

# MANAGEMENT AZIENDALE (LM01)

(Lecce - Università degli Studi)

## Insegnamento STATISTICS FOR BUSINESS

GenCod A003654

**Insegnamento** STATISTICS FOR BUSINESS

**Insegnamento in inglese** STATISTICS FOR BUSINESS

**Settore disciplinare** SECS-S/01

**Corso di studi di riferimento** MANAGEMENT AZIENDALE

**Tipo corso di studi** Laurea Magistrale

**Crediti** 6.0

**Ripartizione oraria** Ore Attività frontale: 48.0

**Per immatricolati nel** 2018/2019

**Erogato nel** 2019/2020

**Anno di corso** 2

**Lingua** INGLESE

**Percorso** CONTROLLO DI GESTIONE

**Docente** Leonardo MARIELLA

**Sede** Lecce

**Periodo** Primo Semestre

**Tipo esame** Orale

**Valutazione** Voto Finale

**Orario dell'insegnamento**

<https://easyroom.unisalento.it/Orario>

### BREVE DESCRIZIONE DEL CORSO

The course explains the most commonly used statistical methods such as support for managerial decisions.

### PREREQUISITI

Knowledge of Statistics and Business Economics

### OBIETTIVI FORMATIVI

The course aims to provide methodologies and tools for the analysis, interpretation and forecasting of company data.

#### **Expected results according to Dublin descriptors:**

##### *Knowledge and understanding*

- Acquisition of concepts, methodologies and tools for the analysis of corporate data.

- Knowledge and use of the main statistical software for the analysis of company data (Excel, Gretl).

##### *Ability to apply knowledge and understanding*

-Ability to interpret Company data, their evolution and consistency through statistical analysis, building suitable models also with the use of sophisticated algorithms.

-Presentation and critical interpretation of the results.

##### *Making judgments*

-Ability to use the results of the analyzes to formulate interpretative hypotheses, derive strategic

### METODI DIDATTICI

Frontal lessons with use of audiovisual aids, classroom exercises

### MODALITA' D'ESAME

Oral exam with discussion of practical cases and example processing of company data

The student, disabled and / or with DSA, who intends to take advantage of an individualized intervention to carry out the examination must contact the Disabled Integration Office of the University of Salento at [paola.martino@unisalento.it](mailto:paola.martino@unisalento.it)

### APPELLI D'ESAME

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#### ALTRE INFORMAZIONI UTILI

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## PROGRAMMA ESTESO

- Main sources of Business Statistics:
  - o Internal sources for data collection
  - o The National Statistical System and external sources
  - \* The National Statistical System
  - \* External sources for data collection
  - o Other databases
  - \* The databases of Cerved Group s.p.a
- Descriptive Statistics:
  - \* Collective and statistical features
  - \* Tables and graphs
  - \* Statistical indexes
  - \* Balance indexes
  - o Composition indexes
  - o Balance indexes and turnover ratios
  - o Profitability ratios
- Position and variability of distributions:
  - \* Position indexes
  - o Modal value
  - o Median value
  - o Mean and trimmed mean
  - \* Variability indexes
  - o Accuracy of modal value
  - o Accuracy of median value
  - o Accuracy of mean
  - \* The Delphi method and its variants
  - o Features of the expert panel
  - o Features of the method
  - \* Some variants of the Delphi method
- Empirical distribution function and indices:
  - \* Empirical distribution function
  - \* Position and empirical distribution function
  - o Quantile values
  - o Half sum of quantile values
  - \* Variability and empirical distribution function
  - o Interquantile range
  - \* The Shang method
- Index numbers:
  - \* Simple index numbers
  - \* Composite index numbers
  - \* Weighted composite index numbers
  - \* Business productivity
  - o Analysis of the output of a process
  - o Analysis of the inputs of a process
  - o Partial productivity indices
  - o Overall productivity indexes
  - \* Temporal and spatial analysis of business productivity
- Analysis of interdependence:
  - \* Independence
  - \* Statistical connection between two features
  - \* Cograduation and correlation between two features
  - \* Customer features
- Analysis of dependence:
  - \* Mean-independence
  - \* Linear regression model
  - \* Break even analysis
  - \* Convenience analysis
  - \* Multiple linear regression model
  - \* Generalized break even analysis
  - \* Balance analysis
- Inference Statistics:
  - \* Population and sample
  - \* Features of an infinite population
  - o Sampling from infinite populations
  - o Estimating of an infinite population parameters
  - \* Control charts
  - o Control charts for attributes
  - o Control charts for variables
  - \* Features of a finite population
  - o Sampling from finite populations
  - o Estimating of a finite population parameters
  - \* Sampling techniques in auditing
  - o Estimation sampling
  - o Discovery sampling

The course includes lectures, demonstrations, computer labs and practical exercises.

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#### TESTI DI RIFERIMENTO

L. Mariella, M. Tarantino. Statistica Aziendale per il Controllo di Gestione. McGraw-Hill Education (Italy), Milano, gennaio 2013