Undergraduate Programs 2018



Welcome to the Unach!

Your admission to our institution will give you the opportunity to receive a high-level education, which will not only help you to forge into the major of your choice; it will provide you the tools and competencies to respond positively to the economic and social problems of your context.

Our institution has the interest to offer you an integral formation, through an accompanying program that includes tutoring, medical attention, dental service, scholarships and student welfare. Our aim is to facilitate your performance throughout your professional training.

The Unach has an academic staff consisting of professors and researchers concerned about offering you a quality education. Our teachers, servers, and workers maintain a high-level of commitment, demand and interest for the most important public: our students.

We hope to see you soon in our classrooms! It will be an honor to see you grow, develop and become a leader in your area. Together we will create a country of opportunities.

Sincerely.

Dr. Nicolay Samaniego Erazo, PhD. PRESIDENT

Dra. Ángela Calderón T., PhD. ACADEMIC VICE-RECTOR

PhD. Lexinton Cepeda A.
VICE-RECTOR OF
POSTGRADUATE

Dra. Anita Ríos R., PhD.
ADMINISTRATIVE
VICE-RECTOR

MISSION

To create, develop, transfer and diffuse knowledge, and culture through the application of academic training, research and social work processes; under the principles of relevance, integrality, interculturality, equity, preservation of the environment, strengthening human talent, for the construction of a better society.

VISION

We are a leading educational institution in area 3 of Ecuador, with national recognition and international projection.

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Undergraduate Programs

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Health Sciences School

School of Political and Administrative Sciences

Engineering School

AUTHORITIES

Dr. Nicolay Samaniego Erazo, PhD. **PRESIDENT**

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VICE-RECTOR OF POSTGRADUATE

Dra. Anita Ríos R. ADMINISTRATIVE VICE-RECTOR



Undergraduate Programs

SCHOOL OF EDUCATION, HUMAN AND TECHNOLOGY SCIENCES



School of Education, Human and Technology Sciences

MISSION

In the School of Educational Sciences of the Universidad Nacional de Chimborazo, future teachers of all levels of the Ecuadorian educational system are trained, educated and professionalized, according to contemporary didactic-pedagogical tendencies, in search of the truth, the development of culture and the practice of values, we are aimed at providing a quality education to all social sectors of the central region and the country.

VISION

To be a renown and prestige School at a national and international level, it is linked to related institutions, which are framed with the latest advances in science, technology, culture, and to become a School that leads innovative educational processes, it has a diversification of careers where new paradigms are experimented and incorporated for the integral formation of the teachers.

Education. School of Human and Technology Science of the Universidad Nacional de Chimborazo is an Academic Unit, in which is done: teaching, research, extension and university management that are aimed at training professionals, preparing highly trained human resources with necessary knowledge to know, analyze, interpret and propose solutions to the problems of inter-learning and others, through an innovative pedagogical, didactic and methodological activity in the process of cultural activity.

Authorities

Amparo Cazorla, Ph.D. Dean

Patricio Humanate, Ph.D. Vice-dean

Directors of Majors

GRAPHIC DESIGN MAJORWilliam Quevedo, M.Sc.,

BASIC EDUCATION MAJOR Tatiana Fonseca, M.Sc.

INITIAL EDUCATION MAJOR Tatiana Fonseca, M.Sc.

PEDAGOGY MAJOR OF PHYSICAL EDUCATION AND SPORT

Edda Lorenzo, Ph.D.

PEDAGOGY MAJOR OF HISTORY AND SOCIAL SCIENCES

Lenin Garcés, M.Sc.

PEDAGOGY MAJOR OF LANGUAGE AND LITERATURE

PEDAGOGY MAJOR OF THE ARTS AND HUMANITIES

Paulo Herrera, Ph.D.

Pedagogy of Experimental Sciences
PEDAGOGY MAJOR OF COMPUTER
SCIENCE

Sandra Tenelanda. M.Sc.

Pedagogy of Experimental Sciences **PEDAGOGY MAJOR OF CHEMISTRY AND BIOLOGY**

Sandra Tenelanda. M.Sc.

Pedagogy of Experimental Sciences
PEDAGOGY MAJOR OF
MATHEMATICS AND PHYSICS
Sandra Tenelanda, M.Sc.

PEDAGOGY MAJOR OF THE FOREIGN AND NATIONAL LANGUAGES

Monica Cadena, M.Sc.

PSYCHOPEDAGOGY MAJORClaudio Maldonado. Dr.



Degree awarded: Bachelor's degree in Graphic Design

Studies Modality: On campus

Number of Periods: **9 Semesters**

Description of the Major

It educates creative, socio-critics researchers and entrepreneurs Graphic Designers with scientific and axiological theoretical bases that contribute to solving problems of visual communication in society; fostering the development of intercultural diversity and the productive matrix.

Occupational profile

Students will act as Brand Manager of business, territorial, products, and services. Project Manager of added value in productive chains. Ethno-methodological researcher. Trade marketing, Packaging 2.0. Informative products, magazines, corporate identity. 2D and 3D animation.

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irst semester

Physical Culture
Artistic drawing
Geometrization
IT /ICT
Language and Communication
Research methodology
Theory of Design

Second semester

Visual Anthropology Creativity Physical Culture Technical drawing Two-dimensional design History of Art National Reality of the Career

Third semester

Technical Drawing Assisted by Computer Three-dimensional design History of Design Illustration Digital illustration Applied Sociology to the Communication

Fourth semester

Photography Corporate Visual Identity Digital image Semiotics Graphic Production Systems Typography

Fifth semester

Editorial design Ecodesign Ergonomics Audiovisual language Graphic production Signage and Signaling

Sixth semester

Digital Animation Andean Design Packaging Audiovisual Production Prototype Serigraphy and Aerography. Ecuadorian Andean Design

Seventh semester

Multimedia Design Web design Infographics Design Marketing 3D modeling

Eighth semester

3D animation
Entrepreneurship
Quality Management
Design Management
Internship practice I
Tutoring of graduation I

Ninth semester

Business Administration Creativity Advertising Design Optional Internship practice II Research Projects Tutoring of graduation II



Degree awarded: Bachelor's degree of Science in Basic **Education**

> Studies modality: On campus

Number of Periods: 9 Semesters

Description of the Major

To train professionals of excellence with pedagogical competences, who integrate critical thinking, innovation, and participatory work, giving solutions to the immense demands of the labor market of the educational institutions of the Country and curricular guidelines of the Ministry of Education.

Occupational profile

The Bachelor of Science in Basic Education may act as an entrepreneur of educational institutions, an educational manager with communicative, technological and research competencies; according to social needs considering the principles of interculturality.

- First semester
 Contemporary Society.
 Contexts of professional development and problems of education.
 Diagnostic exploration of public, educational and good living policy.
 Research and participatory action: lesson study.
 Physical Culture.
 Oral, written and digital communication in the comprehension and textual production.

Second semester

- Ecology of Human and Learning Development. Human Development, emotional ties in the family, education, and community.
- Research and participatory
- action.

 Physical Culture.

 Educative Technology.

Third semester

- Third semester

 Learning experiences.

 History of Education.

 Practices: The curricular structure, in the macro, meso and micro aspect.

 Descriptive statistics in the
- investigation.
 Childhood literature and crea-
- tivity. Info-pedagogy.

- Fourth semester
 Learning experiences didactic approach. Language and Literature of Superior Basic Education. Language skills and methodologies. The teaching of language and literature. Writing and literary initiation.
- Models and curricular adapta-
- tions.
 Preparation of teaching material.
 Basic elements of kichwa.
 Research IV: Models and processes of educational research,

- Fifth semester
 Didactics of mathematics.
 Teaching numbers and their operations.
- earning environments in Basic
- Education.

 Models of multicultural and
- Models of multicultural and intercultural education.
 Teaching strategies of the natural and social environment
 Corporality comprehensive health of children and adolescents
 Investigation V: planning of the investigation.

Sixth semester
- Body instrumental expression and musical singing. Education for psychomotor development.

- The methodology of application of resources and educational
- Methodologies learning in
- movement Social Studies Teaching and its planning.
 - Didactics of natural sciences and
- their planning.

- Seventh semester
 Mathematics for Basic Education, numbers and their operations.
 Educational management.
 Research VII: Models and processes of educational research: execution of the research design
 Environmental education in the formation of ecological conscience.
- Didactics of body instrumental expression and musical singing.
 Internship practice

- Eighth semester
 Training and professional development. Management, ethics and teaching leadership.
 Education and gender, in Basic Education.
- Education.

 Workshop I of learning to learn in the updating of knowledge. Workshop I of academic writing.

 Workshop I problem solving (final exam). Workshop I guidelines

- and development of the research
- project.
 Workshop I methodologies for the resolution of items. Workshop I of reading and production of academic texts.
- Internship practice

- Ninth semester
 Training and professional development. Childhood code. The Good Living
- Childhood code. The about 11 Mg Plan
 Citizen orientation in the syste-matization of educational practice, and integration with the communi-ty. (Social work connection)
 Workshop II problem solving (Career exam). Workshop II of midelines and development of the
- (Career exam). Workshop II of guidelines and development of the thesis project.
 Workshop II methodologies for the resolution of items. Workshop II of reading and production of academic texts.
 Internship practice.



Degree awarded: Bachelor's degree of Science in Initial **Education**

> Studies Modality: On campus

Number of Periods: 9 Semesters

Description of the Major

To train professionals of excellence with pedagogical competences, who integrate critical thinking, innovation, and participatory work, giving solutions to the immense demands of the labor market of the educational institutions of the Country and curricular guidelines of the Ministry of Education.

Perfil Ocupacional

Graduates in the educational area in pedagogy programs can be advisors in programs, generators of projects for the strengthening of proposals being technical or teacher of the educational area, responsible for managing, coordinating, and supervising the integral educational processes.

