# **Credential Templates – Republic of Colombia**

Bachiller(ato) (Baccalaureate)	2
Técnico Profesional (Professional Technician) and	
Técnico Profesional Especialista (Specialist Professional Technician)	11
Tecnólogo/a (Technologist) and Tecnólogo/a Especialista (Specialist Technologist)	ogist) 18
Normalista Superior (Teacher, preschool and elementary school levels)	25
Undergraduate degrees: Profesional ('Professional'), Licenciado/a (Licentiate	e),
Maestro/a ('Master'), and others	
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# COLOMBIA (República de Colombia)

# **Bachiller**(ato) (Baccalaureate)

**Date Entered:** July 2008

**Category:** Upper secondary program

**Credential Actual Name:** 

Bachiller/Bachillerato (en) xx

**Credential Alternate Actual Name(s):** 

Bachiller/Bachillerato Académico Bachiller/Bachillerato Comercial Bachiller/Bachillerato Industrial Bachiller/Bachillerato Pedagógico

Bachiller/Bachillerato en Promoción Social Bachiller/Bachillerato en Ciencias Naturales Bachiller/Bachillerato con Profundización en

Educación

Maestro/a, Maestro/a Bachiller, Maestro/a Superior, Normalista Superior (prior to

mid-1990s)

Etc.

**Credential English Name:** 

Baccalaureate in xx / xx Baccalaureate

**Credential Alternate English Name(s):** 

Academic Baccalaureate
Commercial Baccalaureate
Industrial Baccalaureate
Pedagogical Baccalaureate
Baccalaureate in Social Service
Baccalaureate in Natural Sciences

Baccalaureate with a Focus in Education

Baccalaureate in Teacher Education (prior to the mid-1990s)

Etc.

Note: For a more detailed listing of *bachiller(ato)* types, please refer to the subsection on program types.

#### **Time Period Credential Offered:** Current

# **Issuing Body:**

Baccalaureate diplomas are issued by individual schools but in the name of the republic. Schools providing secondary education are usually called *colegios*, *liceos*, *gimnasios*, *institutos*, or *centros educativos*.

# **Admission Requirements:**

Successful completion of Grade 9 (i.e. lower secondary education).

# **Program Description:**

The title of *bachiller* is awarded to Colombian students upon completion of upper secondary studies. Upper secondary education in Colombia is not compulsory and covers grades 10 and 11. Typically this level of education is referred to as *educación media* or *educación media vocacional*. The use of the word *vocacional* (vocational) does not mean that the program provides occupational or technical training but rather that it allows students to specialize in either an academic or a more professionally-oriented area.

The actual program of study is commonly referred to as *bachillerato* (literally the baccalaureate),

and the name of the credential or the title that students receive upon graduation from Grade 11 is *bachiller*. The term *bachiller* is also used in reference to the person holding the title.

# Examples of alternative and previously used names for upper secondary education in Colombia

Spanish term	English translation
Educación* media** Educación media académica Educación media diversificada Educación media vocacional Educación secundaria vocacional Educación media – ciclo vocacional Educación secundaria – ciclo vocacional Ciclo segundo (de secundaria) Ciclo vocacional (de secundaria) Bachillerato superior Bachillerato diversificado	Upper secondary education Academic upper secondary education Diversified upper secondary education Vocational upper secondary education Vocational secondary education Upper secondary education – vocational cycle Secondary education – vocational cycle Second cycle (of secondary school) Vocational cycle (of secondary school) Higher baccalaureate University baccalaureate Diversified baccalaureate

<sup>\*</sup> The terms educación (education) and enseñanza (instruction) are often used interchangeably.

# **Provides Access to in the Home Country:**

- Employment
- Admission to postsecondary institutions: All types of *bachiller* (described in greater detail below) entitle students to enter any program at an institution of higher education, provided that they satisfy the requirements set by the institution and obtain a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*).

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia."

- Academic baccalaureate no comparison given. (Online database, 2008)
- Technical baccalaureate comparable to the level of an Australian TAFE Certificate (Stream 3200). (Country education profile, 1993)

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

- Academic baccalaureate comparable to GCSE (grades A\*-C) / Credit Standard Grade standard, on a subject-for-subject basis, with the exception of English language.
- Technical baccalaureate comparable to VGCSE (grades A\*-C) / BTEC First Diploma / SQA Intermediate 2 standard.

<sup>\*\*</sup> Media literally means "middle," but it was translated here as "upper secondary" for greater clarity.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• Any type of baccalaureate – comparable to completion of high school.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• Any type of baccalaureate – may be considered for freshman admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Any type of baccalaureate – comparable to a Québec Secondary School Diploma.

**WES-Canada** – World Education Services - Canada, "World Education Profiles: Colombia." Online database (2008).

• Any type of baccalaureate – comparable to an Ontario Secondary School Diploma.

# **IQAS** Recommendations for:

The title of *Bachiller* (baccalaureate) generally compares to the completion of Grade 12. (with specialized training in xx)

The note in parenthesis should be added only if the program incorporated training in a specialized field.

# **Course Equivalencies:**

30-level (Grade 12) courses.

To award individual science courses at Grade 12 level, each course should have been taken for approximately 4 hours a week in both years of upper secondary studies.

# **IQAS Rationale:**

- Length of program: 2 years (i.e. Grades 10 and 11).
- <u>Hours of instruction</u>: Colombian students receive 40 weeks of instruction in the course of a school year, which is further subdivided into two semesters of equal length. Upper secondary students must receive a minimum of 30 full hours of instruction per week, amounting to a minimum of 1,200 full hours per school year. In practice, students generally receive 35-40 hours of weekly instruction.

- <u>Language of instruction</u>: In most Colombian secondary schools, the language of instruction is Spanish. International schools offer bilingual education. Indigenous groups also have the right to receive education in Spanish and in their mother tongue within the territories they have traditionally inhabited.
- <u>Program types</u>: Because of the specialized nature of upper secondary education in Colombia, traditionally the *bachillerato* programs have been described in terms of their type (*tipo*), modality (*modalidad*), specialty (*especialidad* or *opción*), or area (*área*). Over the years, the actual baccalaureate streams have changed little, but during different time periods, the programs were officially grouped in different ways. In practice, there was great overlap in terms of the time periods and the nomenclature.

#### Types of bachilleratos (i.e. baccalaureate programs) offered during different time periods

# a) Starting in 1994

Spanish designation	English translation
Bachillerato académico Bachillerato (in a specialization)	Academic baccalaureate Baccalaureate (in a specialization)
Bachillerato (ili a specialization)	Baccaraureate (iii a specialization)

# b) Officially starting in 1978\*

Spanish designation	English translation
Bachillerato en ciencias	Baccalaureate in sciences
Ciencias matemáticas	Mathematical sciences
Ciencias naturales	Natural sciences
Ciencias humanas	Human sciences
Bachillerato en tecnología	Baccalaureate in technology
Pedagógico	Pedagogy
Industrial	Industrial
Agropecuaria	General agriculture
Comercial	Commercial
Salud y nutrición	Health and nutrition
Educación física y recreación	Physical education and recreation
Promoción de la comunidad	Community development
Bachillerato en arte	Baccalaureate in arts
Bellas artes	Fine arts
Artes aplicadas	Applied arts

<sup>\*</sup> These reforms to the *bachillerato* programs were legislated by Decree 1419 in July 1978, but they were never uniformly implemented by Colombian schools and the old nomenclature largely prevailed.

