



UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY.

SOKOINE UNIVERSITY OF AGRICULTURE

SOLOMON MAHLANGU COLLEGE OF SCIENCE AND  
EDUCATION DEPARTMENT OF MATHEMATICS,  
INFORMATICS

AND COMPUTATIONAL SCIENCES

P.O Box 3038, CHUO KIKUU, MOROGORO, TANZANIA.

Phone: +255 (023) 2603404, Fax: +255 (023) 2603404, E-mail:dmics@sua.ac.tz



## SPECIAL STATISTICS SHORT COURSES FROM 17<sup>TH</sup> MAY 2021 UP TO 30<sup>TH</sup> MAY 2021 TO BE HELD IN SUALISA CONFERENCE ROOM AT iAGRI BUILDING-SUA MAIN CAMPUS

Sokoine University of Agriculture Laboratory for Interdisciplinary Statistical Analysis (SUALISA) would wish to announce to the SUA community and the general public that it will offer short courses in Statistics to be held at SUALISA conference room between 9am and 4.30pm each day from 17<sup>th</sup> May 2021 up to 30<sup>th</sup> May 2021 for workers from Tanzania Shipping Agency Corporation (TASAC)

The participation fee shall be 200,000/Tshs per person per day, covering participation fee, breakfast, lunch, evening tea, stationery and refreshments. Other participants are also invited. Other participants may be allowed to pay only participation fee (30,000Tshs per day) excluding other services. For more details, please contact Maria Celestine via the following addresses.

**Email:** [mary.b.celestine@gmail.com](mailto:mary.b.celestine@gmail.com)

**Mobile:** 0713-301033

**How you will benefit from the course(s):** Each course will provide participants with practical skills to be able to effectively implement a real-life related problem needing statistical skills application.

### TIMETABLE

Date	Time	Session	Trainer
17/5/2021	9am - 10am	Introduction to Data collection	Felicity Ford
	10am-10.15am	Tea break	
	10.15am -12pm	Introduction Data Kit (ODK)to Open	
	12pm-1pm	Lunch Break	All
	1pm - 3pm	Filling questionnaire online	Felicity Ford
	2pm- 3pm	Extracting data from ODK to SPSS	
	3pm-3.15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	

18/5/2021	9am-10am	Introduction to SPSS	Farida Iddy
	10am-10:15am	Tea break	
	10:15am-12pm	Exploratory data analysis using SPSS	
	12am-1pm	Lunch break	All
	1pm-2pm	Introduction to STATA	Farida Iddy
	2pm- 3pm	Exploratory data analysis using STATA	
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	
19/5/2021	9am-10am	Introduction to R: installation, R as a calculator	Japhet M. Mwanzige
	10am-10:15am	Tea break	
	10.15am-12pm	Creation of vectors and matrices in R	
	12am-1pm	Lunch break	All
	1pm-2pm	t-test and Analysis of variance with R-Software	Japhet M. Mwanzige
	2pm- 3pm	Linear regression with R-software	
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	
20/5/2021	9am-10am	Time Series Analysis & Forecasting Methods brief introduction	Mrisho Hamisi
	10am-10:15am	Tea break	
	10.15am-12pm	Time series forecasting by ARIMA model in SPSS	
	12pm-1pm	Lunch break	All
	1pm- 3pm	Time series forecasting by Seasonal ARIMA model in SPSS	Mrisho Hamisi
	2pm- 3pm	Time series forecasting by ARIMA model in STATA	
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	
21/5/2021	9am – 10am	Brief introduction to multivariate analysis	Goodluck Z. Mtae
	10am-10:15am	Tea break	
	10.15am – 12pm	<b>Hypothesis testing:</b> (Hotelling $T^2$ distribution, Multivariate analysis of variance MANOVA)	
	12pm – 1pm	Lunch break	All

