Department of Management  
Amrita Viswa Vidyapeetham, Bangalore

Structural Equation Modeling  
Course Plan PhD: [July-September 2016]

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Description

This is an advance level course in quantitative methods. The course is intended to familiarize the students with the widely used data modelling technique of “structural equation modelling” (SEM). The course will give an exposure to basic theory and application of SEM.

Pedagogy

The topics will be covered by lecture sessions along with hands on practical training using databases. SEM implementation will carried out on R platform.

Learning Objectives

At the end of this course students will be able to:

1. Develop empirical research models in SEM Framework
2. Implement SEM within R ecosystem.
3. Evaluate SEM model estimates and modify it.

Course Outline

1. Introduction and Overview  

2. Fundamentals  
3. Implementation
Preparing Data for Structural Equation Modeling, Structural Equation Modeling with Missing Data, Bootstrapping Standard Errors and Data–Model Fit Statistics
Structural Equation Modeling with Computer Softwares: Snapshots of LISREL, EQS, Amos, and Mplus, Structural Equation Modeling in R with the sem, lavaan and OpenMx Packages

4. Basic Applications

5. Advanced Application

Text book recommended

Other Reading Material


Grading Pattern
Tests – 40 %
Term paper - 60 %