network of African Institutes of Science and Technology (AISTs) in Sub-Saharan Africa. The NM-AIST envisions becoming a World-Class Institution of Higher Learning dedicated to the pursuit and promotion of excellence in science and engineering, and their applications for economic growth and sustainable development in Africa. The NM-AIST endeavors to deliver and promote high quality and internationally competitive teaching and learning, research and innovation, and public service in science, engineering and technology leveraging on entrepreneurship for enhanced value addition to people and natural resources, with a view to stimulating, catalyzing and promoting economic growth and sustainable development in Sub-Saharan Africa.

2. EMPLOYMENT OPPORTUNITIES - ACADEMIC AND ADMINISTRATIVE STAFF

The Government of the United Republic Tanzania has granted NM-AIST a permit (Ref. No.BC.10/87/01/G/48) to employ 56 academic and administrative staff. Applications for employment are invited from suitably qualified individuals to fill various academic and administrative positions with key qualifications in the areas of specialization as shown in Table 1 and 3. The minimum qualifications and salary scales for the various academic position's are as depicted in Table 2

3. MODE OF APPLICATION

All applicants are required to submit their application including the following:

(i) Certified photocopies of relevant Certificates and Academic Transcripts
(ii) Curriculum Vitae
(iii) Names of at least two referees
(iv) Contact details: postal address, telephone and e-mail addresses.

4. CLOSING DATE FOR RECEIPT OF APPLICATIONS: 14th July, 2013.

All applications should be addressed to:

Deputy Vice Chancellor – Planning, Finance and Administration,
The Nelson Mandela African Institute of Science and Technology (NM-AIST),
P.O. Box 447 Arusha,
TANZANIA.

Telephone: +255 272970003
Telefax: +255 272970016
Email: dvc-admin@nm-aist.ac.tz

NB: This advertisement can also be accessed through the website of the Nelson Mandela African Institute of Science and Technology; www.nm-aist.ac.tz

Table 1: Schools and Areas of Specialization

s/n	SCHOOL	Position	Specialization	Key Qualifications
1.	Life Sciences and Bio-Engineering (**LiSBE)**	Professor/ Associate Professor/ Senior Lecturer (1 Position)	Bioinformatics	PhD holders with Master's in Bioinformatics and Bachelor's in Biology or Computer Sciences
		Associate Professor/ Senior Lecturer/ Lecturer (2 Positions)	Bioengineering (Potent Chemistry, Drug Design & Vaccine Discovery)	PhD, Master's and Bachelor's in Bioengineering/ Chemical Engineering/ Life Sciences with experience in Potent Chemistry/Drug Design and/or Vaccine Discovery
		Associate Professor/ Senior Lecturer/ Lecturer (1 Position)	Health and Biomedical Sciences	PhD and Master's in Public Health or Epidemiology. First degree in Medicine Mandatory
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (2 Positions)	Sustainable Agriculture	PhD and Master's in Plant Biotechnology with knowledge in Molecular Biology and Biotic/Abiotic stress Biology. First degree in Agriculture mandatory.

s/n	SCHOOL	Position	Specialization	Key Qualifications
		Professor/ Associate Professor/ Senior Lecturer (1 Position)	Food and Nutritional Sciences	PhD and Master's in Food Chemistry. First degree in Chemistry or Food Sciences.
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer/ Assistant Lecturer (2 Positions)	Biodiversity (Conservation Biology, Bio prospecting)	PhD and Master's in Conservation Biology, Analytical/ Organic Chemistry Master's in Conservation Biology/Analytical Chemistry
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer/ Assistant Lecturer (1 Position)	Biostatistics	PhD and Master's in Biostatistics Master's in Biostatistics
2	Computational and Communication Sciences and Engineering **(CoCSE)**	Associate Professor/ Senior Lecturer/ Lecturer (1 Position)	Computer Science	PhD in relevant specialization plus experience in any of the following: • Artificial Intelligence • Data Mining • Data Warehousing • Machine Learning • Robotics and Automation
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (3 Positions)	Applied Mathematics	PhD in any combination of the following specializations: • Applied Mathematics in Biological &Chemical Sciences • Engineering Mathematics • Financial Mathematics • Combinatorial Algorithms &Data Structures • Numerical Linear Algebra (Advanced level) • Probability Statistics & Stochastic Processes • Dynamic systems • Finite Elements and Differential Methods • Optimal Control • Convex Optimization • Computational Mechanics

