## **Course Title**

Bayesian Networks and Applications (Book by Springer)

# Category

Methodology and technology

## **Target Audience**

Anyone interested in Bayesian statistics

## **Prerequisites for Participants**

Some knowledge of probability and statistics (at the level of a college course in statistics with mathematics)

# **Computer and Software Requirements**

Laptop and Netica software

# Course Description

# **Abstract**

The Bayesian paradigm provides a convenient mathematical system for reasoning about evidence. Bayesian networks provide a graphical language for describing complex systems, and reasoning about evidence in complex models. This allows fidelity to cognitive theories, mathematically tractable and refinable assessment with observational data. This course will first demonstrate Bayesian net basics (using Netica), then present model building and developments, as well as medical application examples using Bayesian networks.