# c) Starting in 1974

Spanish designation	English translation
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Bachillerato académico or	Academic baccalaureate or
Bachillerato clásico*	Classical baccalaureate
Bachillerato comercial	Commercial baccalaureate
Bachillerato industrial	Industrial baccalaureate
Bachillerato agropecuario	Agricultural baccalaureate
Bachillerato en promoción social	Baccalaureate in social service
Bachillerato pedagógico or	Pedagogical baccalaureate or
Formación normalista	Teacher training

<sup>\*</sup> The only difference between the academic and the classical program was that the latter would in most cases offer Latin as a second language.

# d) Prior to 1974

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<sup>\*</sup>Maestro denotes a male teacher while maestra is the feminine form of the word.

In 1994, the new General Law of Education divided baccalaureate programs into those with an academic orientation (*carácter académico*) and those with a technical orientation (*carácter técnico*).

Academic orientation: academic core + academic specialization

The purely academic stream offers students general academic education plus the option to specialize in a specific academic area such as natural sciences, social sciences, humanities, arts, or foreign languages. Those who complete the program graduate with the title of *bachiller académico* (academic baccalaureate) and generally enter higher education. The academic baccalaureate has been by far the most popular one among Colombian students. It is also the type of baccalaureate program that private schools tend to offer.

- <u>Technical orientation</u>: academic core + professionally-oriented specialization

The technical stream aims to prepare students for entry into higher education as well as for employment in a specific field. The numerous areas students can specialize in include agriculture, commerce, finances, administration, ecology, industry, computing, mining, health, recreation, tourism, sports, and others as determined by regional and labour market demands. Graduates from all modalities of the technical stream receive the title of *bachiller* in their chosen specialization.

At the upper secondary level, a school will normally offer only one or two kinds of bachillerato. The National Institutes of Diversified Middle Education (Institutos Nacionales de Educación Media Diversificada or INEM), frequently described as comprehensive secondary schools, are an exception since they have been designed to provide various types of academically- and technically-oriented bachilleratos. The escuelas normales superiores (teacher training schools; literally higher normal schools) also offer secondary education with a focus on academic subjects and teacher training. Another type of institutions authorized to provide secondary education are military schools (colegios militares), although the military secondary school diploma (bachiller militar or bachiller académico con orientación militar) is not very common.

• <u>Curriculum</u>: Before the General Law of Education came into effect in 1994, the curriculum for upper secondary education was organized around the major subject areas outlined below. Presently, the core of the curriculum consists of the so called obligatory and fundamental areas (*áreas obligatorias y fundamentales*). The current legislation does not dictate the exact distribution of hours, which is determined by individual schools, but it does stipulate that the subjects taught as part of the obligatory and fundamental areas must account for a minimum of 80% of the total instructional hours. Options within the obligatory areas and possible additional subjects are chosen and developed by individual schools.

# Core areas of upper secondary school curricula

Prior to 1994	After 1994	
Core areas:	Obligatory and fundamental areas (min. 80%):	
<ul> <li>Spanish language</li> <li>Mathematics</li> <li>Social studies</li> <li>Natural sciences</li> <li>Aesthetic and manual education</li> <li>Religion</li> <li>Physical education</li> <li>Technology studies</li> <li>Foreign language</li> <li>Philosophy</li> </ul>	<ul> <li>Humanities, Spanish language, and foreign languages</li> <li>Mathematics</li> <li>Social sciences, history, geography, political constitution and democracy</li> <li>Natural sciences and environmental education</li> <li>Artistic and cultural education</li> <li>Religious education*</li> <li>Physical education, recreation, and sports</li> <li>Education in ethics and human values</li> <li>Technology and computing</li> <li>Philosophy</li> <li>Economic and political sciences</li> </ul>	
Specialization	Specialization (max. 20%)	

<sup>\*</sup> Religious education is offered by all educational establishments, but as of 1991, participation in this subject in public schools is not mandatory.

Sample curriculum for *bachillerato académico* with hourly distribution (Colegio Nueva York, Bogotá, 2007) (Source: http://www.colegionuevayork.edu.co/proyecto\_educativo/intensidad\_horaria\_cny.doc)

Subject	Weekly hours of instruction
Spanish language and orthography	5
English	7
Mathematics	4
Geometry (1 <sup>st</sup> semester); Statistics and probabilities (2 <sup>nd</sup> semester)	2
Social sciences	1
Chemistry	4
Physics	4
Art	1
Religious education	1
Physical education, recreation, and sports	2
Ethics and values	1
Technology and computing	1
Philosophy; Economic and political sciences	3
Professional orientation	1
Specialization	3
Total hours	40

• Exit credential: Successful completion of a *bachillerato* leads to the title of *bachiller* in a specific area. For example, a student graduating from the program of *bachillerato académico* would be awarded the title of *bachiller académico*. On the actual certificate, the name of the credential can be preceded by phrases like the following:

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título de... (title of...),
diploma de... (diploma of...), or
grado de... (degree of...).
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The title of bachiller can also be acquired by passing an official validation examination (Examen de Validación del Bachillerato Académico) administered by the Colombian Institute for the Promotion of Higher Education (Instituto Colombiano para el Fomento de la Educación Superior or ICFES). Prior to the 1990s, holders of a certificate of occupational aptitude (certificado de aptitud ocupacional) or CAO, formerly referred to as certificate of professional aptitude (certificado de aptitud profesional) or CAP, who accumulated 2 years of work experience could also obtain a Certificate of Equivalence of the Secondary School Diploma (Certificado de Equivalencia del Grado de Bachiller) issued by ICFES. Although this certificate did not have equal academic value as a regular bachiller diploma or a bachiller diploma obtained through validation, it gave its holders access to education at the intermediate/professional technical and technological levels. Also, even though it is not a widespread practice, some upper secondary schools may allow their students to earn certain vocational designations (i.e. CAOs) at the same time as the students are working towards their bachiller title.

Upon successful completion of their studies, upper secondary graduates receive a diploma,

usually accompanied by a graduation record and a transcript, issued by the school where they completed their *bachillerato*.

# **Conclusion**

The title of *bachiller*, obtained upon graduation from a *bachillerato* program, represents a total of 12 years of schooling (10 years of compulsory preschool, elementary, and lower secondary education + 2 years of non-compulsory upper secondary education). Admission to the program is based on successful completion of Grade 9. All types of *bachiller* give students access to postsecondary studies in the field of study of their choice. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *bachiller* to completion of Grade 12.

# **Grading:**

As a general rule, Colombian students receive four quarterly report cards and one final evaluation report in the course of a school year. It is the responsibility of each school to ensure that 95% of all students pass to the next grade. The regulations for passing a grade are typically as follows:

- Students must obtain an overall minimum final average of 6.0 (the lowest passing grade) in order to be promoted to the next grade level.
- Students who fail only one subject may still be promoted to the next grade if their grade point average is at least 7.0.
- Students who fail one or two subjects and have a low overall average are required to take make-up exams.
- Students must repeat a year if they obtain a failing grade in three or more subjects or if they are absent without justification 25% of the class time in the course of a school year.

Several grading scales have been used in Colombia in recent years. The terminology for evaluation is set by the Ministry of National Education, but the exact criteria are determined by individual schools. In other words, the point and percentage equivalents in the figures below should be viewed as approximate values.

