



UNIVERSITÀ DEGLI STUDI DI PALERMO

Department: null

A.Y. 2009/2010

DEGREE COURSE IN STATISTICS FOR DATA ANALYSIS

Characteristics



Class of Bachelor's Degree
(BSc) on Statistics (L-41)



3 YEARS



FREE ACCESS



2131

Educational objectives

External stakeholders, as well as a recent survey on the need for higher education, carried out by the University of Palermo, confirm the need for professionals expert in the production and management of quantitative and qualitative information and in the glamorization of the information assets of companies and institutions, to support management and to evaluate the effects of decisions.

The 1st cycle degree course, coherently with the class specific educational objectives, aims at education graduates with adequate groundings on the fields of Mathematics, Statistics and Computer Data Management, capable of working in various areas with autonomy and responsibility and to fit in the labour market as qualified experts, capable of producing and managing information flows and of using computer systems and networks to gather, and process information and to get form this information strategic indications, to be diffused at adequate detail level and through the most suitable technological modes.

The educational programme is characterized by:

- Core educational activities in the fields of Computer Science, Mathematics, Statistics, Probability, providing students with adequate command of general methods and scientific content;
- A common curriculum for all students, aiming at providing competences in the various field of statistics. Students will therefore acquire an adequate amount of credits in three out of the five class specific areas: Statics, Applied Statistics, Demography. Business Economics, Applied Computer Mathematics;
- A sound number of integrative and class related activities, divided into three groups. The first two groups consist of subject areas which are already included in class specific activities (economics and business economics), and the third group consists of teachings aiming at integrating graduates' groundings. These teachings are related to experimental applied health areas and soft skills such as legal competences;
- Possibility of improving or increasing language skills through a course aiming at providing technical language skills related to the professional area;
- Training based on frontal teaching, accompanied laboratories for the discussion of case studies and the investigation of economic-social issues. Laboratory activities aim at general and applied statistical applications, through the direct relation with professionals, in a way to understand the limits and opportunities for statisticians in various application areas. In this way, the course aims at providing students with adequate analytical capability which, based on solid methodological groundings, bring them to pay constant attention to the process of data production - conceptualization, definition and measurement - and to a critical use of theories and methods with respect to the type and meaning of available information;
- Small number of examinations, reached through the distribution of content among various teachings and the attribution to each educational activity entailing an examination of an adequate number of credits (normally 8 or 10);
- Possibility of attending educational stages at private or public organization, awarded with 8 to 14 credits. This option is suggested to students wishing to conclude their training with a 1st cycle degree. Those who wish to continue their studies may substitute the stage with other educational activities related to the subsequent educational programme, in accordance with the procedures defined by the Course educational regulations.

Professional opportunities

The course is designed to provide both general and professional activity, enabling thus students to continue their studies as well as to fit in immediately in the labour market.

Those who wish to continue their university studies may attend the 2nd cycle degree courses in class LM-82 Statistics and LM-83-Actuarial and Financial Statistics, but also courses in classes LM -56 - Economic Sciences , LM- 77 - Business

Legenda: Per. = periodo o semestre, Val. = Valutazione (V=voto, G=giudizio), TAF= Tipologia Attività Formativa (A=base, B=caratterizzante, C=Affine, S=stages, D=a scelta, F=altre)

Economics Sciences, LM- 88 - Sociology and social Research .

With respect to the labor market, the general preparation guarantees a great flexibility for the employment in companies and public and private institutions. Studies about the labor market position of such graduates confirm the good employment perspectives they have; the percentage of graduates in Statistics working within a year after graduation (summer 2005 session) in Italy is 50% and is higher than the national average of degree classes with which it is comparable (Source: Almalaurea) . The national trend is confirmed by the results of surveys on graduates from Palermo in 2006 and 2007, carried out by the Interuniversity Consortium Stella, showing, one year after graduation, a percentage of 50 % of employees and 25% of students.

Potential career opportunities are generally identifiable in work activities that require skills in the production, processing, management and interpretation of data related to economic, corporate, environmental, social, health phenomena.

Graduates of Class 41 may carry out technical statistical functions in public administration , in the design and testing units of companies operating in the biomedical , epidemiological, ecological - environmental fields; in the statistical offices of medium-sized businesses, in the marketing departments of manufacturing and distribution companies, in management information systems companies, in statistical consulting company engaged in external support to private and public companies, in public and private research centers and institutes.

In these fields, graduates in Statistics may:

- Carry out noncomplex statistical surveys related to the specific fields of specialization;
- participate in the design and verification of the results of experiments and controlled clinical trials;
- carry out evaluation activities addressed to quality management and performance measurement, to the certification of statistical data to be made public or to be used in other statistical surveys;
- participate in the analysis and processing of data to investigate phenomena and to make predictions in various areas of application;
- design and create, from the statistical point of view, databases, for various purposes.

It should be pointed out that, with the introduction of SISTAN (national statistical system), statistical units have been instituted at the central government departments, local authorities, including local health units, and at independent companies , which depend on ISTAT (National Statistical Institute). In addition, the Consolidated Law on local government (Legislative Decree Aug. 18, 2000 , no. 267) states (Article 12 , paragraph 2) that local authorities , in carrying out their respective activities and in the relevant results verification, must use information and statistical systems that operate in conjunction with the statistical offices in application of legislative Decree 6 September 1989, n. 322 .