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- Sociology of Education.
 Institutional systems and care services for children from cultural
- Research I participatory action Physical Education I
- Educational computing -Tics
- Quichua
- Language and communication

Second semester

- Educational theory and methods I. Socio-affective development and
- intervention with families
- Research and participatory action: Life Stories.
- Physical Education II

Third semester

- Theory of educational methods II - Development and learning
- Educational statistics
- Research III: Model and processes of educational, observation and

- Development and child stimulation, evolutionary psychology. - Quichua

Fourth semester

- Psychopedagogy I Design and management of early
- education learning
- The teaching of initial education Research IV: Models and processes of educational research,
- Diagnosis - Info-pedagogy

Fifth semester

- Psychopedagogy II Learning evaluation
- Research VI: Models and processes of educational research, execution of research design
- Language, music, and recreation

- Design, management, and evaluation of curricular models
- Treatment of basic notions in initial

education I and II

- Design and management of
- learning environments - Research VI: Models and processes of educational research,
- execution of research design -Business organization and coresponsibility

Seventh semester

- Introduction to literacy
- Personalized learning, models,
 practices for inclusion and diversity.
 Investigation VII: Models and processes of educational research: execution of the research design.
- Cognitive and motor development - Reading and writing of academic

Eighth semester

- School management and learning communities.
- Investigation VIII: Models and processes of educational research; interpretation, reflection, construction of meaning
- Undergraduate final assignment: 1, Strengthening of knowledge I, 2.

Academic Narrative Workshop I. Childhood literature

Ninth semester

- Learning problems and special educational needs
 Evaluation and systematization of educational practice, integration with the community.
- Modalities of graduation: 1, Strengthening knowledge II 2. Academic Narrative Workshop II
- Preparation of the project to improve educational contexts.



Degree awarded: Bachelor's degree in **Pedagogy of Physical Education and Sport**

> Studies Modality: On campus

Number of Periods: 9 Semesters

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Description of the Major

It educates professional pedagogues capable of identifying, designing and applying programs of physical activity and sport in order to respond to situations and problems related to high performance, physical education and sports management in the local, national and international sports field.

Occupational profile

The graduate will perform in the education system in the basic, middle, adult education and special levels; sports system, recreational centers; public and private companies; Health centers and gyms; prevention and rehabilitation centers, such as personal training, among others.

- Structures and functioning of the human being Sociology of Physical Activity and
- Sport
 Contexts and pedagogical
 systems of education in the area of
 Physical Activity and Sport
 Research and cooperative action
 Teaching and learning of human
 communication

- Second semester
 Development and functioning of the human being in Physical Activity
- and Sport
 Psychological development of
- Psychological development of the human being in a general and evolutionary way Contexts and didactic systems of education in the area of Physical Activity and Sport Participatory action research
- Body expression

Third semester

- Third semester
 Psychopedagogy of Physical
 Activity and Sport
 Design and development of
 pedagogical models, methods,
 ways, strategies, trajectories, and
 values of Body Education
 The methodology of the teachinglearning process of the basic styles
 of swimming
 Models and processes of
 educational research: Fundamentals
- educational research: Fundamentals

- Introduction to Scientific Communication
- Fourth semester
- Methodological processes of teaching-learning of Physical Activity and Sport in Initial Education Theory and Practice of the Games Models and processes of educational research: Diagnosis Office Automation

- Physical activity in children and teenagers. Health promotion in the school context
- Fundamentals of recreation in the school context.

Fifth semester

- Methodological processes of teaching-learning of Physical Activity and Sport in Basic General Education - Fundamentals of Recreation
- and its application in its different contexts.
- contexts.

 Models and processes of educational research: Design and planning of research

 Dance and intercultural artistic manifestations

 Health and nutrition: Evaluation of nutritional status. Programming in the school context
- the school context Outdoor recreational activities in
- Sixth semester

- Methodological processes of teaching-learning of the Physical Activity and Sport in the Unified General Baccalaureate The methodology of the teaching-learning of the Combat sports Models and processes of educational research: Execution of
- research design, applied statistic:
 Leisure, Free Time and Camp
 Recommendations of Physical Activity for specific populations in the school context - Recreation for people with
- different abilitie

Seventh semester

- Methodological processes of teaching-learning of Physical Activity and Inclusive Sport
- The methodology of weightlifting teaching-learning First aid
- Hirst aid
 Models and processes of
 educational research: Execution of
 research design
 Models and processes of
 educational research: Execution of
 research design
 Community and work recreation in
- the school context

Eighth semester

- Methodological and inclusive approaches to curricular and extracurricular activities

- The methodology of the teaching-learning of racket sports Models and processes of educational research: interpretation and reflection, construction of
- and retection of meaning in the area of Physical Activity and Sport Educational Legislation and the Physical Culture of Sport Reading and writing of academic

- Project management of Physical Activity, Sport, and Recreation
 Evaluation and systematization of educational practice: Social work
- connection
 Preparation of the project of improvement of educational contexts, Writing of the final report: Undergraduate final assignment - Theoretical-practical seminar for
- the preparation before the final exam
- Leadership and Entrepreneurship
 Information and Communication
 Technology Applied to Education
 in the area of Physical Activity and

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Degree awarded: Bachelor's degree in **Pedagogy of History** and Social Sciences

> Studies Modality: On campus

Number of Periods: 9 Semesters

Description of the Major

It educates professionals with skills and attitudes to consolidate their values regarding the appropriateness, methods, and languages of knowledge integration, models, processes and professional and investigative procedures in educational projects for the analysis of social phenomena.

Occupational Profile

A professional teacher of higher education institutions, a pedagogical advisor in educational institutions, manager of educational programs for the promotion of educational projects and execution of public policies for the promotion of citizen participation and democracy.

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- Contemporary society and educational policy Epistemology of the Social Sciences
- Educational systems and contexts Research and participatory action Physical Culture I
- Oral, written and digital
- a.-Language, oral and written communication. b.- Digital TICs. Internship practice

- Ecology of Human Development and Learning of History and Social
- Theory and Historical Thought Contexts of educational individual and human learning Physical Culture
- Research and participatory action: life stories
- Info-pedagogy Internship practice

Third semester

- Learning experiences: Curricular and didactic pedagogical approach:
 History of eras, General (ancient and medieval)

 | Description | Construction | Description | Construction | Description | Construction | Description | Construction | Co
- Physical Geography

- Pedagogical Models
 Models and processes of educational research: Observation and exploration
- Archive and documentation Internship practice

Fourth semester

- School management and learning communities I Human and Population Geography
- History by times II
- Economy
 Design, management, and evaluation of contextualized, flexible and adapted curricular models - Models and processes of educational research
- Geographic information system
- Internship practice

Fifth semester

- Local history I Local and National Geography
- Construct: School management and learning communities II
- CI: Design and management of learning environments
- Models and processes of educational research: design and planning of research - Philosophical Anthropology

- Local History II (Conquest and Colony) Internship practice History of Art Museology Didactics and Innovation in History
- CI: Resource management, strategies, and educational environments - Models and processes of
- educational research: execution of research design
- Social-cultural anthropology
- Internship practice

Seventh semester

- Local History III Didactics and Innovation in Social
- Sciences CI: Models and practices for
- inclusion and diversity
- Models and processes of educational research
 - Human development and diversity

- Internship practice Eighth semester

- Seminar on Social and Scientific Research for the transformation of school and community contexts CI: Intervention models, Community education
- Undergraduate final assignment
 Academic Narrative I

- Internship practice

Ninth semester

- Person training and professional teacher development
- CI: Evaluation and systematization of the Educational Practice
- Undergraduate final assignment.
 Academic Narrative II
- Internship practice
- Social work connection



Degree awarded: Bachelor's degree Pedagogy in Language and Literature

> Studies Modality: On campus

Number of Periods: 9 Semesters

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Description of the Major

Professionals with knowledge and capacity for critical reflection on the phenomena of language in its various manifestations, they trained to practice an active role in it, developing their skills with a commitment to academic excellence, arts, and culture.

Occupational Profile

Professional with the ability to act as an advisor or teacher in all areas that involve teaching and reflection on language and particularly the Spanish language, media, specialized magazines such as editor and proofreader and reading promoter.

Integrative Subject: Contexts of professional development and

problems of education - Construct: Teaching and learning communication

a) Language, oral and written communication

b) Computing (Tics)
- Construct: Contemporary society and educational policy a) Sociology of Education b) Philosophy of Education

c) Public Policy and Education

Research and participatory action: Lesson study

Internship practice

Second semester

Construct: Learning Experiences Pedagogical, curricular and didactic approach (Theory and Educational Methods I, Critical Pedagogy) - Composition and essay

Introduction to Literary Studies

- Integrative Subject: Human Development, bonds and affective ties in the family, education and the

- Research and participatory action: Life stories

Physical Culture II

- Info-pedagogy

Third semester

- Learning Experiences: Pedagogical, curricular and didactic Approach - (Theory and Educational Methods II,

- Universal Literature I Integrative Subject: Knowledge

Processes around Citizenship and Work Scenarios related to the profession

Models and processes of educational research: Observation and exploration

Psychology of the education

- Spanish Grammar I

Fourth semester

Universal Literature II

- Speech, text, and teaching - Integrative subject: Socialization of Universal Literature, promotion of

reading. - Spanish Grammar II

- Models and processes of

educational research: Exploration -School management and learning communities (learning strategies educational evaluation, curricular

Fifth semester

- History and Spanish Literature I

- History and Ecuadorian Literature I - General Linguistics

- Integrative Chair: Design of

curricular strategies
- Models and processes of educational research: design and planning of research

Sixth semester

Spanish Literature II

- Integrative subject: Equality and Diversity in education: integration and

- Spanish Lexicology and Semantics I

- Spanish Phonetics and Phonology - Models and processes of

educational research: execution of the design of the

Seventh semester

- Didactics of the Spanish Language and Literature

Latin American Literature

- Integrative subject: Experiences and learnings: Models and practices for inclusion and diversity

- Itineraries

Ecuadorian Literature II

Models and processes of educational research: execution of the research design

Eighth semester

Children and Youth Literature

- Integrative subject: community educational intervention, Interactions school-family-community

 Models and processes of educational research: interpretation and reflection, construction of

- Itineraries

Ninth semester

- Integrative subject: evaluation and systematization of educational practice, integration with the

- Graduation requirement type

PEDAGOGY IN ARTS AND HUMANITIES



Type of training: Bachelor's degree

Degree awarded: Bachelor's degree of Pedagogy in Arts and **Humanities**

> Studies Modality: On campus

Number of Periods: 9 Semesters

Description of the Major

Graduates Bachelors of Pedagogy in Arts and the Humanities that dominate the knowledge of the arts and culture, with theoretical and practical training for the management of knowledge exercising the profession with social responsibility, respecting the interculturality, gender and inclusion.