Grading scales for upper secondary education

a) 2002 – present

Spanish term	English translation	Approximate point and percentage equivalent	Comments	IQAS comparison
Excelente (E)	Excellent	9.0 – 10.0 or 90% – 100%	Maximum grade	87% – 100%
Sobresaliente (S)	Outstanding	8.0 – 8.9 or 80% – 89%		76% – 86%
Aceptable (A)	Aggantabla	7.0 – 7.9 or 70% – 79%		63% – 75%
Асеріавіе (А)	Acceptable	6.0 – 6.9 or 60% – 69%	Minimum pass	50% - 62%
Insuficiente (I)	Insufficient	4.0 – 5.9 or 40% – 59%	Egiling grade	Fail
Deficiente (D)	Deficient	0.0 - 3.9 or $0% - 39%$	Failing grade	Fäll

# b) 1994 – 2002

Spanish term	English translation	Approximate point and percentage equivalent	Comments	IQAS comparison
Excelente (E)	Excellent	9.0 – 10.0 or 90% – 100%	Maximum grade	87% – 100%
Excelente (E)	Excereme (E) Excerient	8.0 – 8.9 or 80% – 89%		76% – 86%
Dian/Buono (D)	Good	7.0 - 7.9 or $70% - 79%$		63% – 75%
Bien/Bueno (B)	Good	6.0 – 6.9 or 60% – 69%	Minimum pass	50% - 62%
Insuficiente (I)	Insufficient	0.0 - 5.9 or $0% - 59%$	Failing grade	Fail

# c) 1974 – 1994

Grade	Alternative point equivalent*	Comments	IQAS comparison
9.5 – 10.0	95 – 100	Maximum grade	87% – 100%
8.5 - 9.4	85 – 94	Indicates excellent performance	76% – 86%
7.5 - 8.4	75 – 84	Indicates good performance	66% – 75%
6.0 - 7.4	60 – 74	Minimum pass	50% - 65%
0.0 - 5.9	0 – 59	Failing grade	Fail

 $<sup>^{*}</sup>$  The 100-point scale gained popularity after 1978, but it was never universally adopted by all schools.

# d) 1934 – 1974

Grade	Spanish term	English translation	Comments	IQAS comparison
5	Muy bien	Very good	Maximum grade	88% – 100%
4.0 - 4.9	Bien	Good		70% – 87%
3.0 - 3.9	Regular	Regular	Minimum pass	50% - 69%
2.0 - 2.9	Mal	Bad	Failing grade	Fail
0.0 - 1.9	Muy mal	Very bad	rannig grade	rall

# COLOMBIA (República de Colombia)

# Técnico Profesional (Professional Technician) and Técnico Profesional Especialista (Specialist Professional Technician)

**Date Entered:** July 2008

**Category:** Technical postsecondary program

Credential Actual Name: Credential English Name:

Técnico Profesional en xx Professional Technician in xx

Técnico Profesional Especialista en xx Specialist Professional Technician in xx

Credential Alternate Actual Name(s): Credential Alternate English Name(s):

Regular programs:

Técnico Profesional en Diseño de Máquinas

Técnico Profesional en Comercio

Internacional

Técnico Profesional en Diseño Gráfico

Etc.

Professional Technician in Machine Design Professional Technician in International

Commerce

Professional Technician in Graphic Design

Etc.

Técnico Profesional Intermedio en xx (prior to

1992)

Intermediate Professional Technician in xx

Similar older programs (prior to the 1980s):

Perito en xx

Experto en xx

Experto en xx

Técnico en xx

Technician in xx

Specialization programs (as of 1992):

Especialista Técnico Profesional en Gestión

Pública

Técnico Profesional Especializado en Gestión

Pública

Técnico Profesional Especialista en Gestión

Pública

Etc.

Specialist Professional Technician in Public Management

**Time Period Credential Offered:** Current (1992 – present)

**Issuing Body:** 

Professional technician and specialist professional technician diplomas are issued by

individual educational institutions, which have full authority over their format and content.

This type of higher technical and vocational programs is delivered predominantly by professional technical institutions (*instituciones técnicas profesionales*), called intermediate professional institutions (*instituciones intermedias profesionales*) prior to 1992. Professional technician programs may also be offered by training centres administered by the National Apprenticeship Service (Servicio Nacional de Aprendizaje) or SENA as well as by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute).

# **Admission Requirements:**

In order to be admitted to a professional technical program, prospective students must have obtained the title of *bachiller* and a specific number of points on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Many postsecondary institutions also require applicants to pass an additional entrance exam and a personal interview.

Students who have successfully completed lower secondary education (i.e. Grade 9), are at least 16 years old, have obtained a certificate of occupational/professional aptitude (*Certificado de Aptitud Ocupacional/Profesional*), and have worked in their area of specialization for a minimum of 2 years may also be admitted to professional technical programs.

Students seeking admission to professional technical specialization programs must possess the title of professional technician in a related area of study.

# **Program Description:**

Professional technical education (*formación técnica profesional*) leads to the title of professional technician (*técnico profesional*) in a specific area. Prior to 1992, this level of education was referred to as intermediate professional education (*formación intermedia profesional*) and concluded with the title of intermediate professional technician (*técnico profesional intermedio*). Programs at this level typically involve 5-6 semesters of full-time study and aim to provide students with the technical and vocational training necessary to successfully exercise a specific occupation. The focus of these programs tends to be on engineering technology, management, communication, and information technology. No programs of this kind are offered in the strictly humanistic areas.

Professional technical specialization (*especialización técnica profesional*) programs, which follow the award of the professional technician title, have been offered since 1992. Currently,

these programs allow students to explore a specific area of their field of study in greater detail. Specializations at this level are particularly common in finance, management, agriculture, and technology-related professions. Most of these programs require an additional 2-3 semesters of full-time study.

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered postsecodnary institutions and programs.

# **Provides Access to in the Home Country:**

- Employment
- Admission to further studies: Students who graduate as professional technicians can either
  continue their studies at the technological level or complete a postsecondary technical
  specialization in their field.

# **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- *Técnico profesional intermedio* or *técnico profesional* (2 years of full-time postsecondary study) comparable to an AQF Certificate IV.
- *Técnico profesional especialista* no comparison given.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

- Técnico profesional intermedio or técnico profesional (2.5 years of full-time postsecondary study) – comparable to an Advanced Vocational Certificate of Education (AVCE) / BTEC National Diploma standard.
- *Técnico profesional especialista* no comparison given.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- *Técnico profesional intermedio* or *técnico profesional* (2-2.5 years of full-time postsecondary study) comparable to a maximum 60 semester credits of lower division coursework completed as part of an Associate of Arts/Science program.
- *Técnico profesional especialista* no comparison given.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• *Técnico profesional intermedio* or *técnico profesional* (2- 2.5 years of full-time postsecondary study) – may be considered for undergraduate admission with up to 30

semester hours of transfer credit for each year, determined through a course-by-course analysis.

• *Técnico profesional especialista* – no comparison given.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

- *Técnico profesional intermedio* or *técnico profesional* (less than 3 years of full-time postsecondary study) comparable to 2 years of postsecondary technical studies
- *Técnico profesional intermedio* or *técnico profesional* (3 years of full-time postsecondary study) comparable to a diploma of postsecondary technical studies.
- *Técnico profesional especialista* no comparison given.

# **IQAS Recommendations for:**

- The title of *Técnico Profesional* (professional technician) generally compares to the completion of a postsecondary Certificate with a focus in xx.
- The title of *Técnico Profesional Especialista* (specialist professional technician) generally compares to the completion of one\* additional year of technical postsecondary study with a greater specialization in the field.

# **Course Equivalencies:**

30-level (Grade 12) courses if no secondary documents are available.

# **IQAS** Rationale:

- <u>Length of program</u>: Typically 5-6 semesters of full-time study for the professional technical programs and 2-3 semesters for the subsequent specialization programs. Some professional technical programs may be slightly shorter (e.g. 4 semesters).
- Language of instruction: Spanish.
- <u>Program types</u>: The majority of professional technical programs are associated with practical professions in engineering technology, management, communication, and information technology.
- <u>Curriculum</u>: The curriculum is not academic in nature and does not involve any research. Rather, it focuses on hands-on skills and very specialized theoretical knowledge.