		Position	Specialization	Key Qualifications
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (2 Positions)	Information Technology Systems Development Management (ITSDM)	PhD& Master's in either or both of the following specializations: • Data Management Systems • Web-Technologies and Client-Server Systems
		Associate Professor/ Senior Lecturer/ Lecturer (2 Positions)	ICT, Electronics and Telecoms	PhD & Master's in relevant combinations of the following specializations: • Database Management systems • Web-Technologies and Client-Server Systems • Mobile Software Development • Communication Theory and Systems (Advanced Level) • Communication System Design and Analysis (Advanced Level) • Digital Systems Design (Advanced level) • Operating Systems (Advanced level) • Computer security • Information Systems Security • Programming (Java, Matlab) • Computational Methods • Software Engineering • Computer Architecture • Parallel and Distributed Systems • Fiber Optics and Optical Communication Systems
3	Materials, Energy, Water and Environmental Sciences **(MEWES)**	Professor/ Associate Professor (1 Position)	Hydrology and Water Resources Management/ Irrigation/Soil	PhD & Master's in Hydrology, Hydraulics, Computational Fluid Mechanics/Dynamics/Hydrological Modeling/Water Resources /Soil
		Senior Lecturer/ Lecturer (1 Position)	Hydrology and Water Resources Management/ Irrigation/Soil	PhD in Hydrology, Hydraulics, Computational Fluid Mechanics/Dynamics/Hydrological Modeling/Water Resources /Soil
		Assistant Lecturer (1 Position)	Geographical Information Systems (GIS)	Master's in Geography/ Remote Sensing and GIS

s/n	SCHOOL	Position	Specialization	Key Qualifications
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (1 Position)	Environmental Science and Engineering **(EnSE)**	PhD & Master's in Environmental Chemistry, Environmental Engineering, Molecular Biology and/or Biotechnology, Chemistry, Biological Engineering, Aquatic Science
		Assistant Lecturer (2 Positions)		Master's in Climate Meteorology, Atmospheric science, Environmental Chemistry, Environmental Engineering, Molecular Biology and/or Biotechnology, Chemistry, Biological Engineering, Aquatic Science
		Senior Lecturer/ Lecturer (3 Positions)	Materials Science and Engineering (**MaSE**)	PhD and Master's incorporating any or a combination of the following specializations: Structural Materials, Energy Materials, Bio &Polymer Materials, Electronic Materials, Nano Materials, Nuclear Technology, etc
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (4 Positions)	Sustainable Energy and Engineering (**SESE**)	PhD and Master's in any or a combination of the following specializations: • Bio-Energy & Renewables • Sustainable Energy Generation & Utilization • Nuclear Power Engineering & Technology
		Assistant Lecturer (1 Position)		
4	Earth Sciences and Engineering **(EaSEn)**	Professor/ Associate Professor/ Senior Lecturer/ Lecturer (3 Positions)	Petroleum Geology	PhD & Master's in Petroleum Geology, Structural Geology Stratigraphy/Basin Analysis Geology
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (3 Positions)	Petroleum Geophysics	PhD & Master's in Seismic Geophysics, Petrophysics, Geophysics
		Associate Professor/ Senior Lecturer/ Lecturer (3 Positions)	Petroleum/ Natural Gas Engineering	PhD & Master's in any or a combination of the following: • Reservoir Engineering, • Petroleum/Natural Gas Production Engineering, • Petroleum/Natural Gas Processing Engineering

