# DATA ANALYTICS FOR DECISION-MAKING

COURSE CONTENT:

| TOPIC TO BE COVERED |
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| 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) |

## Mode of Evaluation of Performance of Participants:

Continuous evaluation by the faculty in the form of assignments/projects.

Appropriate certificates will be awarded to the participants at the end of the course as per criteria specified below:

| CRITERIA | AWARD |
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| Satisfactory Performance* in at least 50% of the topics AND attendance in at least 50% of the sessions | Certificate of Proficiency |
| Satisfactory Performance* in less 50% of the topics AND attendance in at least 50% of the sessions | Certificate of Attendance |
| Satisfactory Performance* in at least 50% of the topics AND attendance in less than 50% of the sessions | Certificate of Participation |
| All other cases | NO Certificate |

*Through assessment based on assignments/tests/projects