

THE TECHNICAL UNIVERSITY OF KENYA

Haile Selassie Avenue, P.O. Box 52428, Nairobi, 00200, Tel +254(020) 343672, 2249974, 2251300, 341639

Fax 2219689, Email: vc@tukenya.ac.ke, Website: www.tukenya.ac.ke

NAME: MR JOSECK NYAPORO NYABORO

Faculty:	ENGINEERING AND THE BUILT ENVIRONMENT
School:	MECHANICAL AND MANUFACTURING ENGINEERING
Department:	Mechanical and Mechatronic Engineering
Current Designation:	Tutorial Fellow, THERMODYNAMICS AND FLUID MECHANICS (DTFM)
Office Telephone:	+254(020) 2219929, 3341639, 3343672
Official Email:	joseck@tukenya.ac.ke
Consultation Hours:	8AM-5PM MON - FRI



EDUCATION LEVEL QUALIFICATION NAME INSTITUTION YEAR INDUSTRIAL ENGINEERING AND EGYPT-JAPAN UNIVERSITY OF SCIENCE Masters of Science (M.Sc.) 2019 SYSTEMS MANAGEMENT AND TECHNOLOGY(E-JUST)(Egypt) Bachelor of Science in MECHANICAL ENGINEERING JOMO KENYATTA UNIVERSITY(Kenya) 2014 Engineering(B.Sc. Eng) KENYA CERTIFICATE OF KCPE/Equivalent NGONYEK(Kenya) 2004 PRIMARY EDUCATION

WORK EXPERIENCE

PERIOD	INSTITUTION	POSITION
OCT 2015 - TO - DATE	The Technical University of Kenya	Tutorial Fellow
4 Feb 2015 - 31 SEP 2015	Associated Services Consultants	Assistant Engineer
29 Feb 2016 - 15 Dec 2016	Sumitomo Chemical Company Limited, Japan	Research Fellow

Insight-driven people leader and researcher fusing commercial instinct and pragmatism, tech-savvy and consumers' insight to navigate ambiguity, champion customer needs, drive agility and inspire sustainable transformation. Builder of outperforming smart operations models. Track record spanning periods of growth to turnarounds

CURRENT RESEARCH PROJECTS				
CFD Analysis of an Airbag Module Using The Existing Gasflow-USM and the New Gasflow-AMR Solver	Computational Fluid Dynamics.			
CFD Modeling of the Mixing Process in a Fuel Tank.	CFD, Automotive Engineering			
High Precision Machining of Hard-to-cut Materials	Precision engineering, high-performance materials, modeling and simulation, manufacturing			
Smart Manufacturing	Manufacturing Engineering, additive manufacturing			

SELECTED PUBLICATIONS **TITLE** LINK TO PUBLICATION YEAR M-Tour: A Smart Design Tourism Application Development for a Destination View online Competitiveness Experimental and numerical study of kerf characteristics in abrasive waterjet View online machining M-Tour: A new socio-technological design application for destination View online competitiveness in Egypt Fluid-structure interaction modeling of the abrasive waterjet drilling of carbon View online fiber reinforced polymers Numerical and Experimental Characterization of Kerf Formation in Abrasive View online Waterjet Machining

COURSES TAUGHT

NAME	DESCRIPTION	PERIOD	
Engineering Product Innovation and Rapid Prototyping	Reverse Engineering Principles, 3D Printing (Additive manufacturing)	2014 - TO-DATE	
Electrical and Autotronics	It is a core unit for Automotive engineers where design and functioning of various electrical components in vehicle are analysed.	October 2015 - TO-DATE	
Technology and Engineering Management	Students who concentrate in Technology and Engineering Management are prepared for careers including product and project management, management consulting, and entrepreneurship. They acquire skills to manage technical organizations, foster innovation, and deal with rapidly evolving technologies and dynamic markets. Specialized coursework is flexible, allowing students to explore and gain depth and understanding of technical organizations to develop a culture of successful innovation and entrepre	September 2019 - TO-DATE	
Programming for Engineers	Matlab, C, C#	2017 - TO-DATE	
Introduction to CNC Manufacturing. Modern Machine Tool Control Tooling for Hole and Milling Operations Features of CNC Machining Centers Manufacturing Mathematics for CNC Programming Techniques and Fixed Cycles for CNC Lathe Programming Introduction to CNC Wire EDM Modern Computer-Aided Part Programming		2017 - TO-DATE	
Basic Principles of maintenance planning. Planned maintenance: Objectives and principles, benefits of sound maintenance systems. Reliability and machine availability; MTBF, MTTR and MWT, factors of availability. Maintenance organization, maintenance economics. Preventive maintenance maintenance schedules, repair cycles. Principles and methods of lubrication. Total productive maintenance (TPM). Machine condition diagnostics: Condition monitoring; cost comparison with and without condition monito		September 2019 - TO-DATI	

PROFESSIONAL AFFILIATIONS AND SOCIETIES

TITLE	INSTITUTION
Associate	American Society of Mechanical Engineers (ASME)
Graduate Engineer	Engineer Board of Kenya, The Institution of Engineers of Kenya