Occupational Profile

Professional trained to work in the academy and projects in different educational institutions generating knowledge and innovation aimed at solving problems improving productivity and living conditions of the population, applying regional knowledge and ancestral knowledge. Develops sustainable entrepreneurship projects in independent artistic practice.

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First semester

- Contemporary society and educational policy

- Geometric drawing
 Systems and educational
 contexts: Diagnostic approach
 Research and participatory action:
- lesson study Physical Culture I
- Oral, written and digital communication (Oral and written language and communication

Second Semester

- Ecology of Human Development and Learning (Evolutionary
- psychology, psychology of learning)
 History of art
 The contexts of educational
- subjects and human learning Research and participatory action:
- life stories
 Physical Culture II
- Info-pedagogy

Third Semester

- Learning Experiences: Pedagogical Approach -curricular and didactic (Pedagogy and general didactics)
 - Artistic drawing

- of pedagogical models (Methodologies, media, strategies, trajectories and learning values) Painting I
- Models and processes of educational research: observation

Fourth semester

- School management and learning communities I
- Design, management and evaluation of curricular models,
 Design of activities, environments and projects of contextualized and
- flexible learning
 Methodology and didactic for the teaching of plastic arts
 Artistic Drawing II
 Painting II

- Models and processes of educational research: Diagnosis

Fifth Semester

- Construct: School management and learning communities II
- Methodology and didactics for teaching the musical arts Design and management of learning environments
- Modeling Music I Workshops for the

elaboration and interpretation of

musical instruments - Models and processes of educational research: design and planning of research

- Integrative Chair: Design and development of resources and
- educational strategies
 Design, application and evaluation of educational intervention models and strategies adapted to cognitive needs
- Sculpture I
- Music II Ecuadorian Music
- Models and processes of educational research: execution of research design
 - Models of multicultural and
- intercultural education.

Seventh Semester

- Methodology and didactics for teaching the performing arts Integrative Chair: Experiences and learnings: Models and practices for inclusion and diversity
- Sculpture IIDance Dance WorkshopsModels and processes of

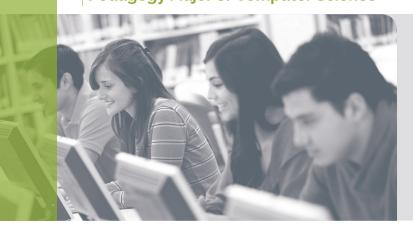
educational research: execution of

research design
- Pedagogical criteria for the development and treatment of

- Community educational intervention, school-family
- community interactions
 Workshop for the preparation of educational artistic projects, school integration - family-community
- Models and processes of educational research: interpretation and reflection, construction of meaning
- Undergraduate final assignment

Ninth Semester

- Training of the person and professional development of the teacher (ethics, leadership, legislation work,
- professional ontology)
 Integrative Chair: Evaluation and systematization of the Educational Practice
- Project of connection with society Degree work



Degree awarded: Bachelor's degree in **Computer Science** Pedagogy

> Studies Modality: On campus

Number of Periods: 9 Semesters

Description of the Major

The Pedagogy of Experimental Sciences (Computing) career trains competitive professionals with scientific, technological and research quality through complex thinking, to solve in an innovative way the problems of the profession, with social responsibility.

Occupational Profile

Computer teacher within educational institutions public and private organizations, administrator of educational computing centers; technical support and consultancy, manager of educational computer projects, manager of undertakings in the area of educational technology.

First semester

- Contemporary society and
- educational policy - ICT computing
- Mathematics and Statistics
- Applied to Education Systems and educational
- contexts: Diagnostic approach
- Research and participatory
- action: lesson study
- Physical Culture I
- Language, oral and written

Second semester

- Ecology of Human Development and Learning
- Mathematics Applied to Computing
- The contexts of educational individual and human learning
- Development of Computational
- Operating Systems
 Research and participatory action: Life Stories
- Physical Culture II

Third semester

Learning experiences: inclusive, contextualized, educational,

- curricular and pedagogical
- Design and development of
- pedagogical models
 Programming languages
- Multimedia Editing ToolsModels and processes of
- educational research: Observation
- and exploration: - Convergence of educational media: The inverted classroom and Tics.

Fourth semester

- Learning experiences: The
- curricular pedagogical approach Computer Science Didactics I
- Design, management, and evaluation of curricular. contextualized, flexible and
- adapted models - Development of Educational Applications I
- Models and processes of
- educational research: Diagnosis Digiculturality
- Internship practice

Fifth semester

Learning experiences: Curriculum approach

- Design and management of learning environments
- Computer Science Didactics II Development of Educational
- Applications II
- Models and processes of educational research: design and planning of research

Sixth semester

- Web Development and Content Management Systems
 - Digital Content Creation Tools
- Computer maintenance
- Models and processes of educational research: execution of research design
- Reading and writing of academic

Seventh semester

- Learning Management Systems
- Computer networks
- Technological Innovation in
- Models and processes of educational research: execution of research design
- Reading and writing of academic

Eighth semester

- Entrepreneurship
- Community Educational Intervention, school-familycommunity interactions
- Management of Educational
- Technology
 Applied Statistics to Research
- Undergraduate final assignment

Ninth semester

- Training of the person and teacher professional development
- Evaluation and systematizatio of educational practice, integration with the community
- Undergraduate final assignment - Internship practice. Technopedagogical design and intervention (Social work connection).

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Pedagogy Major of Chemistry and Biology

Approved-RPC-SO-24-1019-650114A02-NO. 403-2016



Type of training: Bachelor's degree

Degree awarded: Bachelor's degree in **Pedagogy of Chemis**try and Biology

> Studies Modality: On campus

Number of Periods: 9 Semesters

Description of the Major

It educates professionals, reflective leaders, with scientific and psychopedagogical knowledge committed to solving educational and social problems of the community, responding to the strategic and prospective needs of the social, cultural and environmental setting.

Occupational profile

The Bachelor in Pedagogy of Chemistry and Biology may act as a teacher in educational institutions, coordinator of the Chemistry-Biology area; manager of educational projects related to this area of knowledge, in consultancies and educational consultancies in Chemistry and Biology.

- System and educational contexts
- Oral, written and digital communication
- Contemporary society and
- educational policy
- Philosophy and History of Sciences (Chemistry and Biology)
- Research and participatory
- action: Lesson study
- Physical Education I

Second semester

- Contexts of educational individual and human learning
- Ecology of Human Development and Learning
- Cell Biology
- Research and participatory action: Life stories
- Inorganic Chemistry I
- Info-pedagogy
- Physical Education II

Third semester

- Design and Development of Pedagogical Models
- Learning Experiences
- Vegetal biology
- Models and processes of educational research: observation and exploration
- Inorganic Chemistry II

Fourth semester

- Design, management, and evaluation of contextualized, flexible and adapted curricular models
- School management and learning communities I
- Animal Biology
- Models and processes of
- educational research: Diagnostics - Analytic chemistry

Fifth semester

- Design and management of learning environments.
- Biodiversity of Ecuador

Models and processes of educational research: Design and planning of research.

- Biology of microorganisms
- Physical Chemistry

Sixth semester

- Management of resources, strategies, and educational environments
- Human Biology
- Didactics, Software tools for Biology
- Organic Chemistry I
- Research: Models and processes of educational research: execution of research design

Seventh semester

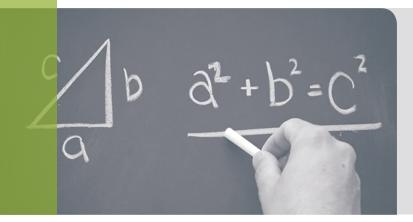
- Models and practices for inclusion and diversity
- School management and
- learning communities II - Applied Statistics to Biology
- -Models and processes of educational research: execution of

the research design

Eighth semester

- Models of community educational intervention
- Didactics, Software tools for Chemistry.
- Biochemistry
- Genetics
- Environmental chemistry
- Undergraduate final assignment.

- Integrative subject: Evaluation and systematization of the educational practice of resources and Educational strategies.
- Personal training and teacher professional development
- Undergraduate final assignment.
- Internship practice; Social work
- connection



Degree awarded: Bachelor in Mathematics and Physics Pedagogy

Studies Modality: On campus

Number of Periods: 9 Semesters

Description of the Major

Professional in educational education, in the area of mathematics and physics with domains in the generation and application of knowledge and critical thinking development, contributing to develop scientific research by raising the quality of teaching in the physical-mathematical sciences.

Occupational profile

The Bachelor in Pedagogy of Mathematics and Physics can serve as a teacher in different educational institutions, Mathematics-Physics area coordinator, Science laboratory, manager of educational projects related to their area of knowledge.

First semester

- Contemporary society and educational policy
- Fundamentals of physics
- Language and communication
- Fundamentals of mathematics
- Contexts of professional development and problems of education
- Scientific investigation methodology
- Physical Education I

Second semester

- Ecology of human development and learning
- Design and development of pedagogical models
- Elementary Algebra
- Inverted classroom and
- Kinematics and dynamics
- Investigation II

- Physical Education II

Third semester

- Educational, pedagogical and curricular models.
- Advanced algebra
- Static, work, and Energy
- Design and development of pedagogical models
- Curricular design
- Investigation III

Fourth semester

- Linear algebra Geometry
- Flat and spherical trigonometry
- Fluid mechanics
- Design, management and evaluation of curricular models, contextualized, flexible and adapted
- Quantitative investigation

Fifth semester

- Analytic geometry

- Differential calculus
- Educational evaluation
- Thermodynamics
- Chair: Design of learning environments
- Qualitative research

Sixth semester

- Discrete Mathematics
- Integral calculus
- Waves and OpticsMathematics Teaching
- Chair of Integration: Management of educational
- resources
 Research in Pedagogy of Mathematics

Seventh semester

- Differential equations
- Didactics of Physics (Software Tools)
- Electromagnetism
- Design of application of resources and educational

strategies

- Research in Pedagogy of Physics

Eighth semester

- Numerical analysis.
- Electronics
- Research for teaching
- Undergraduate final assignment
- School management and learning communities.

Ninth semester

- Evaluation and systematization of the educational practice of educational resources and strategies.
- Statistics
- Undergraduate final assignment

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Degree awarded: Bachelor's degree in Pedagogy of the **English Language**

> Studies Modality: On campus

Number of Periods: 9 Semesters

www.unach.edu.ec

Description of the Major

It trains professionals with knowledge in the foreign language (English) with solid linguistic, pedagogical, didactic, technological and humanistic foundations that allows it to perform efficiently at the level of basic and secondary education and in language institutes with the use of new technologies.