Final examination features

It consists of a short paper about an issue agreed with a Professor or of a stage report.

| Subjects 1 ° year | CFU | Sem. | Val. | SSD | TAF |
|---|-----|------|------|-----------|-----|
| 03927 - COMPUTER SCIENCE <i>Pecorella(PA)</i> | 8 | Ann. | V | INF/01 | A |
| 04872 - MATHEMATICS <i>Consiglio(PO)</i> | 12 | Ann. | V | SECS-S/06 | A |
| 06647 - STATISTICS 1 <i>Plaia(PO)</i> | 10 | Ann. | V | SECS-S/01 | A |
| 02704 - BUSINESS ECONOMICS <i>Tomaselli(PA)</i> | 6 | Ann. | V | SECS-P/07 | C |
| 02796 - POLITICAL ECONOMICS <i>Bavetta(PO)</i> | 10 | Ann. | V | SECS-P/01 | B |
| 01736 - PROBABILITY THEORY <i>Sanfilippo(PO)</i> | 10 | Ann. | V | MAT/06 | B |

56

| Subjects 2 ° year | CFU | Sem. | Val. | SSD | TAF |
|---|-----|------|------|-----------|-----|
| 06674 - ECONOMIC STATISTICS 1 <i>Cuffaro(PQ)</i> | 10 | Ann. | V | SECS-S/03 | B |
| 06706 - SOCIAL STATISTICS I <i>Capursi(PO)</i> | 10 | Ann. | V | SECS-S/05 | B |
| 06649 - STATISTICS 2 <i>Muggeo(PO)</i> | 10 | Ann. | V | SECS-S/01 | A |
| 04677 - ENGLISH LANGUAGE <i>Romeo(PA)</i> | 6 | Ann. | V | | E |

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| Subjects 2 ° year | CFU | Sem. | Val. | SSD | TAF |
|---|-----------|------|------|-----------|-----|
| 06650 - STATISTICS 3 <i>Chiodi(PO)</i> | 10 | Ann. | V | SECS-S/01 | A |
| Optional subjects | 12 | | | | C |
| | 58 | | | | |

| Subjects 3 ° year | CFU | Sem. | Val. | SSD | TAF |
|--|-----------|------|------|-----------|-----|
| 06675 - ECONOMIC STATISTICS 2 <i>Vassallo(PA)</i> | 10 | Ann. | V | SECS-S/03 | B |
| 06705 - SOCIAL STATISTICS 2 <i>Attanasio(PO)</i> | 10 | Ann. | V | SECS-S/05 | B |
| 06651 - STATISTICS 4 <i>Mineo(PO)</i> | 8 | Ann. | V | SECS-S/01 | B |
| 07935 - SEMINARS | 2 | Ann. | G | | F |
| 05917 - FINAL EXAMINATION | 4 | Ann. | G | | E |
| 06634 - INTERNSHIP | 8 | Ann. | G | | S |
| Optional subjects II | 12 | | | | B |
| Free subjects | 6 | | | | D |
| Free subjects II | 6 | | | | D |
| | 66 | | | | |

OPTIONAL SUBJECTS

| Optional subjects | CFU | Sem. | Val. | SSD | TAF |
|--|-----|------|------|-----------|-----|
| 02665 - ECOLOGY <i>Tomasello(PA)</i> | 6 | Ann. | V | BIO/07 | C |
| 05718 - ECONOMIC POLICY <i>Anselmi(PQ)</i> | 6 | Ann. | V | SECS-P/02 | C |
| 03026 - EPIDEMIOLOGY <i>Simonetti(PC)</i> | 6 | Ann. | V | MED/42 | C |
| 02785 - INDUSTRIAL ECONOMICS <i>Purpura(PQ)</i> | 6 | Ann. | V | SECS-P/06 | C |
| 02469 - INFORMATION TECHNOLOGY LAW AND COMPUTER DATA PROCESSING LAW <i>Piraino(PO)</i> | 6 | Ann. | V | IUS/01 | C |

| Optional subjects II | CFU | Sem. | Val. | SSD | TAF |
|--|-----|------|------|-----------|-----|
| 02285 - DEMOGRAPHY <i>Greco(PQ)</i> | 6 | Ann. | V | SECS-S/04 | B |
| 01260 - MULTIVARIATE STATISTICAL ANALYSIS <i>Di Salvo(RU)</i> | 6 | Ann. | V | SECS-S/01 | B |
| 03892 - SAMPLE SURVEYS AND POLLS <i>Giambalvo(PO)</i> | 6 | Ann. | V | SECS-S/05 | B |
| 05282 - STATISTICAL MODELS OF ECONOMIC BEHAVIOURS <i>Vassiliadis(RU)</i> | 6 | Ann. | V | SECS-S/03 | B |

PROPAEDEUTICAL TEACHINGS

- 02285 - DEMOGRAPHY
- 06647 - STATISTICS 1
- 06649 - STATISTICS 2
- 06647 - STATISTICS 1
- 01736 - PROBABILITY THEORY

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06649 - STATISTICS 2
04872 - MATHEMATICS

06650 - STATISTICS 3
06649 - STATISTICS 2

06651 - STATISTICS 4
06650 - STATISTICS 3

06674 - ECONOMIC STATISTICS 1
02796 - POLITICAL ECONOMICS
06647 - STATISTICS 1

06675 - ECONOMIC STATISTICS 2
06674 - ECONOMIC STATISTICS 1
06649 - STATISTICS 2

06705 - SOCIAL STATISTICS 2
06706 - SOCIAL STATISTICS I
06649 - STATISTICS 2

06706 - SOCIAL STATISTICS I
06647 - STATISTICS 1
01736 - PROBABILITY THEORY
04872 - MATHEMATICS