# Research Techniques for Prediction

**Academic Year: ( 2018 / 2019 )** **Review date: 12-04-2018**

**Department assigned to the subject: Statistics Department**

**Coordinating teacher:**

**Type: Electives ECTS Credits : 6.0**

**Year : Semester :**

## DESCRIPTION OF CONTENTS: PROGRAMME

1: Univariate Time Series
Descriptive Analysis
Transformations
Introduction to the R language for forecasting
2: Stationary Models
ARIMAs
Box-Jenkins methodology
Measuring forecast performance
Business and Management applications
3: Exponential Smoothing
Simple, Holt, Holt-Winters
4: Dynamic regression
Endogenous variables, transfer function
5: Multivariate time series
VAR models, cointegration
6: Garch models
Financial Applications and Risk Management

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|---|---|
| **% end-of-term-examination:** | 60 |
| **% of continuous assessment (assigments, laboratory, practicals…):** | 40 |