

Department of Census and Statistics in Sri Lanka

Course Modules and Durations

Module and Training Units		Duration
1.1 Module on Frameworks of Official Statistics		2 days
Purpose :		
(1) To provide an overview of issues and ideas concerning the scope and organisation of Official Statistics, and its processes and products		
(2) To provide a general foundation for a more detailed study of these elements		
	OS1. Orientation to Sri Lanka Statistical System	1 day
	OS2. Fundamental Principles of Official Statistics	1 day

1.2 Module on Basic Survey Skills Development (Written Paper)		40 days
<i>Purpose :</i> To acquire knowledge about the nature of census and sample survey-taking and to develop skills by having participants design and conduct an actual survey under real-life conditions.		
1.21 Sub-module on Survey Methods (two Assignments)		15 days
<i>Purpose:</i> To introduce students to the practical aspects of censuses and surveys starting with planning, design and testing of questions and questionnaires, data collection methods, data processing, and dissemination		
	SM1. Planning Censuses and Sample Surveys for Collecting Data for Official Statistics	3 days
	SM2. Design of Survey Questionnaires (Assignment 1)	3 days
	SM3. Operational Considerations in Data Collection through Censuses and Sample Surveys	3 days
	SM4. Processing of Data Collected from Censuses and Surveys (CSPro) (Assignment 2)	4 days

SM5. Dissemination of Census and Survey Results	4 days
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1.22 Sub-module on Basics of Sample Design (Assignment)		
<i>Purpose: To introduce standard methods of drawing samples from finite populations and making inferences about population characteristics and to provide students with a general understanding of these methods and their practical motivation and applications</i>		5 days
SD1. Basic Principles of Sampling and Inference for Finite Populations		2 days
	SD2. Sample Selection and Estimation I	3 days

1.23 Sub-module on Basic Statistical Analysis of Census and Survey Data (Assignment)		13 days
	IT1. Using Excel for Statistical Analysis	1 day
	IT2. Using Statistical Software (SPSS/STATA) for Analyzing Survey Data	2 days
	SA1. Analysis of Survey Data: Descriptive Statistics	2 days
	SA2. Analysis of Survey Data: Probability and Distribution Theory	3 days
	SA3. Analysis of Survey Data: Introduction to Tests of Hypotheses	2 days
	SA4. Analysis of Survey Data: Introduction to Linear Correlation and Regression	3 days

1.24 Sub-module on Survey Project		5 days
SM6. Survey Project (Group Work)		

Part 2 (Compulsory)

Duration : One month or 20 days

Curriculum for Middle-level Training/Induction Programme in Official Statistics

Purpose :

(1) To provide participants with specialist skills and knowledge which are central to the conduct of professional statistical work within government

(2) To allow official statisticians to strengthen their professional skills and knowledge in a particular area.

Module and Training Units		Duration
2.1 Module on Core Topics in Official Statistics (Written Paper)		20 days
2.11 Sub-module on Overview of the System of National Accounts (Assignment) <i>Purpose: To provide a broad exposure to the economic accounting framework of the System of National Accounts (SNA) and an understanding of how various sources of economic statistics are integrated within a structure which presents data for the analysis of trends in the economy</i>		5 days
	NA1. Introduction to the System of National Accounts	5 days
2.12 Sub-module on Sampling and Estimation (Assignment) <i>Purpose: To develop understanding of the principles and methods of estimation from sample surveys.</i>		6 days
	SD3. Sample Selection and Estimation II	6 days
2.13 Sub-module on Analysis of Statistical Data (Assignment) <i>Purpose: To provide an overview of statistical methods for linear and logistic regression and the analysis of time series data</i>		7 days
	SA5. Analysis of Survey Data: Regression Models	4 days
	SA6. Time Series Analysis I- Basic Time Series Analysis	3 days
2.14 Sub-module on Basics of Gender Statistics		

<i>Purpose: To provide an overview of concepts of gender and gender issues and the importance and generation of gender statistics and indicators</i>		2 days
	GDR1. Concepts and Indicators, Data Sources, Analysis and Interpretation: Gender Statistics	2 days
<i>2.15 Special Sub Module</i>		5 days
	Geographic Information System	5 days