Occupational profile

Professional teacher and project manager in different educational institutions, innovators in the area of English teaching; Administration, orientation and advising of language programs in public and private institutions, public relations in the tourist and commercial sector.

- Contemporary society and educational policy
- Oral, written and digital communication in the comprehension and textual production.
- Educational systems and contexts
- English A1
- Physical Culture I
- Research and participatory action:

Second semester

- Ecology of Human Development
- and Learning - English A2
- The contexts of educational subjects and human learning
- Physical Culture II
- Research and participatory action: Life stories

- Curricular and Didactic Pedagogical Approach
- Design and Development of
- pedagogical models
 Research III: Models and processes of educational research: observation
- English B1 Info-pedagogy

- Infopedagogía

Fourth semester

- School management and learning communities. (Curriculum,
- Psychopedagogy)
 Linguistics (Grammar Phonology,
- Morphology and Syntax)
- Design, management and evaluation of contextualized, flexible and adapted curricular models
- Research IV: Models and processes of educational research: Diagnosis

Fifth semester

- Critical Thinking development (Reading and Study Strategies
- neurolinguistics and logic)
 Ecuadorian and English speaking
- countries languages and culture - Foreign Language Learning & Teaching Foreign Language
- Design and management of learning environments
- Investigation V: Models and processes of educational research: Design and planning of research.

Sixth semester

Foreign Language Learning &

- Classroom management (Evaluation, didactic resources and planning)
- Teaching English to Children with
- Special Educational Needs
 Semantics and Pragmatics
- Design and development of
- resources and educational strategies Research VI: Models and processes of educational research: Execution of the research design

Seventh semester

- Foreign Language Learning &
- Teaching 3 Human Language development (Socio-linguistics, bilingual and anthropology linguistics)
- Experiences and learning: Models and practices for inclusion and diversity
- Computer Assisted Language Learning (CALL)
- Investigation VII: Models and processes of educational research: execution of the research design.
- Foreign Oral Communication I Academic Writing I

Eighth semester

Language for specific purposes-

(teaching to children, Inclusive teaching and classed based instruction)

- Educative, community intervention; Interactions school-family-
- Assessment
- Models and processes of educational research Interpretation and reflection, construction of
- Academic Writing II

Ninth semester

- International Exam Preparation
- Person training and teacher professional development
- Undergraduate final assignment
- Evaluation and systematization of educational practice, integration with the community
- Internship practice. Social work connection

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PSYCHOPEDAGOGY MAJOR



Type of training: Bachelor's degree

Degree awarded: Bachelor's degree in Psychopedagogy

> Studies Modality: On campus.

Number of Periods: 9 Semesters

www.unach.edu.ec

Description of the Major

Professional with ethics characterized by respect for the confidentiality of truthful information, transparency and fairness with responsibility and social awareness, making assertive and fundamental decisions with a sense of social responsibility, promoting principles of inclusion and equity.

Occupational profile

The Educational Psychologist can act as an Educational Psychology Advisor, counselor, conflict mediator and teacher manager in the different basic educational institutions, baccalaureate, university, care centers for people deprived of liberty, specialized psycho-pedagogical institutes.

First semester

- General Psychology
- Contemporary society and educational policy
- Educational Systems and
- Research I Participatory Action: Lesson study
- Physical Culture I
- Learning and Teaching of Human Communication I

Second semester

- Pedagogy- Neurobiological Foundations of Learning
- Anthropology of education
- Research and participatory action: Life Stories
- Attention to diversity and
- inclusive education - Physical Culture II
- Learning and Teaching Human Communication II

Third semester

- Curricular development - Integrative Subject: Learning
- Neuroeducation

- Psychology of Development
- Models and processes of educational research: Exploration observation.
- Info-pedagogy

Fourth semester

- School Psychopathology
- General Didactics
- Integrative Subject: Inclusive Practices in Attention to Diversity
- Social Psychology
- Models and processes of
- educational research: Diagnosis - Convergence of Educational Settings

Fifth semester

- Didactics of Literacy and Mathematics
- Learning difficulties
- Alternative Communication Systems (Braille and Sign Language)
- Integrative Subject: Psychopedagogical Exploration **Techniques**
- Models and processes of

educational research: Design

and planning of research.

- Reading and writing of academic texts I

Sixth semester

- Family and community counseling
- Integrative Subject:
- Psychopedagogical Evaluation - Psycho technique
- Models and processes of educational research: Execution of research design
- Reading and writing of academic texts II

Seventh semester

- Integrative Subject: Psychopedagogical intervention and intervention in diversity
- Models and processes of educational research: Execution
- of research design - Gender, Education, and
- Interculturality - Effective communication

Eighth semester.

- Education for sexuality
- Integrative Subject: Psychopedagogical Intervention in Behavioral Problems
- Mediation and conflict resolution
- Models and processes of educational research: Interpretation and reflection, construction of meaning

Ninth semester

- Person training and teacher professional development
- Integrative Subject: evaluation and systematization of educational practice, integration with the community
- Undergraduate final assignment
- Internship practice. Social work connection

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UndergraduatePrograms

ENGINEERING SCHOOL



ENGINEERING SCHOOL

MISSION

To train entrepreneurial professionals who join local, regional, and national productive and socio-economic development and promote it through an efficient professional exercise.

VISION

To start the teaching process, quality learning in a solid scientific and technical training capable of leading processes aimed at solving the problems of the society.

The Engineering School carries out administrative. academic. investigative management processes connection with forming humanistic, innovative and entrepreneurial professionals who contribute to the solution of the problems of our country; offering quality educational services, permanent staff training, allocation of resources for the management system, developing projects based on science, technology, culture and ethics.

Authorities

Patricio Villacrés, Ph.D.

Dean

Silvia Torres, Dr. Vice-dean

Directors of Majors

AGRO-INDUSTRY ENGINEERINGMario Salazar, Dr.

ARCHITECTURENathalie Santamaría, Arch.

ENVIRONMENTAL ENGINEERING Anita Mejía, Dra. CIVIL ENGINEERING

Víctor Velásquez, Eng.

TELECOMMUNICATIONS ENGINEERING

Juan Cepeda, Eng.

COMPUTING AND SYSTEMS ENGINEERING

Jorge Delgado, Eng.

INDUSTRIAL ENGINEERING

Wilfrido Salazar, Eng.



Type of training: **Engineering**

Degree awarded: **Agro-industry** engineer

Studies Modality: On campus

Number of Periods: 10 Semesters

Description of the Major

Agro-Industry Major trains professionals with solid axiological, scientific and technological criteria. That they contribute to the sustainable development of the Agro-industry sector, of the province and the country with quality and social recognition.

Occupational Profile

Professional trained to work in Ministry of Agriculture, Livestock, Aquaculture and Fisheries, BanEcuador, Public and Private Agricultural Industries, Producers' Organizations, Private Departments of Professional Counseling, Institutions of Teaching and Research, Own Microenterprises, NGOs, foundations.

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First semester

- Mathematics I
- Physics I
- General Chemistry
- Epistemology of Agro-industry
- Computing
- Language and communication

Second semester

- Mathematics II
- Physics II
- Biology
- Organic Chemistry
- Investigation methodology
- National and World Reality

Third semester

- Mathematics III
- Biochemistry
- General Microbiology
- Thermodynamics
- Analytic chemistry

Fourth semester

- Industrial Security and Occupational Health Analysis of Agro-Industrial
- Agro-Industrial Microbiology
- Animal Raw Material
- Vegetal and Fungi Raw
- Unit Operations I

Fifth semester

- Accounting Applied to Agroindustry
- Sensory analysis
- Post-harvest handling
- Unit Operations II
- Security and harmlessness
- Experimental Design

Sixth semester

- Biotechnology - Lacteal Industries

- Engineering Calculations - Marketing and
- Commercialization
- Operative investigation - Business Management

Seventh semester

- Container, packaging and Transportation
- Process engineering
- Extracts Industry
- Industrialization of Non-Food Products I
- Meat industry
- Industrialization of Fruits and Vegetables

Eighth semester

- Cereal Industry - Industrialization of Non-Food Products II
- Internship practices
- Industrialization of Non-

Traditional and Ancestral Products

- Professional ethics Ninth semester
- Design of Agro-industrial
- Plants
- Agro-industrial Projects
- International Trade - Undergraduate final
- assignment I Entrepreneurship
- Social Work

Tenth semester

- Environmental management
- Production management
- Research and Development of Agro-industry Products
- Quality management
- Undergraduate final assignment II
- Legislation Applied to Agroindustry

ARCHITECTURE



Type of training: **Architecture**

Degree awarded: **Architect**

Studies Modality: On campus Number of Periods: 10 Semesters

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Description of the Major

This major trains educated professionals, critics and committed to society and its sustainable development, highly qualified in the various professional fields to respond with correct and innovative solutions to social needs framed in the transformation of the habitat.

Occupational Profile

Quality professional capable of designing architectural and urban projects, at a private and public level, creating solutions related to the use of space through form, technique, and aesthetics, responding to current demands, coexisting in harmony urbanism and medium ambient.

