Course Introduction

About the Instructor

Zhang Yan

Education
Ph.D. in Industrial Engineering
University of Xi'an Jiaotong University, 2010
B.A. in E-Commerce
University of Xi'an Jiaotong University, 2000
Experience
Lecturer– 2011 - 2013
Associate professor 2014 -
Transportation Management School, Dalian Maritime University, 2011

Course Introduction

- Provides an introduction to optimization, building upon the fundamentals of linear algebra.

- Covers optimization methodologies, including linear programming, network optimization, integer programming, and decision tree.

- Applications to logistics, manufacturing, transportation, marketing, project management, and finance.

Basis of Grade

- Class attendance and participation   20%
- Homework   30%
- Project Report   50%

Introduction of Operations Research

What is Operations Research (OR)?

- **"The science of better"**
- ✦✦✦
- **"The use of mathematical models, statistics and algorithms to aid in decision-making with the goal of improving or optimizing performance"**
- ✦✦✦
- **"Research designed to determine the most efficient way to do something"**
- ✦✦✦
- **"The application of scientific methods to improve the effectiveness of operations, decisions and management"**