Part 3 (Two optional Modules)

Specialization Course [select two Modules]

Duration : Two months or 40 days

3.1 Module on National Accounts (Written Paper and Assignment)	20 days
NA2. GDP Compilation	5 days
NA3. The Accounts	5 days
NA4. Input-output Tables and Analysis	5 days
NA5. Satellite Accounting Frameworks	5 days

3.2 Module on Economic Statistics (Written Paper and Assignment)	23 days
ES1. Index Numbers: Theory, Construction and Application	5 days
ES2a. Key Concepts and Indicators, Data Sources, Analysis & Interpretation: Agriculture, Forestry, Fishing and Hunting	6 days
ES2b. Key Concepts and Indicators, Data Sources, Analysis & Interpretation: Mining, Manufacturing, Electricity, Gas and Water, Construction	
ES2c. Key Concepts and Indicators, Data Sources, Analysis & Interpretation: Distributive Trade	
ES2d. Key Concepts and Indicators, Data Sources, Analysis & Interpretation: Services	
ES3. Establishment and Enterprise Surveys	2 days
ES4. Statistics and Indicators of International Trade in Goods and Services	2 days

ES5. Short-term Economic Indicators and Forecasting	3 days
SA7. Time Series Analysis II- Introduction to ARIMA Models	5 days
3.3 Module on Demographic Statistics(Written Paper and Assignment)	
	20 days
DS1. Key Concepts and Indicators, Data Sources, Analysis and Interpretation: Population and Growth, Migration, Population Dynamics, Mortality	5 days
DS2. Key Concepts and Indicators, Data Sources, Analysis and Interpretation: Nuptiality and Fertility	2 days
DS3. Key Concepts and Indicators, Data Sources, Analysis and Interpretation: Life Tables	3 days
DS4. Estimation of Demographic Measures	5 days
SA8. Population Projections: Theory and Methods	5 days

3.4 Module on Social Statistics (Written Paper (Written Paper and Assignment)	20 days
<i>Choose two:</i>	
SS1. Key Concepts and Indicators, Data Sources, Analysis and Interpretation of Statistics on: Health, Nutrition and Disability	8 days
SS2. Key Concepts and Indicators, Data Sources, Analysis and Interpretation of Statistics on: Education	8 days
SS3. Key Concepts and Indicators, Data Sources, Analysis and Interpretation of Statistics on: Economic Activity, Employment, and Unemployment	8 days
SS4. Key Concepts and Indicators, Data Sources, Analysis and Interpretation of Statistics on: Income and Expenditure	8 days
SS5. Key Concepts and Indicators, Data Sources, Analysis and Interpretation of Statistics on: Poverty	8 days
<i>Required</i>	
SA9. Analysis of Social Statistics using Multivariate Techniques	4 days

3.5 Module on Statistics on Energy and the Environment (Written Paper and Assignment)		20 days
	ENV1. Concepts and Indicators, Frameworks, Data Sources, Analysis and Interpretation: Environmental Statistics	10 days
	ENV2. Environment and Natural Resources Accounting	5 days
	ENV3. Concepts and Indicators, Frameworks, Data Sources, Analysis and Interpretation: Energy Statistics	5 days
3.6 Module on Current Measurement Issues in Official Statistics (Written Paper Assignment)		16 days
	SPE1. Statistics for Monitoring the MDGs	4 days
	SS5. Key Concepts and Indicators, Data Sources, Analysis and Interpretation of Statistics on: Poverty	8 days
	SPE2. Statistics for Measuring Informal Sector and Informal Employment	4 days

Part 4 : (Compulsory)

4.1 Module on Research and Analysis (Dissertation)

Duration : 5 days for theory and Two months or 40 days for the thesis

Modules Summary

Curriculum for Certificate Course in Official Statistics

Module and Training Units	Duration
Module on Frameworks of Official Statistics	4 days
Module on Basic Survey Skills Development (except Survey Project)	40 days
Module on Core Topics in Official Statistics	20 days
Two Specialization Modules	40 days

Module on Research and Analysis	45 days
RA1. Research Methods and Report Writing	5 days
RA2. Thesis	40 days