

Faculty of
**Natural Sciences and
Mathematics**

Statistics

RPC-SO-18-No.377-2020



Bachelor of Science in Statistics



Applicant Profile

If applicants enjoy:

- ▶ Discovering patterns
- ▶ Solving problems
- ▶ Analyzing information
- ▶ Working with technology
- ▶ Programming and exploring data

Statistics is a great choice for them.



Employability

Discover where a degree in Statistics can lead students in the public or private sector:

- ▶ Data Intelligence Consulting
- ▶ Analysis of large volumes of data and predictive modeling
- ▶ Market trend research
- ▶ Management of strategic projects
- ▶ Academic statistical research or teaching

These are just some of the opportunities that await them. From the business world to scientific research, Statistics opens up a wide range of possibilities. Students can make meaningful contributions in any industry they choose.

This allows you to study data science and advanced analytics at a leading university.



Professional Skills

Upon completing the program, students will be able to:

- ▶ Analyze large datasets
- ▶ Build predictive models
- ▶ Program in R and Python
- ▶ Apply artificial intelligence
- ▶ Deploy data engineering projects
- ▶ Communicate results through data visualization

These competencies will enable them to make decisions under conditions of uncertainty across social, scientific, and productive sectors.



In fact...

The Bachelor of Science in Statistics receives a comprehensive and rigorous education, supported by a strong foundation of knowledge that enables them to analyze and interpret data and make informed decisions across a wide range of professional fields.



LEARN MORE



Curriculum

N 100 - I	ARTS, SPORTS AND LANGUAGES ELECTIVE COURSES	PROBLEM SOLVING	SINGLE VARIABLE CALCULUS	PROGRAMMING FUNDAMENTALS	INTRODUCTION TO STATISTICS	ENGLISH I
N 100 - II	DISCRETE MATHEMATICS	LINEAR ALGEBRA I	VECTOR CALCULUS	STATISTICS I	HUMANITIES ELECTIVE COURSES	ENGLISH II
N 200 - I	COMMUNICATION	DIFFERENTIAL EQUATIONS	NUMERICAL OPTIMIZATION	MATHEMATICAL STATISTICS	MEASURE AND PROBABILITY	ENGLISH III
N 200 - II	SAMPLING	MULTIVARIATE STATISTICS	APPLIED STATISTICAL MODELS I	CATEGORICAL DATA	STATISTICAL PROCESS CONTROL	ENGLISH IV
N 300 - I	SUSTAINABILITY SCIENCE	DATA ENGINEERING	APPLIED STATISTICAL MODELS II	STOCHASTIC PROCESSES	BAYESIAN STATISTICS	ENGLISH V
N 300 - II		DESIGN OF EXPERIMENTS	COMPUTATIONAL STATISTICS	TIME SERIES	ENTREPRENEURSHIP AND INNOVATION	COMMUNITY SERVICE INTERNSHIPS
N 400 - I		ROBUST AND NONPARAMETRIC METHODS	GEOSTATISTICS	STATISTICAL LEARNING	MANAGEMENT SKILLS DEVELOPMENT	SELECTED ELECTIVE COURSE
N 400 - II				UNSTRUCTURED DATA	STATISTICS CAPSTONE COURSE	SELECTED ELECTIVE COURSE
						PRE-PROFESSIONAL BUSINESS INTERNSHIPS



Did you know?

In an era driven by data, students will be prepared to harness it. Become one of the most sought-after professionals in today's job market.

Important decisions are made using statistics every day. For example:

- ▶ Netflix uses data to recommend movies and shows.
- ▶ Instagram uses data to determine which content users see.
- ▶ Hospitals use data to help predict diseases.
- ▶ Companies analyze customer behavior using data.

Is statistics only about numbers? It goes beyond that.

It is the science used to better understand how the world works—and how it changes.

While others rely on opinions, statisticians rely on evidence. Students will learn how to transform data into decisions that shape the world.

www.fcnm.espol.edu.ec

www.admission.espol.edu.ec



International Relations

Through its External Relations Office, ESPOL promotes and develops partnerships with international cooperation organizations, academic institutions, and research centers. These partnerships create mobility opportunities for the entire ESPOL community and contribute to the excellence that distinguishes the institution.

More than 226 international agreements allow students to participate in experiences abroad, including semester or year-long exchange programs, pre-professional internships, research placements, and participation in conferences, competitions, and other academic activities.

163
universities
around the world