<sup>\*</sup> The number of years should reflect the actual full-time equivalent duration of the program.

# Sample curriculum for the program leading to the title of professional technician in administrative processes (Corporación Unificada Nacional de Educación Superior, 2008)

(Source: http://www.cun.edu.co/images/pdf/malla%20empresas%202007.pdf)

Semester I:	Semester II:					
<ul> <li>Business intelligence and personal life plan</li> <li>Text comprehension and production</li> <li>Computing tools</li> <li>Basic mathematics</li> <li>Introduction to research training</li> <li>Fundamentals of economics</li> <li>General administration</li> <li>General accountancy</li> </ul> Semester III:	<ul> <li>Development of entrepreneurship and managerial qualities</li> <li>Civic ethics and education</li> <li>Basic English</li> <li>Applied systems</li> <li>Descriptive statistics</li> <li>Organization and methods of cost accounting</li> <li>Commercial and taxation legislation</li> </ul> Semester IV:					
<ul> <li>Business plan, leadership, and business dynamics</li> <li>Financial mathematics</li> <li>Fundamentals of marketing</li> <li>Strategic planning</li> <li>Production management</li> <li>Budget</li> <li>Elective course</li> </ul>	<ul> <li>Business plan and business mentality</li> <li>Human resources management</li> <li>Fundamentals of international commerce</li> <li>Occupational legislation</li> <li>Elective course (technical focus)</li> <li>Business practicum</li> <li>Final project (creation of an enterprise / research seminar / research assistantship or internship / written thesis)</li> </ul>					
Total number of a	Total number of academic credits: 68					

• <u>Program structure</u>: Presently, all professional technician programs should be structured according to the model of educational cycles (*ciclos propedéuticos*).

Prior to 2002, the title of professional technician was viewed predominantly as a terminal qualification leading to employment (with the exception of specialization programs). There was little connection between technical, technological, and undergraduate degree programs, and the transfer of credit practices between different institution types were not clearly defined, causing difficulties for students who wished to continue their education at a higher level without having to repeat several courses. In 2002, the model of the educational cycles (*ciclos propedéuticos*) was introduced as a way of restructuring higher education in order to facilitate student mobility and make the system more flexible, sequential, and permeable. The model consists of three cycles that focus on the acquisition of specific competencies. The completion of each cycle allows the student to obtain a title and either seek employment or continue with the next cycle leading to a higher qualification. In this way, the model of educational cycles combines diploma-level

postsecondary education with degree-level undergraduate education.

