This course gives a practical introduction to multilevel modeling techniques used in the R statistical platform. Multilevel data arise when data are sampled at two or more levels such as residents within neighborhoods within cities, individuals within families or repeated measures within individuals. Multilevel modeling enables researchers to answer research questions involving more than one level.

### Course Outline

- Introduction to multilevel modeling
- Two-level model for cross-sectional data
- Statistical and methodological issues
- Using the lme4 package in R
- Two-level model for longitudinal data
- Visualizing data in multilevel modeling
- Model checking
- Three-level model
- Cross-classified models (subject to availability of time)
- Other types of dependent variables such as binary and frequency counts (subject to availability of time)

### Who Should Attend

This course is designed for Individuals with knowledge in regression and would like to extend it to handle nested data.

### Prerequisites

Participants are expected to have basic knowledge in regression analysis. Basic knowledge in R is useful but not necessary.

### Enquiries

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**Multilevel Modeling with R**

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