- Mathematical Analysis I
- Architectural Drawing I
- Graphic expression - Projective Geometry
- National reality
- Applied Linguistics

Second semester

- Mathematical Analysis II
- History and Theory of Architecture I
- Architectural Drawing II
- Fundamentals of Design
- Investigation methodology Computer I (Computer Aided Drawing)

Third semester

- Physical
- History and Theory of Architecture
- Architectural Drawing III
- Architectural Design I (Single Family House)
- Construction Technology I (Traditional)

- Resistance of Structures I (Isotactic and Hyper static)
- History and Theory of Architecture
- Topography of the Building
- Architectural Design II (Multifamily House)
- Construction Technology II (Concrete)
- Information II (Computer Aided Drawing)

Fifth semester

- Resistance of Structures II (Concrete and Wood)
- History and Theory of Architecture
- Architectural Design III (Education and Recreation)
- Construction Technology III (Wood)
- Conservation and Built Patrimony

Sixth semester

- Resistance of Structures III (Metallic
- Plumbing installations
- Architectural Design IV (Culture

- Urban Planning I
- Construction Technology IV (Steel) - Itinerary I: Conservation and
- Heritage I
- Itinerary II: Urban Planning I (Landscape Architecture)

Seventh semester

- Sustainable Architecture and Landscape
- Electrical Installations
- Architectural Design V
- (Administration and Commerce)
- Urban Planning II
- Pre-professional Practices I -(Drawing and Architectural Design) - Itinerary I: Conservation and
- Heritage II - Itinerary II: Urban Planning II (Landscape Architecture)

Eighth semester

- Architectural Design VI (Health. Transport, and Mobility)
- Urban Planning III
- Internship Practices II (Technique and Construction)

- Professional Ethics and Philosophy
- Itinerary I: Conservation and Heritage III
- Itinerary II: Urban Planning III (Landscape Architecture)

Ninth semester

- Business Management and
- Entrepreneurship
- Social work I
- Undergraduate final assignment I:
- Technical Project I
- Career Exam I
- Applied Research Methodology
- Architectural Design Workshop VII (Local Need)

Tenth semester

- Organization of Works
- Social work II
- Undergraduate final assignment II: Technical Project II
- Career Exam II
- Project Management and

Type of training: **Engineering**

Degree awarded: **Environmental Engineer**

Studies Modality: On campus

Number of Periods: 10 Semesters

www.unach.edu.ec

Description of the Major

Create professionals who possess specialized knowledge to provide answers to the various problems related to environmental issues contributing to improving the quality of life of our society through the conservation and preservation of natural resources.

Occupational Profile

Professional with skills, abilities and leadership to: Generate environmentally and economically viable solutions for the industry. Plan-design-operate-control natural and residual water treatment systems, control of air and soil pollution. Implement management systems: environmental, territorial, management of water resources, watersheds, urban and hazardous waste management. Design economic proposals for valuation of natural resources.

First semester

- Geometry and trigonometry
- Physics I

Thinking

- Chemistry - Mathematics I
- Computing
- Ethics Culture and Critical

Second semester

- General biology
- Physics I
- Organic Chemistry
- Calculation I
- Communication and language
- Computer Aided Drawing

Third semester

- Microbiology
- Methods of Environmental Engineering
- Physical chemistry
- Calculation II
- Environmental Instrumental
- Statistics

Fourth semester

- Environmental Biochemistry
- Numerical Methods and Programming
- Geography and
- Geomorphology
- Thermodynamics Experimental design
- Investigation methodology

Fifth semester

- Ecology and Biodiversity
- Meteorology and Climatology
- Geology and Soil Science
- Fundamentals of Topography and Remote Sensing
- Unit Operations I
- Environmental Toxicology

Sixth semester

- Lacteal Industries
- **Engineering Calculations**
- Marketing and Commercialization
- Operative investigation

- Business management

- Seventh semester - Analysis of Environmental Risks
- Characterization and Treatment
- Industrial Processes and Clean Production
- Professional development
- Watershed area I
- Territorial management

Eighth semester

- Mechanics of Fluids and
- Design of Treatment Plants
- Watershed area II
- Environmental impact
- Environmental Sociology
- Scientific Writing

Ninth semester

- Environmental Audits
- Analysis and Control of Air Pollution

- Remediation Techniques
- Industrial Security and Occupational Health
- Environmental Intervention Projects VIN
- Undergraduate final assignment I: two options (A) Research Project I (B) Grade I Exam

Tenth Semester

- Environmental economics
- Energies and Alternative Technologies
- Environmental Projects and Strategic Sectors
- Undergraduate final assignment II: two options (A) Research Project II (B) Grade II Exam
- Integral Environmental Management
- Entrepreneurship



Type of training: **Civil Engineering**

Degree awarded: **Engineer**

Studies Modality: On campus

Number of Periods: 10 Semesters

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Description of the Major

This career trains civil engineers with solid technical, technological, humanistic knowledge with ethical, environmental and quality commitments in the planning, design, and construction of civil works, which allow proposing alternatives that contribute to the welfare and development of the community.

Occupational Profile

Technical staff in public institutions: GADs, Ministries, Secretariats, Drinking water and sewerage companies; Planner, designer, constructor, administrator, supervisor, inspector, advisor of Consultants, NGOs, in activities of design, construction, and supervision of civil works.

First semester - Mathematical Analysis I - Chemistry

- Physical Descriptive geometry
- Statistics
- Thought development

Second semester

- Mathematical Analysis II

- Technical drawingInvestigation methodology
- Language and
- communication Theory of Programming

Third semester

- Differential equations
- Fluid mechanics
- Resistance of Materials I
- Dynamics
- Topography I
- National reality

Fourth semester

- Numerical methods
- Hydrology
- Resistance of Materials IISoil Mechanics I

- Topography II Materials Testing

Fifth semester

- Concrete I
- Hydraulic Engineering I
- Structures
- Soil Mechanics II
- Construction of Roads I

Sixth semester

- Concrete II
- Hydraulic Engineering II
- Matrix Analysis
- Geotechnics
- Construction of Roads II
- Internship practice

Seventh semester

- FoundationsWater Supply
- Heavy earthquake design
- Floors
- Internship practice IIConstruction Techniques

Eighth semester

- Civil works
- Sewerage
- Sanitation
- Water treatment
- Intervention Projects - Construction Costs

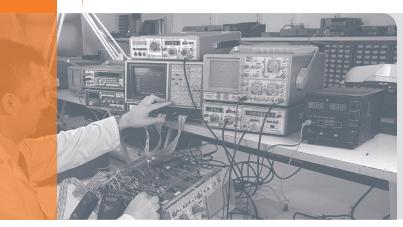
Ninth semester

- Steel
- Solid Waste Management
- Engineering Applications Inspection and Control of
- Work of Titration I Option:

- Projects formulation

Tenth semester

- Bridges
- Irrigation and Drainage
- Road Maintenance
- Entrepreneurship
- Project Management
- Undergraduate final assignment II Option: A-B



Type of training: **Engineering degree**

Degree Awarded: **Telecommunications Engineer**

> Studies modality: On campus

Number of Periods: 10 Semesters

Description of the Major

To train professionals to respond to the growing demand for solving problems related to electronic technology in its basic branches that are: electronic devices, digital systems, control instruments, through a strong theoretical and professional practice.

Occupational Profile

Engineer capable of managing, evaluating and developing projects based on electronic systems, independently or dependently, in the mining, energy, health, transport, telecommunications, construction, and technology sectors, both in companies in the productive sector and in services.

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First semester

- Linear algebra
- The calculation of one variable
- Culture and Citizenship in the contemporary world
- Basic physics
- Programming languages
- Chemistry

Second semester

- Calculation of several variables
- Basic Circuits
- Differential equations
- Statistics and Probabilities
- Applied Physic
- Advanced programming.

Third semester

- Basic electronic
- Instrumentation and Technical Interpretation
- Numerical methods
- Basic Digital Systems
- Linear systems

Fourth semester

- Analog Communications
- Design and Construction of electronic circuits
- Applied Electronics
- Investigation methodology
- Applied Digital Systems
- Electromagnetic Theory

Fifth semester

- Digital Communications
- High-Frequency Electronics
- Statistics Applied to Research
- Environmental Management in
- Traffic Engineering
- Lines of transmission

Sixth semester

- Optical Communications
- Electrical and
- telecommunications installations
- Microcontrollers and microprocessors
- Digital Signal Processing

- Local Networks
- Microwave systems

Seventh semester

- Design of Communications
- **Power Electronics**
- Propagation and Antennas
- WAN networks
- Control systems
- Embedded Systems

Eighth semester

- Wireless Communications
- **Technical Scientific Writing**
- Standardization of
- **Telecommunications**
- Internship practice I Advanced Networks and
- Network Security

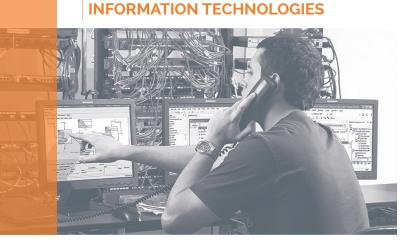
Ninth semester

Operating Systems Administration

- Cell Communication
- Financial economics
- Operative investigation
- Internship Bonding Practices I
- Internship practice II

Tenth semester

- Technical Communication for Engineering
- Project management
- Network management
- Internship Bonding Practices II
- Applications Project
- Industrial networks



Type of training: **Engineering**

Degree awarded: **Information Technology Engineer**

> Studies Modality: On campus

Number of Periods: 10 Semesters

Description of the Major

Form professionals with scientific, critical, ethical and innovative bases that, supported by research and linkage, constitute a contribution for the sustainable development of the province and country through the creation and application of computing systems with quality.

Occupational Profile

A generator of computing and computational solutions, in the fields of Software Industry, Hardware, Communications, Services and Computer Security, Public or private institutions and PYMES, Companies or national and international consulting groups, the Free practice of the profession.

First semester

- Linear algebra
- Differential calculus
- Physics I and Laboratory
- IT Fundamentals
- National reality
- Oral and written expression techniques

Second semester

- Integral calculus
- Vector Calculation
- Physics II and Laboratory
- Scientific investigation
- methodology
- Programming I
- Operating systems

Third semester

- Operating Systems
- Administration
- Differential equations
- Electronics
- Data structure

- Programming II
- Communication system

Fourth semester

- Architecture and IT Platforms
- Databases Fundamentals
- Network Fundamentals
- Interfaces and Multimedia
- Numerical methods
- Probability and statistics

Fifth semester

- Databases Administration
- Switching and Routing
- Ethics and Human Relations
- Software Engineering Operative investigation
- Web Technologies

Sixth semester

- Mobile Computing
- Network scalability - Business intelligence
- Research in IT

- Models and Simulation
- Internship practices
- Scientific writing

Seventh semester

- Server Management
- Big Data
- Cloud Management
- Platform interoperability
- Internship practices - Virtualization of Servers

Eighth semester

- Business software applications
- Applications and Network Administration
- Computing Law
- Security Strategy
- Internship practices
- IT projects

Ninth semester

- Computer Audit and Consulting

- Accounting and Financial Analysis
- IT Management
- Qualification Guide - Human Factors Engineering in
- Information Systems - Social Work

Tenth semester

- Ecology and Environment
- Entrepreneurship and Technological Innovation
- Integrated Project / Career
- Digital Content Writing

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Type of training: **Engineering**

Degree awarded: **Industrial Engineer**

> Studies Modality: On campus

Number of Periods: 10 Semesters

Description of the Major

Trains professional who plan, organize, direct and control productive systems, implement comprehensive management standards. Use continuous improvement; increase the productivity of organizations, both in the administrative field and within the manufacturing.

