This is the training course outline;

1) Introduction to stata

-Features of stata window

-Reading/importing data to stata

-Creating logs and analysis scripts (do-files)

-How to comment/extend a line of script in do-files

-Missing values in stata

2) Data management in stata

-variable types in stata

-Changing variable types

-Renaming variables

-Adding new variables

-Creating new variables from existing variables (use of recode)

-Labelling variables values

-Dates variables

-Saving dataset

-Merging two or more datasets

-Appending datasets

3) Exploring data in stata

-Use tabulate command to explore categorical variables

-Summarise command for continuous variables

-Simple loop using: bysort or by

-Using the `if’ conditional command

-Graphs in stata

4) Descriptive statistics in stata

-Calculating mean, variance and sd

-Calculating median, IQR, min, max

-Tabulate categorical variables

-Calculating proportions with 95% CI

-Calculating means with 95% CI

5) Inferential statistics

-Test of means (using ttest/z-test for one mean, two means and paired test)

-ANOVA for more than two groups

-Chi-square for categorical variables

-Comparison of proportions

-Equivalent non-parametric tests

5) Regression modelling

-Linear regression

-Logistic regression

-Multinomial and ordinal logistic regression

-GLM models to calculate risk ratios, IRR (poission models)

6) Advanced statistics

-Panel data analysis using mixed effect models (linear and logit models)

-Survival analysis

-Missing data imputation

-Penalized models for feature selection (LASSO, elastic net, ridge )