		Senior Lecturer/ Lecturer (1 Position)	Petroleum Chemistry/Geochemistry	PhD& Master's inChemical and Processing Engineering or Petroleum/Gas Processing Engineering
		Senior Lecturer/ Lecturer (2 Positions)	Mining Engineering	PhD & Master's in any or a combination of the following: • Mining Engineering, • Mining and Production Engineering, • Mineral Processing Engineering
		Senior Lecturer/ Lecturer (2 Positions)	Mining Geology	PhD & Master's in: • Mining Geology, • Petrology
5	Business Studies and Humanities (**BuSH**)	Professor/ Associate Professor/ Senior Lecturer/ Lecturer (2 Positions)	Innovation, Technology Management & Entrepreneurship	PhD& Master's in: • Innovation Management/Technology Management/Entrepreneurship • Management Science and Innovation
		Professor/ Associate Professor/ Senior Lecturer/ Lecturer (2 Positions)	Intellectual Property Rights & Management	PhD and or Master's in: Intellectual Property Rights &Management (Qualifications in Law essential)
		Assistant Lecturer (1 Position)	Intellectual Property Rights & Management	Master's in: Intellectual Property Rights &Management (Qualifications in Law essential)
		Senior Lecturer/ Lecturer (2 Positions)	Business Administration & Management	PhD & Master's in Business Administration/ Marketing/General Management/Finance/Business Strategy
		Senior Lecturer/ Lecturer (1 Position)	Research Methodology	PhD & Master's in any or a combination of the following Research Methodology/Data Management/Proposal Writing/ Proposal Evaluation

Table 2: Minimum Qualifications and Salary Scales for the various Academic Positions

Position	Qualifications	Salary Scale
Assistant Lecturer	Master's degree from a recognised reputable university and: • Average grade of at least B^+ (GPA of 4.0/5.0) in the Master's degree, and • A minimum GPA of 3.8/5.0 in the Bachelor's degree	PUTS 3-4
Lecturer	PhD degree from a recognised reputable university with a minimum of three years teaching experience thereafter, impressive track record of research and publications ; and: • Average grade of at least B^+ (GPA of 4.0/5.0) in the Master's degree, and • A minimum GPA of 3.8/5.0 in the Bachelor's degree	PUTS 5-6
Senior Lecturer	PhD degree from a recognised reputable university with a minimum of five years teaching experience thereafter, impressive track record of research and publications; and: • Average grade of at least B^+ (GPA of 4.0/5.0) in the Master's degree, and • A minimum GPA of 3.8/5.0 in the Bachelor's Degree	PUTS 7-8
Associate Professor	PhD degree from a recognised reputable university with a minimum of seven years teaching experience thereafter, impressive track record of research and publications ;and: • Average grade of at least B^+ (GPA of 4.0/5.0) in the Master's degree, and • A minimum GPA of 3.8/5.0 in the Bachelor's degree	PUTS 9
Professor	PhD degree from a recognised reputable university with a minimum of ten years teaching experience thereafter, impressive track record of research and publications; and: • Average grade of at least B^+ (GPA of 4.0/5.0) in the Master's degree, and • A minimum GPA of 3.8/5.0 in the Bachelor's degree	PUTS 10

TABLE 3: Minimum Qualifications for available Administrative Staff positions

S/N	POSITION	VACANCIES	SALARY SCALE	MINIMUM QUALIFICATIONS AND EXPERIENCE	DUTIES AND RESPONSIBILITIES
1	Academic Officer II	1	PGSS 11-12	Holder of a Degree in the field of science and or, Educational Planning, Engineering Management, Statistics, Public Administration, Systems Analysis, Sociology and any other relevant field.	(i) To assist Senior Academic Officer in the process of compilation of examination results (ii) To participate in the development of and review of curricula (iii) To prepare course and examination timetables (iv) To prepare and administer respective academic awards (v) Plans and ensures the proper conduction of examinations (vi) To perform any other duties assigned to him/her by his/her supervisor.
2	Admissions Officer II	1	PGSS 11-12	Holder of a Diploma or Degree in the field Science and/or Engineering Education, Educational Planning, Statistics, Public Administration, Management, System Analysis, Sociology and any relevant field.	(i) To assist the Senior Admissions Officer in receiving and compiling applications for admission (ii) To assist in maintaining student records and examination results (iii) To assist in the process of preparation of ID's to students (iv) To assist in the process of preparation of transcripts and certificates (v) To perform any other duties assigned to him/her by his/her supervisor.