- The first cycle corresponds to professional technical studies and concludes with the title of técnico profesional.
- The second cycle corresponds to technological education and leads to the title of tecnólogo.
- The third cycle corresponds to university-level studies and allows students to earn an undergraduate degree.
- Exit credential: Successful completion of a professional technical program or a professional technical specialization leads to the title of *técnico profesional* or *técnico profesional especialista* respectively. In each case, the specific area of study will be indicated as well. On the actual diploma certificate, the name of the credential can be preceded by phrases like the following:

```
título de... (title of...),diploma de... (diploma of...), or
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- grado de... (degree of...).

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

# Conclusion

The title of *técnico profesional*, obtained upon graduation from a higher technical and vocational program, normally represents 2.5-3 years of full-time postsecondary studies. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a specific number of points on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*). Alternatively, students who have successfully completed lower secondary education (i.e. Grade 9), are at least 16 years old, have obtained a certificate of occupational/professional aptitude (*Certificado de Aptitud Ocupacional/ Profesional*), and have worked in their area of specialization for a minimum of 2 years may also be admitted to professional technical programs. Many postsecondary institutions require applicants to pass an additional entrance exam and a personal interview.

The title of *técnico profesional* gives students access to employment as well as to further postsecondary studies (professional technical specialization programs or technological programs in a related area of study). Students seeking admission to technological programs in a related area of study will receive transfer of credit for their professional technical studies. Completion of a subsequent professional technical specialization program (*especialización técnica profesional*) represents an additional 1-1.5 years of full-time postsecondary study.

Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *técnico profesional* to the completion of a postsecondary

Certificate with a focus in xx. The title of *técnico profesional especialista* is comparable to the completion of one additional year (or more, depending on the actual duration of the program) of technical postsecondary study with a greater specialization in the field.

# **Grading:**

• <u>Grading scale</u>: The grading scale for all types of postsecondary education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

Graume scare for busisecultual v education	Grading	scale for	postsecondary	education
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Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the professional technical level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of credits required for graduation varies between fields of study and institutions. It is not uncommon for a specific program to have different durations and credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from a professional technical program was 1400. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

# COLOMBIA (República de Colombia)

# Tecnólogo/a (Technologist) and Tecnólogo/a Especialista (Specialist Technologist)

**Date Entered:** July 2008

**Category:** Technical postsecondary program

# **Credential Actual Name:**

Tecnólogo/a en xx Tecnólogo/a Especialista en xx

# **Credential Alternate Actual Name(s):**

# Regular programs:

Tecnólogo/a en Ingeniería Industrial Tecnólogo/a en Informática y Telecomunicaciones Tecnólogo/a en Administración de Empresas Etc.

# **Specialization programs:**

Especialista Tecnológico en Mercadeo Tecnólogo Especializado en Mercadeo Tecnólogo Especialista en Mercadeo Etc.

# Time Period Credential Offered: Current

# **Issuing Body:**

Technologist and specialist technologist diplomas are issued by individual educational institutions, which have full authority over their format and content.

These types of higher technical and vocational programs are delivered predominantly by technological institutions (*instituciones tecnológicas*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Technological programs may also be offered by training centres administered by the <u>National Apprenticeship Service</u> (*Servicio Nacional de Aprendizaje*) or SENA.

# **Credential English Name:**

Technologist in xx / xx Technologist Specialist Technologist in xx

# **Credential Alternate English Name(s):**

Industrial Engineering Technologist
Computer Technology and
Telecommunications Technologist
Business Administration Technologist
Etc.

Specialist Technologist in Marketing

# **Admission Requirements:**

In order to be admitted to a technological program, prospective students must have obtained the title of *bachiller* and a specific number of points on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Alternatively, students with the title of professional technician (*técnico profesional*) in a related field can also seek admission to technological programs and qualify for transfer of credit. Many postsecondary institutions require applicants to pass an additional entrance exam and a personal interview.

Students seeking admission to technological specialization programs must possess the title of technologist in a related area of study.

# **Program Description:**

Technological education (formación tecnológica) programs lead to the title of technologist (tecnólogo) in a specific area. For students admitted to technological programs based on the title of bachiller, the programs typically last 6 semesters of full-time study although some can have a duration of up to 8 semesters. After the introduction of educational cycles in 2002 (see below), graduates from related professional technical programs require an additional 2-3 semesters of full-time study to obtain the title of tecnólogo. Technological programs aim to provide students with the technical and vocational training necessary to successfully exercise a specific occupation. They tend to focus on business, management, engineering technology, and communications. No programs of this kind are offered in the strictly humanistic areas.

Technological specialization (*especialización tecnológica*) programs allow students to further explore a particular aspect of their field of study, but in most cases they do not involve any research. Specializations at this level pertain primarily to the areas of business management, commerce, finance, technology, and communications. Most of these programs require an additional 2-4 semesters of full-time study.

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered postsecondary institutions and programs.

# **Provides Access to in the Home Country:**

- Employment
- Admission to further studies: Students who graduate as technologists can either continue
  their studies at the undergraduate degree level or complete a postsecondary technological
  specialization in their field.

Note: The combination of a technologist title plus a technological specialization is regarded in

Colombia as comparable to an undergraduate degree.

# **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- *Tecnólogo* (3 years of full-time postsecondary study) comparable to an AQF Diploma.
- *Tecnólogo especialista* (additional 2 years of full-time postsecondary study) comparable to an AQF Diploma in the first instance.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

- *Tecnólogo* no comparison given.
- *Tecnólogo especialista* (3 years of full-time postsecondary study) comparable to BTEC / SQA Higher National Diploma (HND) standard / Foundation degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- Tecnólogo (3-3.5 years of full-time postsecondary study) comparable to a maximum 105 semester credits of lower division coursework completed as part of an Associate of Science program.
- *Tecnólogo especialista* no comparison given.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

- *Tecnólogo* (2-3.5 years of full-time postsecondary study) may be considered for undergraduate admission with up to 30 semester hours of transfer credit for each year, determined through a course-by-course analysis.
- Tecnólogo especialista no comparison given.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

- *Tecnólogo* (3 years of full-time postsecondary study) comparable to a diploma of postsecondary technical studies.
- *Tecnólogo especialista* no comparison given.

# **IQAS** Recommendations for:

- The title of *Tecnólogo* (technologist) generally compares to the completion of a postsecondary Diploma with a focus in xx.
- The title of *Tecnólogo Especialista* (specialist technologist) generally compares to the completion of one\* additional year of technical postsecondary study with a greater specialization in the field.

\* The number of years should reflect the actual full-time equivalent duration of the program. **Course Equivalencies:** 

30-level (Grade 12) courses if no secondary documents are available.

# **IQAS** Rationale:

- <u>Length of program</u>: Typically 6 semesters of full-time study for the technological programs and 2-4 semesters for the subsequent specialization programs. Some technological programs may be slightly shorter or longer (e.g. 8 semesters). After the introduction of educational cycles in 2002, graduates from related professional technical programs require an additional 2-3 semesters of full-time study to obtain the title of *tecnólogo*.
- <u>Language of instruction</u>: Spanish.
- <u>Program types</u>: The majority of technological programs are associated with practical professions in business, management, engineering technology, and communications.
- <u>Curriculum</u>: The curriculum for technological programs has a stronger scientific and
  theoretical orientation than professional technical education. The subjects studied provide
  students with the skills to design, implement, and manage the processes that are part of
  their professions. The focus is on applied disciplines, which typically do not include the
  fine arts or humanities.

Sample curriculum for the program leading to the title of technologist in administrative management (Corporación Unificada Nacional de Educación Superior, 2008)

(Source: http://www.cun.edu.co/images/pdf/malla%20empresas%202007.pdf)

Semester I:	Semester II:
<ul> <li>Business intelligence and personal life plan</li> <li>Text comprehension and production</li> <li>Computing tools</li> <li>Basic mathematics</li> <li>Introduction to research training</li> <li>Fundamentals of economics</li> <li>General administration</li> <li>General accountancy</li> </ul>	<ul> <li>Development of entrepreneurship and managerial qualities</li> <li>Civic ethics and education</li> <li>Basic English</li> <li>Applied systems</li> <li>Descriptive statistics</li> <li>Organization and methods of cost accounting</li> <li>Commercial and taxation legislation</li> </ul>
Semester III:	Semester IV:
<ul> <li>Business plan, leadership, and business dynamics</li> </ul>	<ul><li>Business plan and business mentality</li><li>Human resources management</li></ul>
<ul> <li>Financial mathematics</li> </ul>	<ul> <li>Fundamentals of international commerce</li> </ul>
<ul> <li>Fundamentals of marketing</li> </ul>	<ul> <li>Occupational legislation</li> </ul>
<ul> <li>Strategic planning</li> </ul>	<ul> <li>Elective course (technical focus)</li> </ul>
<ul> <li>Production management</li> </ul>	<ul> <li>Business practicum</li> </ul>

<ul><li>Budget</li><li>Elective course</li></ul>	Final project (creation of an enterprise / research seminar / research assistantship or internship / written thesis)				
Semester V:	Semester VI:				
<ul> <li>International vision</li> <li>Technical English</li> <li>Linear algebra</li> <li>Microeconomics</li> <li>Salary management</li> <li>Project design and evaluation</li> <li>Administrative control</li> <li>Financial administration</li> </ul>	<ul> <li>Statistics for decision making</li> <li>Innovation and development</li> <li>Macroeconomics</li> <li>Market research</li> <li>Process management</li> <li>Financial analysis</li> <li>Elective course (technological focus)</li> <li>Final project (creation of an enterprise / research seminar / research assistantship or internship / written thesis)</li> </ul>				
Total number of academic credits: 102					

• <u>Program structure</u>: Presently, all technological programs should be structured according to the model of educational cycles (*ciclos propedéuticos*).

Prior to 2002, the title of technologist was viewed predominantly as a terminal qualification leading to employment (with the exception of specialization programs). There was little connection between technical, technological, and undergraduate degree programs, and the transfer of credit practices between different institution types were not clearly defined, causing difficulties for students who wished to continue their education at a higher level without having to repeat several courses. In 2002, the model of the educational cycles (*ciclos propedéuticos*) was introduced as a way of restructuring higher education in order to facilitate student mobility and make the system more flexible, sequential, and permeable. The model consists of three cycles that focus on the acquisition of specific competencies. The completion of each cycle allows the student to obtain a title and either seek employment or continue with the next cycle leading to a higher qualification. In this way, the model of educational cycles combines diploma-level postsecondary education with degree-level undergraduate education.

- The <u>first cycle</u> corresponds to professional technical studies and concludes with the title of *técnico profesional*. (In the sample curriculum above, the first cycle would end after semester IV.)
- The <u>second cycle</u> corresponds to technological education and leads to the title of tecnólogo. (In the sample curriculum above, the second cycle would end after semester VI.)
- The <u>third cycle</u> corresponds to university-level studies and allows students to earn an undergraduate degree.
- <u>Exit credential</u>: Successful completion of a technological program or a technological specialization leads to the title of *tecnólogo* or *tecnólogo especialista* respectively. In each

case, the specific area of study will be indicated as well. On the actual diploma certificate, the name of the credential can be preceded by phrases like the following:

```
título de... (title of...),
diploma de... (diploma of...), or
grado de... (degree of...).
```

Many of the Colombian education titles can also end in an *a* instead of an *o*, indicating that the recipient of the credential is female. For example, the feminine version of *tecnólogo* would be *tecnóloga*. Oftentimes, though, the masculine version of the title will be used even when it is being awarded a female.

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

#### Conclusion

The title of *tecnólogo*, obtained upon graduation from a higher technical and vocational program, normally represents 3 years of full-time postsecondary studies. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a specific number of points on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*). Alternatively, students with the title of professional technician (*técnico profesional*) in a related field can also seek admission to technological programs and qualify for transfer of credit. Many postsecondary institutions require applicants to pass an additional entrance exam and a personal interview.

The title of *tecnólogo* gives students access to employment as well as to further postsecondary studies (technological specialization programs or undergraduate degree programs in a related area of study). Students seeking admission to undergraduate degree programs in a related area of study will receive transfer of credit for their technological studies. Completion of a subsequent technological specialization program (*especialización tecnológica*) represents an additional 1-2 years of full-time postsecondary study. In Colombia, the combination of the title of technologist plus a technological specialization is regarded as comparable to an undergraduate degree.

Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *tecnólogo* to the completion of a postsecondary Diploma with a focus in xx. The title of *tecnólogo especialista* is comparable to the completion of one additional year (or more, depending on the actual duration of the program) of technical postsecondary study with a greater specialization in the field.

# **Grading:**

 Grading scale: The grading scale for all types of postsecondary education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

Grading scale for postsecondary education

Numerical grade	Description	IQAS comparison
4.60 - 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the technological level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of credits required for graduation varies between fields of study and institutions. It is not uncommon for a specific program to have different durations and credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from a technological program was 2100. Students enrolled in technological specialization programs had to complete an additional 900 ULAs to graduate. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

# COLOMBIA (República de Colombia)

# Normalista Superior (Teacher, preschool and elementary school levels)

**Date Entered:** July 2008

**Category:** Postsecondary teacher training program

# **Credential Actual Name:**

Normalista Superior(con Énfasis en xx)

# **Credential Alternate Actual Name(s):**

Normalista Superior con Énfasis en Ciencias Naturales y Educación Ambiental Normalista Superior con Énfasis en Matemáticas

Normalista Superior con Énfasis en Ciencias Sociales, Historia, Geografía, Constitución Política y Democracia

Normalista Superior con Énfasis en Educación Artística

Normalista Superior con Énfasis en Educación Etica y en Valores Humanos

Normalista Superior con Énfasis en Educación Física, Recreación y Deportes

Normalista Superior con Énfasis en Educación Religiosa

Normalista Superior con Énfasis en Humanidades, Lengua Castellana e Idiomas Extranjeros

Normalista Superior con Énfasis en Tecnología e Informática

# **Credential English Name:**

Teacher (for preschool and elementary school) (with Emphasis on xx)

# **Credential Alternate English Name(s):**

Teacher with Emphasis on Natural Sciences and Environmental Education

Teacher with Emphasis on

Mathematics

Teacher with Emphasis on Social Sciences, History, Geography, Political Constitution, and Democracy

Teacher with Emphasis on Artistic Education

Teacher with Emphasis on Education in Ethics and Human Values

Teacher with Emphasis on Physical Education, Recreation, and Sports

Teacher with Emphasis on Religious Education

Teacher with Emphasis on Humanities, Spanish Language, and Foreign Languages

Teacher with Emphasis on Technology and Computing

Time Period Credential Offered: Late 1990s – current

# **Issuing Body:**

Postsecondary teacher training diplomas are issued by individual schools but in the name of the republic. Schools providing this type of education are called *escuelas normales superiores*. There are 138 of these schools throughout Colombia. 128 of the schools are public and only 10 are private. Unlike institutions of higher education, these schools are spread uniformly throughout the country. In many rural and remote areas, they are the only institutions offering postsecondary education.

# **Admission Requirements:**

Completion of upper secondary education (i.e. Grade 11).

Most of the students entering the program will have completed a *bachiller con profundización en educación* (baccalaureate with a focus in education) at the same school and will require 4 semesters of additional study to obtain the title of *normalista superior*. These semesters are sometimes referred to as Grades 12 and 13. Holders of other types of *bachiller* can be admitted to the program too, but they will have to complete 6 semesters of study.

# **Program Description:**

In Colombia, the title of *normalista superior* (teacher) is the minimum requirement to become an instructor at the preschool and elementary school levels. Students receive the title upon graduation from the postsecondary diploma cycle in teacher education (*ciclo complementario*), a program established in the late 1990s and offered exclusively at teacher training schools (*escuelas normales superiores*). For students who were admitted to the program based on a *bachiller con profundización en educación*, the exit credential represents completion of a 2-year postsecondary program in teacher training. For students who were admitted to the program based on any other type of *bachiller*, the title represents completion of a 3-year postsecondary program in teacher training.

# **Provides Access to in the Home Country:**

- Employment as preschool or elementary school teacher.
- Admission to undergraduate studies with significant transfer of credit.
   (All escuelas normales superiores have transfer of credit agreements with selected higher education institutions. Students will typically receive credit for 3-4 semesters of undergraduate study in their area of specialization. It is common for these transfer students to complete their undergraduate studies in the evenings while they work during the daytime. Still, the number of students who continue with undergraduate studies after completing the postsecondary diploma cycle is minimal.)

# **Placement Recommendations:**

No comparisons suggested by other assessment agencies/resources.

# **IQAS** Recommendations for:

The title of *Normalista Superior* (teacher for preschool and elementary school levels) generally compares to the completion of a postsecondary Diploma with a focus in xx.

# **Course Equivalencies:**

30-level (Grade 12) courses if no secondary documents are available.

# **IQAS Rationale:**

- <u>Length of program</u>: 4 semesters after *bachiller con profundización en educación* (baccalaureate with a focus in education) or 6 semesters after any other type of *bachiller* (baccalaureate).
- <u>Language of instruction</u>: Spanish.
- <u>Curriculum</u>: All Colombian teacher training programs are structured around four core areas:
  - o pedagogical training,
  - o discipline-related training,
  - o scientific and research training, and
  - o training related to social obligations, ethics, and moral values associated with the teaching profession.

Each *escuela normal superior* develops the postsecondary diploma cycle in one of the following nine obligatory and fundamental areas associated with elementary education:

- humanities, Spanish language, and foreign languages,
- mathematics,
- social sciences, history, geography, political constitution and democracy,
- natural sciences and environmental education ,
- artistic and cultural education,
- religious education,
- physical education, recreation, and sports,
- education in ethics and human values,
- technology and computing.

Theoretical instruction is complemented by teaching practica (*prácticas pedagógicas*) and hands-on workshops (*talleres*), allowing students to practice applying the skills and knowledge they acquire.

# Sample curriculum for the postsecondary diploma cycle in teacher training in humanities and languages with weekly hours of instruction (Escuela Normal Superior de Bucaramanga, 2008)

(Source: <a href="http://www.normalbucaramanga.edu.co/">http://www.normalbucaramanga.edu.co/</a>)

Semesters I & II (Grade 12)	Semesters III & IV (Grade 13)			
Pedagogy (19 <sup>th</sup> – 20 <sup>th</sup> century) – 3 hrs	Pedagogy (20 <sup>th</sup> century – present) – 2 hrs			
Theory and curriculum design – 2 hrs	Theory and curriculum design – 4 hrs			
The child and the school – 4 hrs	Special educational needs – 4 hrs			
Teaching methods for mathe	matics – 4 hrs			
Teaching methods for social sciences – 4 hrs	Teaching methods for natural sciences – 4 hrs			
Colombian sign langua	ge – 1 hr			
Drama – 2 hrs	Children's literature – 3 hrs			
Teaching methods for English	language – 4 hrs			
Teaching methods for Spanish	language – 4 hrs			
Practicum: Pedagogical labo	oratory – 5 hrs			
Teaching methods for arts education (drawing and music) – 3 hrs	_			
Teaching methods for physical	education – 2 hrs			
Teaching methods for ethics – 2 h (only in semester I)	_			
Teaching methods for religious education – 2 h (only in semester II)	-			
-	Teaching methods for technology – 3 hrs			
Total: 40 hours of instruction per week				

• Exit credential: The academic title awarded to students who complete the postsecondary diploma cycle in teacher training is *normalista superior* (teacher). Often the title will also indicate an area of focus (énfasis); for example, Normalista Superior con Énfasis en Ciencias Naturales y Educación Ambiental (Teacher with Emphasis in Natural Sciences and Environmental Education).

The title of *normalista superior* has been in use in Colombia for a long time and has always entitled its holders to teach at the preschool and elementary school levels. However, prior to the late 1990s, the postsecondary diploma cycle in teacher education did not exist and the title of *normalista superior* was awarded upon completion of an upper secondary program in teacher education (*bachillerato pedagógico / formación normalista*).

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the diploma certificate, the title of *normalista superior* can be preceded by phrases like the following:

```
título de... (title of...),
diploma de... (diploma of...),
grado de... (degree of...).
```

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their

education.

- Examinations: Students enrolled in the last semester of the postsecondary diploma cycle in teacher education are required to take the national Examination of Quality of Higher Education (Examen de Calidad de la Educación Superior), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (Instituto Colombiano para el Fomento de la Educación Superior) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded the exit credential. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the teacher training school as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES tests became mandatory in 2003 and were first administered to students in the postsecondary diploma cycle in teacher education in 2006. The exam currently consists of 200 multiple-choice questions that focus on the basic competencies in the field. More information about ECAES is available on the ICFES website.
- <u>Professional registration</u>: In order to teach at a public institution, holders of a *normalista superior* title must first be inscribed in the *escalafón docente* (teachers' echelon). The current *escalafón*, introduced in 2002, consists of three grades, each further subdivided into four salary levels. Instructors are inscribed into the *escalafón* according to their level of education and are promoted based on their experience, performance, and further professional development. Instructors employed at private institutions do not have to be inscribed in the teachers' echelon.

# **Conclusion**

In Colombia, completion of the postsecondary diploma cycle in teacher training (*ciclo complementario*) represents a minimum of 2 years of full-time postsecondary study. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education). Most of the students entering the program will have completed a *bachiller con profundización en educación* (baccalaureate with a focus in education) at the same school and will require 4 semesters to complete the program and obtain the title of *normalista superior* (teacher). Holders of other types of *bachiller* can be admitted to the program too, but they will have to complete 6 semesters of study. The title of *normalista superior* gives students access to employment as preschool or elementary school teachers. It also entitles them to receive advanced placement when entering an undergraduate degree program in education (*licenciatura*) in the area of their specialization. Based on the above information, IQAS compares the title of *normalista superior* to the completion of a postsecondary diploma with a focus in xx.

# **Grading:**

The grading scales used by the *escuelas normales superiores* are usually the same as the ones used at the secondary level of education. Several scales have been used in Colombia in recent years. The terminology for evaluation is set by the Ministry of National Education, but the exact

criteria are determined by individual schools. In other words, the point and percentage equivalents in the figures below should be viewed as approximate values.

# Grading scales for the postsecondary diploma cycle in teacher training

# a) 2002 – present

Spanish term	English translation	Approximate point and percentage equivalent	Comments	IQAS comparison
Excelente (E)	Excellent	9.0 – 10.0 or 90% – 100%	Maximum grade	87% – 100%
Sobresaliente (S)	Outstanding	8.0 – 8.9 or 80% – 89%		76% – 86%
A contable (A)	A acomtoble	7.0 - 7.9 or $70% - 79%$		63% – 75%
Aceptable (A)	Acceptable	6.0 – 6.9 or 60% – 69%	Minimum pass	50% - 62%
Insuficiente (I)	Insufficient	4.0 – 5.9 or 40% – 59%	Egiling grade	Fail
Deficiente (D)	Deficient	0.0 - 3.9 or $0% - 39%$	Failing grade	ran

# b) 1994 – 2002

Spanish term	English translation	Approximate point and percentage equivalent	Comments	IQAS comparison
Excelente (E)	Excellent	9.0 – 10.0 or 90% – 100%	Maximum grade	87% – 100%
Excelente (E)	Execuent	8.0 – 8.9 or 80% – 89%		76% – 86%
Pion/Puono (P)	Good	7.0 – 7.9 or 70% – 79%		63% – 75%
Bien/Bueno (B) Good		6.0 – 6.9 or 60% – 69%	Minimum pass	50% - 62%
Insuficiente (I)	Insufficient	0.0 - 5.9 or $0% - 59%$	Failing grade	Fail

# COLOMBIA (República de Colombia)

# **Undergraduate degrees:** Professional'), Licenciado/a (Licentiate), Maestro/a ('Master'), and others

**Date Entered:** July 2008

Category: Undergraduate degree program

**Credential Actual Name:** 

Profesional en xx

Licenciado/a / Licenciatura en xx

Maestro/a en xx

Administrador(a) Público/a Administrador(a) de Empresas

Arquitecto/a

Contador(a) Público/a Trabajador Social

Músico Etc.

**Credential Alternate Actual Name(s):** 

Profesional en Relaciones Internacionales

Profesional en Finanzas

Profesional en Comercio Internacional

Licenciado/a / Licenciatura en Terapia Física

Maestro/a en Artes Plásticas Maestro/a en Bellas Artes Maestro/a en Textiles

Former credentials:

Diplomado/a en xx

Diplomado/a en Ciencias Políticas

Diplomado/a en Bellas Artes

Etc.

**Time Period Credential Offered:** Current

**Issuing Body:** 

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (universidades) but also by

**Credential English Name:** 

'Professional' in xx Licentiate in xx

'Master' in xx

Public Administrator

**Business Manager** 

Architect

**Public Accountant** 

Social Worker

Musician

Etc.

**Credential Alternate English Name(s):** 

'Professional' in International Relations

'Professional' in Finance

'Professional' in International Commerce

Licentiate in Physical Therapy

'Master' in Plastic Arts

'Master' in Fine Arts

'Master' in Textiles

Diploma Holder in xx

Diploma Holder in Political Sciences

Diploma Holder in Fine Arts

Etc.

university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In rare instances, undergraduate programs can also be offered by professional technical institutions (*instituciones técnicas profesionales*) and technological institutions (*instituciones tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

# **Admission Requirements:**

Admission requirements for this level of education include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. Alternatively, students with a title of *tecnólogo* in a related field can also seek admission to undergraduate degree programs and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

# **Program Description:**

Professional education (*formación profesional*) in Colombian terms is the equivalent of undergraduate degree education and, depending on the field of study, leads to a number of undergraduate titles such as 'professional' (*profesional*), licentiate (*licenciado*), 'master' (*maestro*), and others. For students admitted to undergraduate degree programs based on the title of *bachiller*, the programs typically last 8-10 semesters of full-time study. After the introduction of educational cycles in 2002 (see below), graduates from related technological programs require an additional 3-4 semesters of full-time study to obtain an undergraduate degree.

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

- Employment
- Admission to further studies: Holders of an undergraduate degree can seek admission to

graduate programs leading to the titles of specialist, master, or doctor.

# **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- Undergraduate degree (older programs requiring 3-3.5 years of full-time study) comparable to a maximum 105 semester credits of undergraduate coursework.
- Undergraduate degree (4-6 years of full-time study) comparable to a Bachelor Degree or a first professional degree in certain fields (e.g. medicine).

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

- Undergraduate degree (older programs requiring 3-3.5 years of full-time study) may be considered for undergraduate admission with up to 30 semester hours of transfer credit for each year, determined through a course-by-course analysis.
- Undergraduate degree (minimum 4 years of full-time study) may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Any undergraduate degree (4-5 years of full-time study) – comparable to a Bachelor Degree.

# **IQAS** Recommendations for:

An undergraduate degree (*Profesional*, *Licenciado/a*, *Maestro/a*, and others), representing a minimum of four years of full-time study, generally compares to the completion of a four-year

Bachelor's Degree with a focus in xx.

# **IQAS** Rationale:

• <u>Length of program</u>: Typically 8 to 10 semesters of full-time study. (After the introduction of educational cycles in 2002, graduates from related technological programs require an additional 3-4 semesters of study to obtain an undergraduate degree.)

In the 1980s and earlier, some undergraduate degree programs required only 3-3.5 years of full-time study. However, such programs were very rare and did not entitle graduates to further studies at the master's level.