Occupational Profile

It is required in all types of organizations, such as banks, hospitals, manufacturing industries, service industries, both private and state.

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First semester

- Mathematical Analysis I
- Basic physics
- General chemistry
- Industrial Drawing
- Introduction to Industrial
- Language and communication

Second semester

- Mathematical Analysis II
- Linear algebra
- Organic Chemistry and Laboratory
- Applied Physic
- Investigation methodology
- Computing

Third semester

- Mathematical Analysis III
- Thermodynamics I - Electricity
- Statistics
- National Reality and Ancestral

Knowledge

- Programming

Fourth semester

- General Accounting
- Materials technology
- Thermodynamics II
- Drawing aided by computer
- · Industrial electricity
- Statistics II

Fifth semester

- Cost accounting
- Unit Operations
- Machine Tools I
- Methods Engineering I - Industrial Controls I
- Operations Research I

Sixth semester

- Machine Tools II
- Methods Engineering II
- Industrial Controls II - Industrial Security

- Industrial Processes I
- Operations Research II

Seventh semester

- Economic engineering
- Professional development
- Production Management
- Human Talent Management
- Industrial hygiene - Industrial Processes II

Eighth semester

- Quality Control
- Plant Design and Organization
- Maintenance management
- Ergonomics
- Operation management - Entrepreneurship and Innovation

Ninth semester

- Legislation
- Supply Chain Management
- Quality Management

- Business management
- Process management
- Intervention and Industrial Development Linkage

Tenth semester

- Environmental impact
- Normalization
- Elaboration and Evaluation of Industrial Projects
- Strategic Planning
- Career Exam Graduation Project
- Process Simulation



Undergraduate Programs

HEALTH SCIENCES SCHOOL



HEALTH SCIENCES SCHOOL

MISSION

To train professionals in the field of health and sport supported by scientific and technological knowledge, in the practice of values, to participate in a relevant way in the socio-economic development of the country.

VISION

To solve the health, socio-economic and cultural problems through the training of professionals with a strong scientific, technical, humanistic and axiological training that promote the development of universal and ancestral cultures, to provide comprehensive care in the field of health, capable of leading processes aimed at solving the problems of the country, aware of the relevance of our values.

The Health Sciences School is an Academic and Administrative unit, its purpose is to train highly qualified professionals in the careers of Physical and Sporting Therapy, Clinical and Histopathological Laboratory, Clinical Psychology, Nursing, Medicine, Dentistry.

Authorities

Gonzalo Bonilla, Dr. **Dean**

Yolanda Salazar, M.Sc. Vice-dean

Directors of Majors

NURSING Mónica Valdiviezo, M.Sc

CLINICAL AND
HISTOPATHOLOGICAL
LABORATORY
Patricia Miño, Dra.

MEDICINE
Wilson Nina, Dr.
DENTISTRY
Tania Murillo, M.Sc

CLINICAL PSYCHOLOGY Ramiro Torres, M.Sc.

PHYSICAL AND SPORTING THERAPY Vinicio Caiza, M.Sc.

NURSING MAJOR



Type of training: **Bachelor's degree**

Degree awarded: Bachelor's degree in Nursing

Studies Modality: On campus

Number of Periods: 8 Semesters

Description of the Major

It educates professionals in Nursing, in accordance with the National Health System, research and scientific - technological development, basing their action on principles of equity, solidarity, quality, warmth and ethics, committed to improve the living conditions of the population.

Occupational profile

Nurses will provide their services in public and private community health centers and units; Hospitals and clinics; Specialized care units; Educational, industrial, business, commercial and social centers; Private clinics and home care; Research, education and solidarity actions in health.

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First semester

- Process of Basic Nursing Care I
- Computing
- Language and communication
 Research Methods and Study techniques
- National Reality and Governance
- Microbiology and Parasitology
- Physical Education I

Second semester

- Morphophysiology I
- Psychology in Health
- Process of basic nursing care II
- Nursing care process in public health and Ecology I
- Physical Education II
- Nutrition I
- Biochemistry

Third semester

- Morphophysiopathology 1

- Bioethics and Human Development
- Nursing Care Process in Pharmacology I
- Clinical Nursing Care Process for Adults and Older Adults I
- Surgical Nursing Care Process for Adults and Older Adults I
- Socioanthropology
- Optional 1

Fourth semester

- Morphophysiopathology II
- Epidemiology
- Process of Nursing Care in
- Pharmacology II
 Process of Nursing Care in
- Process of Nursing Care in Public Health and Ecology II
- Process of Clinical Nursing Care for the Adult and the Elderly II
 Process of Surgical Nursing Care for Adults and the Elderly II

Fifth semester

- Nutrition II
- Nursing Administration I
- Process of Nursing Care in Pharmacology III
- Process of Nursing Care in
- Sexual and Reproductive Health
- Optional 2

Sixth semester

- Process of Nursing Care in
- Public Health and Ecology III - Process of Nursing Care in Children's Health
- Research and Entrepreneurship Projects
- Biostatistics
- Enf 6.04-Cb
- Administration in Nursing II
- Optional III

Seventh semester

- Rotating Internship Application

of the Process of Nursing Care in the Adult and Elderly Clinic

- Rotating Internship Application of the Surgical Process of Nursing Care of the Adult and Elderly
- Rotating Internship Application of the Process of Nursing Care in Public Health and Ecology I

Eighth semester

- Rotating Internship Application of the Process of Nursing Care in Sexual and Reproductive Health
- Rotating Internship Application of Process of Nursing Care in Children's Health
- Rotating Internship Application of the Process of Nursing Care in Public Health and Ecology II

CLINICAL AND HISTOPATHOLOGICAL LABORATORY MAJOR



Type of training: Bachelor's degree

Degree awarded: Bachelor's degree in Clinical and Histopathological Laboratory

> Studies Modality: On campus

Number of Periods: 8 Semesters

Description of the Major

The career in Health Sciences in Clinical and Histopathological Laboratory trains professionals prepared for the analysis in Laboratories of: Microbiology and Molecular Biology and Genetics; Clinical; Histopathological; Transfusion Medicine; Toxicology and Forensics; Public Health and Epidemiology.

Occupational profile

The graduate will work in Clinical Laboratories; Histopathological; Forensic and Toxicology; Molecular biology; Bacteriological analysis in Milk Banks; Reference; Accreditation Organizations; Centers for the Control of Infectious Diseases; Research and Teaching in Institutes of Higher Education.

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First semester

- Morphophysiology I
- Computing
- National Reality and Governance
- Language and communication
- Research Methods and Study Techniques
- Physical Education I
- Instrumentation I

Second semester

- Morphophysiology II
- Chemistry
- Histology
- Cell Biology
- Instrumentation II
- Physical Education II
- Biostatistics

Third semester

- Microbiology I
- Biochemistry I
- Cytology I
- Hematology I
- Urinalysis I
- Parasitology
- Histological Techniques I

Fourth semester

- Microbiology II
- Biochemistry II
- Cytology II
- Hematology II
- Urinalysis II

Fifth semester

- Immunohematology
- Hospital Practices I
- Biosecurity
- Transfusion Therapy
- Bioethics
- Quality guarantee

Sixth semester

- Endocrinology
- Hospital Practices II
- Clinical Analysis I
- Serology
- Entrepreneurship.

Seventh semester

- Laboratory Pathology and
- Clinical Correlation I 5.00
- Pre-Professional Practices I
- Clinical Analysis II
- Research Projects I
- Toxicology

Eighth semester

- Laboratory Pathology and Clinical Correlation I
- Internship practice II
- Molecular and Genetic Biology
- Research Projects II
- Forensic Techniques



Type of training: Medicine

Degree awarded: **General Practitioner**

> Studies Modality: On campus

Number of Periods 12 Semesters

Description of the Major

Medicine prioritizes the integral formation of its students, creating spaces so that, based on the new technological and humanistic scientific knowledge, respond adequately to the demands of the community in the area of its competence for the benefit of the population.

Occupational profile

Public, private and mixed health services. Public: Centers and Subcenters of Health, City and Provincial Hospitals. Private and mixed: Hospitals, Clinics, IESS, Armed Forces, Police, SOLCA, Charity Board, and NGO's. Private practice and medical attention in private practice.

www.unach.edu.ec

First semester

- Anatomy I
- Society and Health
- Physical Education I
- Histology I
- Embryology I
- Biochemistry I
- Computing
- Language and communication

Second semester

- Anatomy II Physical Education II
- Histology II
- Embryology II
- Biochemistry II
- National Reality and Governance
- Research Methods and Study **Techniques**
- Physiology I

Third semester

- Anatomy III General Pathology I
- Immunology
- Microbiology I
- Parasitology I
- Biostatistics
- Physiology II

Fourth semester

- Anatomy IV General Pathology II
- Microbiology II
- Parasitology II
- Community Health I Physiology III
- Nutrition

Fifth semester

- Semiology I
- Pharmacology I
- Patient Handling - Medical Ethics
- Community Health II

Sixth semester

- Semiology II
- Pharmacology II
- Medical Psychology
- Imaging I
- Entrepreneurship
- Community Health III

Seventh semester

- Internal Medicine I
- Dermatology
- Imaging II Clinical laboratory
- Community Health IV
- Medical English I - Psychiatry I

Eighth semester

- Internal Medicine II
- Community Health V
- Medical English II
- Evidence-Based Medicine
- Medical Genetics
- Rheumatology
- Psychiatry II

Ninth semester

- General Surgery - Surgical Specialties
- Geriatrics
- Primary health care
- Traumatology

Tenth semester

- Alternative medicine
- Optional
- AnesthesiologyLegal Medicine
- Pediatrics
- Gynecology and Obstetrics
- Research Projects

Eleventh semester

- Rotating Internship I

Twelfth semester

- Rotating Internship II

Type of training: **Dentistry**

Degree awarded: **Dentistry**

Studies Modality: On campus

Number of Periods: 10 Semesters

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Description of the Major

The Odontology career trains professionals with academic and scientific quality in oral health, basing their training strengths on Research, on scientific updating, the practice of values and the connection with the community. Developing projects and activities of interest for oral health care.

Occupational profile

Performing in: Public and private health centers and units, community, hospitals, public and private clinics, specialized care units, educational, business, commercial and social centers, private practices; organizations related to research, environments, counseling, health education.

