ITEC COURSE ON
DATA ANALYTICS FOR DECISION-MAKING

A PROPOSAL
from the
INTERNATIONAL STATISTICAL EDUCATION CENTRE (ISEC), KOLKATA

Couse Content

Number of Days of Training: 15
Number of Lectures/day: 4 (of 90 minutes each), inclusive of extensive hands-on sessions with R programming
Project presentations: 6 hours
Inauguration and Valedictory Session: 30 minutes+1 hour

TOPICS TO BE COVERED

TOPIC
1. INTRODUCTION TO DATA ANALYTICS
2. INTRODUCTION TO R
3. LINEAR REGRESSION MODELS
4. CLASSIFICATION
5. TREE BASED METHODS
6. SUPPORT VECTOR MACHINES
7. NEURAL NETWORKS
8. CROSS-VALIDATION
9. GENERALIZED LINEAR MODELS
10.   PREDICTIVE ANALYTICS
11.   TIME SERIES MODELLING
12.   DIMENSION REDUCTION
13.   RESAMPLING METHODS
14.   MCDM METHODS
15.   SPECIAL TOPIC I (to be decided)
16.   SPECIAL TOPIC II (to be decided)