This course provides scientific methods for academic researchers, policy makers, and market practitioners to answer three questions: (1) If a policy has been carried out, how does one scientifically quantify its effects? (2) If a policy is going to be implemented, how does one predict its effects? (3) Based on policies implemented, how does one design better policies in the future by making causal/behavioral inferences?

To achieve this end, the course first describes the concepts of program evaluations in both the Rubin and Roy frameworks. It then introduces a variety of social and field experimental approaches such as difference-in-differences (DD) estimator, regression discontinuity design (RDD), and randomized controlled trials (RCT). Finally, it discusses how to use experimental approaches to identify structural models, derive behavioral inferences, and then make predictions.

**Course Outline**
- Statistic and behavioral challenges to program evaluation
- The Rubin counterfactual framework versus the Roy framework
- Heckman’s model of program evaluation and causality
- Definitions: average treatment effect (ATE), local average treatment effect (LATE), treatment effect on the treated (TT), treatment effect on the non-treated (TUT)
- Difference-in-differences (DD) estimator
- Regression discontinuity design (RDD)
- Social/quasi-experimental methods
- Randomized controlled trials
- Criticism of quasi- and field experimental approaches
- Use experimental approaches to identify structural models and then make behavioral inferences

**Who Should Attend**
- Academic researchers in social science who are engaged in intervention research, program evaluation, or more generally causal inference
- Policy makers in government, NGOs, and international organizations who are engaged in designing and evaluating programs
- Practitioners in companies who are interested in designing and evaluating marketing and managerial strategies

**Prerequisites**
Basic knowledge of statistics and regression analyses

**Enquiries**
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For details on schedule, course fee & registration, visit **CFPR website**.

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**Faculty Member**

Dr. Yi Junjian is Assistant Professor in the Department of Economics at the National University of Singapore. He got his PhD from the Chinese University of Hong Kong and then did a three year postdoc in the University of Chicago. His research focuses on labor and demographic economics, economic development, economics on human capital, and Chinese economy. Dr. Yi’s recent research papers have appeared in economics and demography journals, such as *Economic Journal, Review of Economics and Statistics, and Demography*. Dr Yi has taught Advanced Labor Economics courses and was highly rated for his teaching.