First semester

- Chemistry
- Biology
- Anatomy I
- Physiology I
- Histology I
- Embryology I
- Language and communication Research Methods and Study
- Techniques
- Physical Education I

Second semester

- Biochemistry
- Embryology II
- Biophysics
- Anatomy II
- Physiology II
- Histology II Physical Education II - National reality and
- governance

Third semester

- Biostatistics
- Microbiology I
- Biosecurity I
- Semiology
- Dental Morphology I
- Biomaterials I
- Community Stomatology I
- Oral Pathology I

Fourth semester

- Microbiology II
- Dental Morphology II
- Biomaterials II
- Prosthesis I
- Community Stomatology II
- Cardiology Oral Pathology II

Fifth semester

- Dental Operatory I
- Imaging İ
- Occlusion I

- Endodontics I

- Surgery I
- Prosthesis II
- **Dental Emergencies**
- Pharmacology I
- Dental Ethics

Sixth semester

- Pharmacology II
- Imaging II
- Prosthesis III
- Endodontics II - Surgery II
- Clinical Propaedeutic

Seventh semester

- Psychology Applied to Odontology
- Pediatric odontology I
- Orthopedics
- Periodontics
- Surgery III

- Integral Clinic I

Eighth semester

- Pediatric odontology II
- Orthodontics
- Integral Clinic II
- Public Health II
- Internal Medicine

Ninth semester

- Geriatric Odontology - Forensic Odontology
- Integral Clinic III
- Scientific investigation
- Introduction to Project
- Management

- Community Stomatology III

Tenth semester

- Integral Clinic IV
- Administrative management
- Entrepreneurship

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Type of training **Psychology**

Degree awarded: Bachelor's degree in **Clinical Psychology**

> Studies Modality: On campus

Number of Periods: 10 Semesters

Description of the Major

The career of Clinical Psychology trains professionals committed to psychosocial development and research with technical-pedagogical procedures of quality, humanistic and ethical values, to attend to the mental health of the population.

Occupational profile

The Clinical Psychologists will provide their scientific and technical services of psychological help in state institutions and NGOs in the area of Health, Hospitals, Health Centers, Psychiatric, Geriatric hospitals. Help centers for people with toxic dependencies, alcoholism, and women's police station.

First semester - Physical Education I - Language and communication

- Research Methods and Study Techniques

- Computing

- General Psychology I

- Cultural and Philosophical Anthropology I

- Neuroanatomy and Neurophysiology I

Second semester

- Physical Education II - National Reality and

Governance - Social psychology

- General Psychology II

- Neuroanatomy and Neurophysiology II

- Cultural and Philosophical Anthropology II

Third semester

- Instruments and Techniques of Psychological Evaluation I

- Evolutionary Psychology

- Personality theories

- General Psychopathology I - Neuropsychology and

Psychophysiology I - Human sexuality

Fourth semester

- Instruments and Techniques of Psychological Evaluation II

- Evolutionary Psychology II - Theories of Personality II

- General Psychopathology II

- Neuropsychology and Psychophysiology II

- Human Sexuality II

Fifth semester

- Hygiene and Mental Health I

- Projective Tools and Techniques I

- Psychology and

Psychopathology of

Childhood and Adolescence I

- Psychodiagnostic I

- Psychostatistic

Sixth semester

- Hygiene and Mental Health II - Projective Techniques and

Techniques II - Psychology and

Psychopathology of Childhood and Adolescence II

- Psychodiagnostic II

- Research Projects I

- Ethics and Deontology

Seventh semester

- Research Projects II

- Psychotherapy

- Cognitive Behavior I - Humanistic and Gestalt Psychotherapy

- Systemic Therapy I

- Group Psychotherapy and Work Techniques I

Eighth semester

- Entrepreneurship
- Brief Psychotherapy
- Cognitive-Behavioral Psychotherapy I
- Humanistic and Gestalt Psychotherapy II
- Systemic Therapy II
- Group Psychotherapy and Work Techniques II

Ninth semester

- Psychoanalysis Seminary

- Internship practice I

Tenth semester

- Institutional Systemic Intervention

- Internship practice II

PHYSICAL AND SPORTING THERAPY



Type of training: **Bachelor's degree**

Degree awarded: Licenciado (a) en Fisioterapia

Studies Modality: On campus

Number of Periods: **8 Semesters**

Description of the Major

Physical and Sporting Therapy Major trains professionals to ensure their intervention in the areas of prevention, cure and rehabilitation that contribute to the health of individuals in the community, capable of participating in the interdisciplinary team and with subsequent professional development.

Occupational Profile

Professional able to intervene efficiently and effectively in the areas of prevention, cure and rehabilitation of the patient susceptible to injuries of the musculoskeletal system in hospitals, health centers, clinics, IESS, Armed Forces, Police, SOLCA; ONG'S; medical practices; Surgeries; Biomedical research.

First semester - Morphophysiology 1 - Computing

ComputingNational Reality and

Governance

- Language and communication

- Research Methods and Study Techniques

- Physical Culture I

Second semester

- Morphophysiology 2

- Biochemistry
- Histology
- Biophysics
- Fundamentals of

Rehabilitation

- Physical Culture I

Third semester

- Traumatology and Orthopedics 1
- Kinesiology 1
- General Pathology
- Neuroanatomical
- Massotherapies' 1
- Physical Agents 1
- Biostatistics

Fourth semester

- Traumatology and Orthopedics 2
- Kinesiology 2
- Pathology 1
- Orthotics and Prosthesis 1
- Massotherapies' 2
- Physical Agents 2
- Kinesiotherapy 1

Fifth semester

- Special Therapies
- 1 (Traumatological Physiotherapy)
- Radiological Bases
- Hospital Practices 1 (Traumatology)
- Special Pathology 1 (Neurology)
- Orthotics and Prosthesis 1
- Kinesiotherapy 1

Sixth semester

- Sporting medicine
- Diagnostic imagingHospital Practices 2
- (Neurology)
- Special Therapies 2 (Neurological Physiotherapy)
- Special Therapies 2 (Neurological Physiotherapy)
- Sporting Psychology

Seventh semester

- Sporting physiotherapy
- Research projects
- Internship Practices 1 (Pediatrics and Sporting Medicine)
- Special Pathology 3 (Geriatrics)
- Special Therapies 3 (Pediatric Physiotherapy)
- Cardiorespiratory physiotherapy 1

Eighth semester

- Research Projects II and Entrepreneurship
- Internship Practices
- 2 (Geriatrics and Cardiorespiratory)
- Special Therapies 4 (Geriatric Physiotherapy)
- Cardiorespiratory

Undergraduate Programs

SCHOOL OF POLITICAL AND ADMINISTRATIVE SCIENCES



SCHOOL OF POLITICAL AND ADMINISTRATIVE SCIENCES

MISSION

To solve legal, economic, accounting, administrative and social communication problems by training professionals with a strong scientific, technical, humanistic and axiological basis; through quality education provided to all social sectors of the province and the country.

VISION

To train professionals in the legal, economic, accounting, administrative and social communication fields, supported by scientific and technological knowledge, in the practice of humanistic, moral and cultural values, to participate in a relevant way in the socioeconomic development of the country.

The School of Political Administrative Sciences is an Academic Unit that is supported by scientific and technological knowledge, in the practice of humanistic, moral and cultural values, it contributes to the sustainable and maintainable progress of society; and to train, through quality education, professionals and researchers in the legal, economic. accounting, administrative and social communication fields, with a strong scientific, technical, humanistic and axiological basis.

Authorities

Patricio Sánchez, Econ.

Dean

María Eugenia Borja, Econ. Vice-dean

Directors of Majors

BUSINESS ADMINISTRATION

Martha Romero, M.Sc.

ACCOUNTING AND AUDITING

Magdalena Lema, Eng.

LAW

Fernando Peñafiel, Law.

ECONOMICS

Eduardo Zurita, Econ.

BACHELOR'S DEGREE IN COMMUNICATION

Miriam Murillo, M.Sc.

TOURIST MAJOR

Héctor Pacheco. Dr.



Degree awarded: Bachelor's degree in **Business Administra**tion

> Studies modality: On campus

Number of Periods: 9 Semesters

Description of the Major

It forms professionals with solid and deep knowledge in business administration, with skills and attitudes to understand and analyze the new economic phenomena of organizations, generating performance skills in complex environments such as those that currently surround the business world.

Occupational profile

He will act as an advisor in business administration developing investment projects; Management systems; Restructuring, General redesign of companies; Quality programs; Production re-engineering; Internationalization processes; Markets and strategies of expansion of companies of the different productive sectors.

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First semester

- Fundamentals of
- Administration - Linear algebra
- Fundamentals of
- Accounting
- Research Epistemology
- Socioeconomic, Cultural and Ecological Reality
- Oral and written communication

Second semester

- Administrative process
- Commercial and Corporate
- Mathematics Applied to the Administration
- Business accounting
- Investigation methodology
- Interculturality and Ancestral Knowledge

Third semester

- Organization and Systems
- Labor law and social security
- Financial mathematics
- Administrative Structure for
- Cost accounting
- Descriptive statistics

Fourth semester

- Economic theory
- Operations research
- Stock market - Statistics applied to
- Budget Administration

Fifth semester

companies

- Process management
- Behavior and Culture Organizational
- Marketing
- Strategic planningHuman Talent Management
- Financial management

Sixth semester

- Quality management
- EPS Legislation. Itinerary A. Subject 1
- Foreign trade
- Corporate social
- responsibility - Financial analysis
- Formulation and evaluation
- Productive chains. Itinerary B. Subject 1

Seventh semester

- Administrative auditStrategic Scenarios. Integrative Chair
- Smart business
- Internship practice I
- Strategic productive sectors. Itinerary B. Subject 2
- Administration of MYPIMES Itinerary A. Subject 2
- Professional ethics

Eighth semester

- Productive Management for EPS. Itinerary A. Subject 3
- Business Negotiation - Strategic Prospective.
- Itinerary B. Subject 3
 Investment projects.
- Integrative Chair
- Entrepreneurship
- Internship practice II
- Social work connection

Ninth semester

- Management and Business Policies
- Marketing ManagementManagement Information
- **Undergraduate final** assignment

ACCOUNTING AND AUDITING MAJOR.



Type of training: Bachelor's degree

Degree awarded: Bachelor's Degree in Accounting and Auditing, Certified Public Accountant

> Studies modality: On campus.

