



ONLINE

LABOUR STATISTICS

SAMPLING DESIGN & WEIGHTING

5 – 30 OCTOBER 2026

🕒 4 WEEKS

Information Note



International
Labour
Organization



International Training Centre

INTRODUCTION/BACKGROUND

Gathering information about the characteristics of a population for each of its members is time consuming and costly. However, we can make inferences about the population with the help of samples¹. Sampling is a statistical procedure that is concerned with the collection of data on a part of a population of interest and subsequent extrapolation to make statistical inferences about the whole population, for example using sample means to estimate population means.

Sound probability sampling and weighting methodologies are essential to enable the production of much of the information required for understanding the functioning of our society. They provide a solid basis for estimating unknown values and ratios, along with their precision. At the same time, they are crucial in assuring the efficient use of scarce resources for the production of official statistics, while maintaining data quality.

The ILO Department of Research and Statistics, in collaboration with ITCILO, is proud to offer the upcoming online course ***"Sampling Design & Weighting"***. The course will take place over 4-weeks between 5 and 30 October, 2026.

LEARNING OBJECTIVES

The main objective of the course is to "enhance understanding and capacities of ILO constituents and social partners to design and implement household surveys and to weight sample data in line with best methodological practices." The course will enhance the knowledge of participants on the different sampling and weighting techniques highlighting their pros and cons. In addition, the course will highlight the link between sampling techniques and survey design with a particular focus on labour force surveys (LFS), the most common source of official labour statistics across the globe.

More specifically, the course aims to:

- Enhance understanding on **sample surveys and survey designs**;
- Provide insights about the **principles and practices of sampling**;
- Enrich understanding of **estimation theory, methods for probability sampling**, and the use of sampling frames;
- Increase understanding of **quality dimensions and calculation of sample size for complex** multi stage designs;
- Improve understanding of different **weighting strategies and treatment of unit non-response**;
- Provide practical case studies on weighting making use of different sets of benchmarks available for different population sub-groups and/or for different geographical domains.

¹ Handbook of Surveys on Households and Individuals. Foundations and Emerging Approaches (Final Draft). Updated version of April 30, 2026 [BG-3k-Handbook on Surveys of Household and Individuals-E.pdf](#)

TARGET AUDIENCE

Important Note

The target audience includes:

- Statisticians and practitioners from national statistical offices that have a role in designing household surveys samples and weighting survey data;
- Other Statisticians from national statistical offices; Ministries of labour and other institutions involved in the implementation of surveys to produce official labour statistics ;

ONLINE COURSE CONTENT

Using a blended methodology of interactive PowerPoint presentation and case-studies, this course provides practical skills and tips to help participants understand how to design and implement household surveys and how to calculate weights and precision of estimates. The course content includes the following;

Module 1

- Labour Force Survey (LFS): Purpose and Design
- Independent samples, rotation, seasonality, and ad-hoc modules
- Sampling Fundamentals
- Sampling theory, sample design, frames, sample size, and non-response considerations

Module 2

- Practical Case Study on Sample Selection using the R package R2Beat
- Two-stage sampling with stratification of PSUs
- Survey Weighting Fundamentals
- Weighting, stratification vs. calibration, and population benchmarks

Module 3

- Introduction to ReGenesees
- Simple stratification using the R package ReGenesees
- Practical Calibration Techniques
- Practical case study on calibration with constraints at multiple geographical levels

Module 4

- Non-Response Adjustment
- Using calibration to treat non-response
- Measuring Survey Precision
- Calculation of standard errors and coefficients of variation (CVs) using ReGenesees

TRAINING METHODOLOGY

The course is constructed as follows:

- **Lectures by experts and practitioners**
 - Sharing knowledge with participants around the various topics covered in the course
- **Interactive exercises & case studies**
 - Hands-on practical exercises on calculation of sample size using the R package R2Beat, as well as weighting and calculation of standard errors using the R package ReGenesees

The course will emphasize a unique learning approach:

- **Harnessing digital learning technology**
 - Interactive online platform
 - Online feedback and support
 - Online forum discussions and interaction
- **Training methodology will combine**
 - Expert presentations
 - Practical case studies presented online
 - Practical exercises to guide self-learning
 - Online Group discussions and exercises

DATES

The course will take place from **5 – 30 October 2026**.

LANGUAGE

The course will be conducted in English.

COST AND FINANCING

The course is fee-paying. The total cost is Euro €1,245

PAYMENTS AND CANCELLATION

- Payments need to be received latest 14 days before the beginning of the course. Payment modalities will be communicated in the letter of acceptance. In the event of a cancellation, a participant may be substituted with another candidate. Cancellations remain free of charge if communicated latest 14 days prior to the start of the course.
- For cancellations after this date, a penalty will be applied. For further information regarding payment, cancellation and refunds, please consult: <https://www.itcilo.org/applications-payments-cancellation>

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HOW TO APPLY

To register, kindly fill in and submit the online registration form available through this link:
<https://oarf2.itcilo.org/DST/A9719104/en>

The selection of applicants will be based on the submission of:

- **Demonstration of capacity and experience** regarding the **basic knowledge of statistics and probability**
- A completed **online registration** form
- An **official sponsorship letter** issued by their organization (or donor organization),

Kindly note that we need to receive the above-mentioned documents in order to register you for the course!

We strongly recommend applying early since admission is competitive and space is limited!

DEADLINE FOR APPLICATION:

The deadline for applications is the **30th of September 2026!**

CONTACTS

- Administrative arrangements can be coordinated with the course assistant via (lmstats@itcilo.org);
- For the technical coordination, please also be in contact with the ITCILO programme officer Mr. Mostafa Mohamed (m.mohamed@itcilo.org).

WITHDRAWAL, CANCELLATION POLICY, AND REFUNDS FOR OPEN COURSES

If an enrolled participant wishes or must withdraw from a course, they may choose to apply to a different course or be substituted by another candidate. The participant must notify the Centre, in writing, of their decision at least 14 days prior to the start date of the course. Cancellation of participation in regular courses will result in the following penalties:

- 14 days or more prior to the start date of the course: No penalty, 100% refund of amount paid less applicable bank charges
- 8 to 13 days prior to the start date of the course: Penalty of 50% of course price, refund of residual amount paid (if any) less applicable bank charges
- 7 days or less prior to the start date of the course: Penalty of 100% of course price.

INFO

FOR FURTHER INFORMATION PLEASE CONTACT

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Administrative arrangements:

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Technical coordination:

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www.itcilo.org

COURSE CODE: A9719104