	1pm – 2pm	<b>Multivariate regression analysis:</b>	Goodluck Z. Mtae
	2pm-3pm	Principal component Analysis, Factor analysis and multiple linear regression analysis)	
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	
22/5/2021	9am – 10am	Introduction to regression Analysis	Goodluck Z. Mtae
	10am-10:15am	Tea break	
	10.15am – 12pm	Introduction to linear regression Analysis	
	12pm – 1pm	Lunch break	All
	1pm – 2pm	Introduction to Binary logistic regression analysis	Goodluck Z. Mtae
	2pm – 3am	Introduction to Binary logistic regression analysis	
	3pm-3:15pm	Evening Tea	
	3:15am-4:30pm	Exercises	
23/5/2021	9am – 10am	Introduction to Multinomial logistic regression with SPSS	
	10am-10:15am	Tea break	
	10.15am – 12pm	Introduction to Multinomial logistic regression with STATA	Prof. Kazuzuru
	12pm – 1pm	Lunch break	All
	1pm – 3pm	Introduction to Ordinal Logistic regression with SPSS	Prof Kazuzuru
	2pm – 3pm	Introduction to Ordinal Logistic regression with STATA	
	3pm – 3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	
24/5/2021	9am – 10am	Introduction to Structural Equation Modelling (SEM)	Miss Farida Iddy
	10an-10:15pm	Tea break	
	10.15am – 12pm	Introduction to SEM using STATA	
	12pm – 1pm	Lunch break	All
	1pm – 3pm	Introduction to SEM using SPSS and AMOS	
	2pm – 3pm	Introduction to SEM using SPSS and AMOS	Mrisho Said
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercise	

25/5/2021	9am – 10am	Introduction to Survival analysis	Goodluck Z. Mtae
	10am-10:15am	Tea break	
	10.15am – 12pm	Kaplan Maier survival curve with STATA	
	12pm – 1pm	Lunch break10	All
	1pm – 2pm	Life tables and non-parametric survival function with STATA	
	2pm – 3pm	Cox proportional hazard model with STATA	Goodluck Z. Mtae
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	

26/5/2021	9am – 10am	Introduction to impact evaluation	Prof. Kazuzuru
	10am-10:15am	Tea break	
	10:15am – 12pm	Introduction to propensity score matching with logit and probit model with STATA	
	12pm – 1pm	Lunch break	All
	1pm – 2pm	Introduction to Difference in Differences estimators with STATA	
	2pm – 3pm	Introduction to Difference in Differences estimators with STATA	Prof. Kazuzuru
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	

27/5/2021	9am – 10am	Introduction to SAS software and installation	
	10am-10:15am	Tea break	
	10:15am – 12pm	SAS session 1:	Goodluck Z. Mtae
	12pm – 1pm	Lunch break	All
	1pm – 3pm	SAS session 2:	Goodluck Z. Mtae
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	

28/5/2021	9am – 10am	SAS session 3: Basic SAS procedure	Goodluck Z. Mtae
	10am-10:15am	Tea break	
	10.15am – 12pm	Introduction to Geographical information system GIS	
	12pm – 1pm	Lunch break	All
	1pm – 2pm	Introduction to Spatial econometrics	
	2pm – 3pm	Spatial Regression analysis with SAS	Goodluck Z. Mtae
	3pm-3:15pm	Evening Tea	

	3:15pm-4:30pm	Exercises	
29/5/2021	9am – 10am	Introduction to experimental design	Goodluck Z. Mtae
	10am-10:15am	breakfast	
	10.15am – 12pm	Introduction to one way analysis of variance with SAS	
	12pm – 1pm	Lunch break	All
	1pm – 3pm	Introduction to Standard design with SAS	Goodluck Z. Mtae
	2pm – 3pm	Introduction to Standard design with SAS	
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	
30/5/2021	9am – 10am	Introduction to qualitative analysis	
	10am-10:15am	Tea break	
	10.15am – 12pm	Introduction to qualitative analysis with NVIVO	Felicity Ford
	12pm – 1pm	Lunch break	All
	1pm – 3pm	Content and thematic analysis with NVIVO	Felicity Ford
	2pm – 3pm	Practical Content and thematic analysis with NVIVO	
	3pm-3:15pm	Evening Tea	
	3:15pm-4:30pm	Exercises	