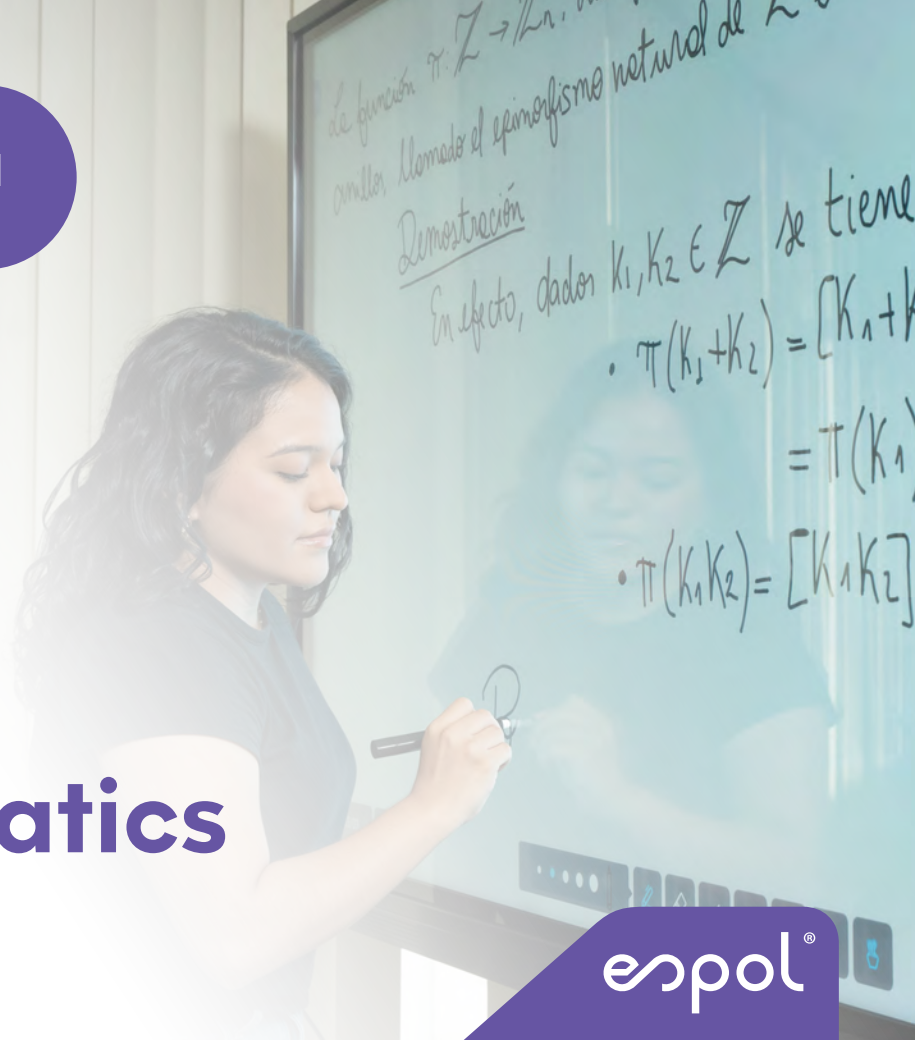


Faculty of
**Natural Sciences and
Mathematics**

Mathematics

RPC-SO-15-No.309-2020

espol®



Bachelor of Science in Mathematics



Applicant Profile

- ▶ Inquisitive individuals
- ▶ Critical thinkers
- ▶ Analytical individuals
- ▶ Strong aptitude for logical and abstract thinking



Employability

Mathematicians' skills allow them to excel in many different fields. They may pursue graduate studies, as well as programs in business, science, technology, or disciplines such as social services, education, and public administration.

Some of the professional roles they can pursue include:

- ▶ Developer of algorithms and mathematical models
- ▶ Business and risk analyst in financial institutions and companies
- ▶ Expert affiliated with scientific or technological research institutions
- ▶ Scientific advisor in different fields
- ▶ University professor



Professional Skills

Upon completing the program, students will be able to:

- ▶ Find solutions to problems by addressing challenges across a wide variety of sectors, including business, academic, and everyday settings.
- ▶ Adapt mathematical models to different processes, whether in the analysis of theoretical or applied problems, while contributing new approaches to their solution.
- ▶ Participate in multidisciplinary teams and engage in research and graduate programs.



In fact...

ESPOL mathematicians are trained with strong knowledge in algebra, geometry, mathematical analysis, differential equations, and mathematical models, providing them with opportunities to participate in research projects and practical applications across various academic and business fields.



LEARN MORE



Curriculum

N 100 - I	CALCULUS I	PROBLEM SOLVING	AXIOMATIC GEOMETRY	INTRODUCTION TO MATHEMATICAL REASONING	ARTS, SPORTS AND LANGUAGES ELECTIVE COURSES	ENGLISH I
N 100 - II	CALCULUS II	PHYSICS: MECHANICS	PROGRAMMING FUNDAMENTALS	LINEAR ALGEBRA I	DISCRETE ANALYSIS	ENGLISH II
N 200 - I	VECTOR CALCULUS	STATISTICS I	DIFFERENTIAL EQUATIONS I	LINEAR ALGEBRA II	COMMUNICATION	ENGLISH III
N 200 - II	MATHEMATICAL ANALYSIS I	MATHEMATICAL STATISTICS	FUNDAMENTALS OF OPTIMIZATION	ALGEBRAIC STRUCTURES	HUMANITIES ELECTIVE COURSES	ENGLISH IV
N 300 - I	MATHEMATICAL ANALYSIS II	TOPOLOGY	MATHEMATICAL METHODS FOR THE SCIENCES	NUMERICAL ANALYSIS		ENGLISH V
N 300 - II	MEASURE THEORY	COMPLEX ANALYSIS	ENTREPRENEURSHIP AND INNOVATION	ELEMENTS OF SCIENTIFIC COMPUTING	SELECTED ELECTIVE COURSE	COMMUNITY SERVICE INTERSHIPS
N 400 - I	FUNCTIONAL ANALYSIS	DIFFERENTIAL EQUATIONS II	MANAGEMENT SKILLS DEVELOPMENT		SUSTAINABILITY SCIENCE	SELECTED ELECTIVE COURSE
N 400 - II				DIFFERENTIAL GEOMETRY	MATHEMATICS CAPSTONE COURSE	SELECTED ELECTIVE COURSE
						PRE PROFESSIONAL BUSINESS INTERSHIPS



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.



Did you know?

Mathematics is one of the most strategic and highly valued academic programs in both the business and academic worlds, due to its wide range of applications across different fields of knowledge and its connection to economic and technological development.

www.fcnm.espol.edu.ec

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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.

