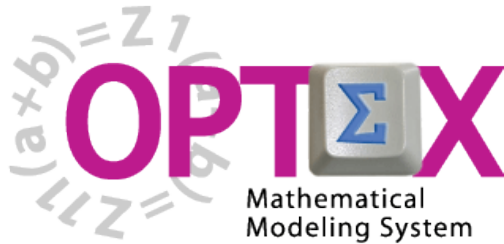


TUTORIAL – SESSION 7

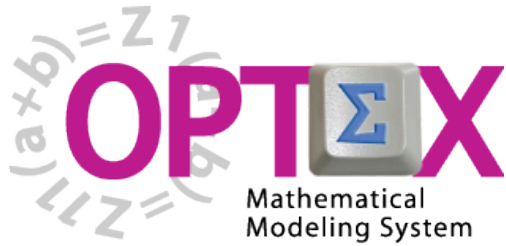
IMPLEMENTATION OF THE VRP PROBLEM (VEHICLE ROUTING PROBLEM)





TUTORIAL BASIC

1. **SESSION 1: INTRODUCTION**
 - Introduction to OPTEX (Section 1)
 - OPTEX-EXCEL-MMS (Section 2)
2. **SESSION 2: VRP MODELING IN EXCEL**
 - VRP: Vehicle Routing Problem (Section 3)
 - Implementing VRP Model using EXCEL (Section 4)
3. **SESSION 3: USING EXCEL TO LOAD DATA**
 - Industrial Data Information Systems –IDIS- (Section 5)
4. **SESSION 4: OPTEX-GUI – LOADING MODELS**
 - Loading the Model in OPTEX-MMIS (Section 6)
 - Verification of the Model in OPTEX-MMIS (Section 7)
5. **SESSION 5: Loading and Checking Industrial Data**
 - Implementation and Validation of IDIS- (Section 8)
6. **SESSION 6: Solving Mathematical Models**
 - Scenarios and Families of Scenarios (Section 9)
 - Solution of Mathematical Problems (Section 10)
 - Results Information System (Section 11)
7. **SESSION 7: SQL Servers**
 - Using SQL Servers for IDIS (Section 12)
8. **SESSION 8: Optimization Technologies**
 - Solving Problems using C (Section 13.1)
 - Solving Problems using GAMS (Section 13.2)
 - Solving Problems using IBM OPL (Section 13.3)



TUTORIAL IMPLEMENTATION OF THE VRP PROBLEM (VEHICLE ROUTING PROBLEM)

TUTORIAL BASIC

7. SESSION 7: SQL Servers

- **Using SQL Servers for IDIS (Section 12)**



D Analytics

"the computer-based mathematical modeling is the greatest invention of all times"

**Herbert Simon
First Winner of Nobel Prize in Economics (1978)**

"for his pioneering research into the decision-making process within economic organizations"