DSO-530 (16272)
Applied Modern Statistical Learning Methods

Who should take the course?
Knowing how to implement modern statistical methods will give you an edge over less quantitatively competent MBAs.

Course objectives
To give students an understanding of modern non-linear statistical methods and how to apply them in real business situations.

Key concepts
- Modern statistical learning approaches
- Shrinkage methods
- Non-linear regression
- Tree methods
- Boosting and Bagging
- Support Vector Machines
- Statistical methods for Option Pricing
- Using the statistical software R
- Neural networks

Course description
This course aims to provide a very applied overview to such modern non-linear methods as Generalized Additive Models, Decision Trees, Boosting, Bagging, Neural Networks and Support Vector Machines as well as more classical linear approaches such as Logistic Regression, and Nearest Neighbors. We will cover all of these approaches in the context of Marketing, Finance and other important business decisions.