Number of Periods: 9 Semesters

www.unach.edu.ec

Description of the Major

Form professionals with scientific and ethical capacity in the area of Public Accounting, which analysis, interpretation, registration of financial information of the company; International accounting standards or financial information; apply techniques of financial theory, statistics, economics.

Occupational profile

A wide field of action in accounting, auditing, taxation, projects, budgets, strategic planning in public and private institutions such as commercial, industrial, banking, craft, agriculture, construction, etc. In teaching in general.

First semester

- Socioeconomic and Cultural
- Verbal and Written Communication
- Basic mathematics
- Computing
- Basic Accounting
- Methodological and Epistemological Foundations of

Second semester

- Business Law
- Administrative Theory
- Financial Mathematics
- Intermediate Accounting
- Investigation methodology

Third semester

- Corporate law
- Human Talent Management

- Economic Fundamentals
- Accounting Systems

Fourth semester

- Labor and Social Law
- Strategic planning
- Linear programming
- Introduction to Costs
- Superior Accounting - Inferential statistics

Fifth semester

- Fundamentals of Financial
- International Financial **Reporting Standards**
- Organizational Design
- Cost Systems
- Business Ethics Social and Corporate Responsibility
- Accounting of Organizations of

Popular and Solidarity Economy

Sixth semester

- Financial Audit
- Financial Management
- Tributary Legislation
- Cost Management and Control
- Entrepreneurship
- Public Finances

Seventh semester

- Fundamentals of Management
- Tics Applied to Accounting
- Tax Applications
- Projects
- Itinerary I:

Special Accounting / Itinerary II: Audit

Eighth semester

- Audit Laboratory

- Budgets
- Public and Budgetary Accounting
- The itinerary I: Special Accounting / The itinerary II:

Ninth semester.

- Public Contracting
- Preparation and Writing of Reports of Research Projects
- Undergraduate final assignment
- Community Service Activities Social connection).

- Management Audit



Type of training: Lawyer

Degree Awarded: Lawyer

Studies modality: On campus

Number of Periods: 9 Semesters

Description of the Major

It educates Lawyers with high technical and scientific knowledge, capable of providing legal, innovative, effective and timely responses, applying laws, rules and legal rules, with a moral, humanistic and social justice perspective, with scientific attitude and legal methodology.

Occupational Profile

He will work in public and private institutions and free professional practice with capacity for interpretation and knowledge of normative production, decentralization processes, environment, indigenous justice, community democracy, mediation, arbitration as an alternative for problem solving.

First semester - Theory of the State

- Introduction to the right

- Methodology of social and legal research

Reading Workshop - Writing

- Logic and Legal Argumentation

Second semester

- Law history

- Philosophy and Theory of - Constitutional Theory and

Human Rights
- Civil and General Civil Right

- Legal Sociology

Third semester

- Ecuadorian Constitutional

- Goods

- General Theory of Process and Evidence

- Constitutionalization of Ecuadorian law
- Criminology and socio-criminal investigation

Fourth semester

- Social Right

- Labor right

- Theory of Obligations and Responsibility

- Succession right

- Crime Theory

Fifth semester

- Institutional Administrative

- Public International Right

- Civil Contracts

- Substantive Criminal Right

- Judicial processes and alternative means of conflict resolution

Sixth semester

- Commercial Right
- Law and Corporate Practice
- Private international right
- Processes and
- administrative litigation
- Adjective Criminal Right
- Itinerary I. Introduction to Quichua culture and language

Seventh semester

- Public Contractual Activity
- Legal Medicine
- Law of Nature
- "Comparative Latin American
- Itinerary I. Multiculturalism, Legal Pluralism, and Ethnic Rights

Eighth semester

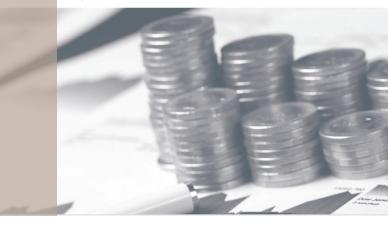
- Actions and constitutional

- Itinerary II. Law and Popular and Solidarity Economy
- Tax Advice
- Linkage. Legal Office IOral Litigation

Ninth semester

- Internship practice. Formulation of Projects and Legal Entrepreneurship
- Itinerary II. Local strategic planning
- Linkage. Legal Office II Qualification Seminar

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Type of training: **Degree**

Degree Awarded: **Economist**

Studies modality: On campus

Number of Periods: 9 Semesters

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Description of the Major

It educates professionals capable of linking theories, methods and instruments of economic science to analyze and propose sustainable and sustainable solutions to the problems of the economy, at its macro and micro levels, with high ethical values and in harmony with the environment.

Occupational Profile

Values the efficient use of economic resources; Research, analyze and interrelate micro and macroeconomic processes; Develop skills in the formulation and discussion of decision models; Formulates and evaluates investment projects for the public and private sector.

First semester

- Basic mathematics
- Introduction to Economics
- General Accounting
- National Reality and problems of the contemporary world
- Computing
- Language and communication

Second semester

- Intermediate Mathematics
- Basic Microeconomics
- Evolution of Economic Thought
- Cost accounting
- Research Methodology
- Descriptive statistics

Third semester

- Basic Macroeconomics

- Integrative Chair: Economic Diagnosis
- Intermediate Microeconomics
- Financial analysis
- Inferential statistics
- Economic history

Fourth semester

- Political economy
- Operations research
- Economic engineering
- Intermediate Macroeconomics
- Games theory

Fifth semester

- National accounts
- Budgets
- Marketing
- Financial planning
- Basic Econometrics

- Mathematics applied to the Economy

Sixth semester

- Theory and Monetary Policy
- Human talent management
- Formulation and Evaluation of Private Investment Projects
- Public finances
- Intermediate Econometrics
- Internship practice

Seventh semester

- Economic Policy
- Formulation and Evaluation
- of Social Investment Projects
- Itineraries Subject 1
- Itineraries Subject 2
- Internship practice

Eighth semester

- Economic Legislation
- International economy
- Economic development
- Economic Planning
- Itineraries
- Undergraduate final assignment

Ninth semester

- Ethics and Economics
- Integrative Chair: Economic Research
- Strategic planning
- Entrepreneurship
- Bonding Practices
- Undergraduate final assignment

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COMMUNICATION

Aprobada -RPC-SO-20-1019-650321B01-N°393-2017



Type of training: Bachelor's Degree

Degree Awarded: Bachelor's degree in Communication

> Studies modality: On campus

Number of Periods: 9 Semesters

Description of the Major

To train professionals in the Sciences of the Communication with solid academic, scientific and research knowledge, considering the deontological precepts that contribute in the solution of the local, regional and national problems, from a fluid connection with the society.

Occupational profile

He will act as Director of social communication projects, print publishers, editors, journalists, directors of mass media, directors of communication, and heads of public relations, preproduction and post-production in audiovisual media.

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First semester

- Language and communication Research Methods and Study
- Techniques
- National Reality and Governance
- Group Techniques and Dynamics
- Epistemology of Communication

Second semester

- News Genres
- Narrative and Audiovisual Script
- Specialized Software 1 - Communication theory
- Image Theory

Third semester

- Graphic Edition
- Ethnography of Communication
- Genres of Opinion
- Content Production for Radio
- Specialized Software II

Fourth semester

- Message Construction and
- Content Production for Television
- Publicity and advertising
- Semiotics
- Sociology and Psychology of Communication

Fifth semester

- Communication for the
- development
- Political Communication
- Professional ethics - Integral Journalism
- Communication Planning - Public relations

Sixth semester

- Organizational Communication - Integral Multimedia Design for
- Lobby Political and Commercial

- Legal Framework for
- Communication - Public opinion

Seventh semester

- Communication Companies Administration
- Alternative Communication and
- Community Practices
- Design and Formulation of Social Communication Projects
- Entrepreneurship
- Specialized Journalism

Eighth semester

- Communication Culture and Society
- Communication, Gender, and Interculturality
- Design of Public Communication **Policies**
- Impact of Mass Media
- Legal Medicine
- Graduation Modalities Workshop

Ninth semester

- Internship practice
- Undergraduate final assignment
- Social work connection



Degree awarded: Bachelor's degree in **Tourism**

> Studies modality: On campus

Number of Periods: 8 Semesters

Description of the Career

It educates critical professionals, committed to humanistic, moral and cultural values, which based on science, technology, and culture, constitute a contribution

responsible management of natural and cultural heritage.

Occupational Profile

Entrepreneurship in tourism and hotel sector, marketing and tourism marketing, tourism research teams, academic centers of tourism competitiveness, private and autonomous tourism activity, promoter, designer or tour guide.

www.unach.edu.ec

First semester

- Basic mathematics
- IT I
- National Reality and Governance
- Language and communication
- Research Methods and Study Techniques
- Introduction to Tourism and Hospitality
- Physical Education I

Second semester

- Applied Mathematics
- Computer II
- Tourist geography
- Guiding Techniques I
- Ethnography and Folklore
- Tourist and Hotel Techniques I
- Physical Education II

Third semester

- Financial Mathematics I
- Guiding Techniques II
- Cultural heritage
- Computer Science Applied to
- Tourist Operations I
- Tourist and Hotel Techniques II
- Nutrition and Food Safety

Fourth semester

- Basic accounting
- Financial Mathematics II
- Tourist Operations II
- IT Applied to Tourism II
- Protected areas
- History of Ecuador
- Environmental Interpretation

Fifth semester

- Statistics Applied to Tourism I
- Accounting Applied to Tourism

- Sustainable tourism
- Organization of Events and Conventions
- Administration I
- Culinary Technique
- Restoration Techniques

Sixth semester

- Statistics Applied to Tourism II Accounting Applied to Tourism
- Customer Service and Service Techniques I
- Operation of Travel Agency and Air Traffic I
- Administration II
- Ecuadorian cuisine
- Design of Tourist Facilities

Seventh semester

- Tourist Projects
- Entrepreneurship I - Customer Service and Service

- Techniques II
- Tourism and Hotel
- Management I - Strategic Planning of Tourism I
- Operation of Travel Agency and Air Traffic II
- Tourism Economy

Eighth semester

- Tourist Projects and Entrepreneurship II
- Tourism and Hotel Marketing I
- Tourism and Hotel
- Management II
- Strategic Tourism Planning II
- Computerized Booking System
- Tourist and Environmental Legislation.