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of credits required for graduation varies between fields of study and institutions. It is not uncommon for a specific program to have different durations and credit requirements at different institutions. Examples are shown below. Also, the duration of programs and number of credits can change from year to year. The most up-to-date information can be obtained directly from the institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

Duration of various undergraduate degree programs at different Colombian institutions in semesters and credits (Source: Institutional websites, November 2007)

Undergraduate degree program	Universidad Nacional de Colombia	Universidad de los Andes	Pontificia Universidad Javeriana	Universidad Colegio Mayor de Nuestra Señora del Rosario	Universidad Santo Tomás	Universidad Industrial de Santander
Accounting/ Public Accounting	10 sem	-	8-10 sem 160 cr	-	10 sem	-
Business Administration	10 sem	8 sem 137 cr	8-10 sem 160 cr	10 sem 208 cr	9 sem	-
Law	10 sem	10 sem 180 cr	10 sem 168 cr	10 sem 218 cr	10 sem 161 cr	10 sem 203 cr
Mechanical Engineering	10 sem	8 sem 137 cr	-	-	10 sem	10 sem 190 cr
Medicine*	12 sem	12 sem 240 cr	12 sem 268 cr + internship	12 sem 263 cr	-	12 sem 210 cr + internship
Dentistry	10 sem	-	8-10 sem 171 cr	-	-	-
Physiotherapy	8 sem 157 cr	-	-	10 sem 170 cr	-	10 sem 188 cr

<sup>\*</sup> The last two semesters of all programs in medicine consist of clinical internships.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: In addition to area-specific courses, undergraduate curricula include a broad range of academic subjects. Undergraduate degree programs are academically more challenging than technical or technological education and usually require students to complete a small research project (*trabajo de grado* or *proyecto de grado*) or a practicum (*práctica*) in the last semester of study.
- <u>Program structure</u>: Some undergraduate programs, especially if taught at university institutions or technological schools, are structured according to the model of educational cycles (*ciclos propedéuticos*).

Prior to 2002, there was little connection between technical, technological, and undergraduate degree programs, and the transfer of credit practices between different institution types were not clearly defined, causing difficulties for students who wished to continue their education at a higher level without having to repeat several courses. In 2002, the model of the educational cycles (*ciclos propedéuticos*) was introduced as a way of restructuring higher education in order to facilitate student mobility and make the system more flexible, sequential, and permeable. The model consists of three cycles that focus on the acquisition of specific competencies. The completion of each cycle allows the student to obtain a title and either seek employment or continue with the next cycle leading to a higher qualification. In this way, the model of educational cycles combines diploma-level postsecondary education with degree-level undergraduate education.

- The <u>first cycle</u> corresponds to professional technical studies and concludes with the title of *técnico profesional*.
- The <u>second cycle</u> corresponds to technological education and leads to the title of tecnólogo.
- The <u>third cycle</u> corresponds to university-level studies and allows students to earn an undergraduate degree.

However, the structure of educational cycles is appropriate only for applied disciplines and would be difficult to implement for areas like the humanities. This is why the traditional universities are not likely to structure their programs in this way.

• Exit credential: Even though an undergraduate degree in Colombia is normally referred to as a professional title (*título profesional*), the exact name of the degree can vary depending on the discipline studied. The four variations of Colombian undergraduate titles are summarized below. All of these degrees represent an equivalent credential and have the same academic and professional value.

# Colombian undergraduate degrees

Undergraduate degree in	Title awarded	Time period	Comments	
A specific profession	Specific professional title e.g. <i>Abogado</i> (Lawyer)	Used currently and in the past	This is the most popular format of Colombian undergraduate titles.	
A general field or discipline	Profesional en + general area of study  e.g. Profesional en Comercio Internacional ('Professional' in International Commerce)	Used from the early 1990s until present	If there is no specific name of profession associated with a particular field of study, the graduate will be granted the title of 'professional' (profesional) in the general area. Prior to the 1990s, the term licenciado was used instead of profesional for this	
	Licenciado en + general area of study  e.g. Licenciado en Terapia Física (Licentiate in Physical Therapy)	Used prior to the early 1990s	type of degrees.	
Education	Licenciado en + area of education  e.g. Licenciado en Educación Básica con Énfasis en Humanidades y Lengua Castellana (Licentiate in Basic Education with Focus on Humanities and Spanish Language)	Used currently and in the past	All undergraduate programs in education lead to the title of <i>licenciado</i> . Licentiates will often indicate an area of focus ( <i>énfasis</i> ) within a particular stream of education. Education students can also be granted a licentiate in a specific subject like mathematics or biology, representing teacher training in that particular subject.	
Arts	Maestro en + area of the arts  e.g. Maestro en Artes Plásticas ('Master' in Plastic Arts)	Used currently and in the past	Undergraduate program in the arts lead to the title of <i>maestro</i> . This title should not to be confused with the upper secondary credentials of <i>maestro</i> , <i>maestro bachiller</i> , or <i>maestro superior</i> . Another similar title is that of <i>magíster</i> obtained after completion of a master's program or <i>maestría</i> .	

Other undergraduate-level degrees and qualifications that were commonly used in the past are the designations of *diplomado*, *doctor*, and *egresado*.

## Colombian undergraduate-level titles and qualifications common in the past

Title or qualification awarded upon completion of	Title or qualification awarded	Comments
Some undergraduate degree programs in general disciplines*	Diplomado en + general area of study  e.g. Diplomado en Ciencias Políticas (Diploma Holder in Political Sciences)	The title of <i>diplomado</i> was used very rarely in the past and was granted only by some universities.
Some undergraduate degree programs especially in law, medicine, and dentistry	Doctor en + area of study  e.g. Doctor en Medicina (Doctor in Medicine)	Prior to the 1980s, any program leading to the title of <i>doctor</i> was in all likelihood an undergraduate degree. Currently, the title of <i>doctor</i> is granted upon completion of the highest level of graduate studies.
Coursework for undergraduate degree programs	Egresado en + area of study  e.g. Egresado en Finanzas (Graduate of Finance)	This qualification does not represent a full academic credential. Rather, it indicates that the student completed most of the program requirements and coursework but did not complete the final project or did not satisfy a minor requirement in order to be granted the full title. Particularly in the 1970s, diplomas of <i>egresado</i> were common as employers made little distinction between graduates with the full title and those with the incomplete credential.

<sup>\*</sup> Currently, the term *diplomado* is still in use, but it no longer refers to undergraduate degrees. It is a qualification obtained upon completion of short professional development courses or programs. Such programs are frequently offered by universities and have an approximate duration of 120 hours.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

- *título de...* (title of...),
- título profesional de... (professional title of...),
- diploma de... (diploma of...),
- grado de... (degree of...),
- grado profesional de... (professional degree of...).

Many of the Colombian education titles can also end in an *a* instead of an *o*, indicating that the recipient of the credential is female. For example, the feminine version of *licenciado* would be *licenciada*. In other instances, the *a* is added on, as is the case with the titles of *administrador* and *administradora*. Oftentimes, though, the masculine version of the title will be used even when it is being awarded a female.

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

Examinations: Most students enrolled in the last year of their undergraduate program must take the national Examination of Quality of Higher Education (Examen de Calidad de la Educación Superior), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (Instituto Colombiano para el Fomento de la Educación Superior) or ICFES. It is important to point out that individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education. The ECAES simply serves as a measure of quality assurance and state supervision over the higher education system. The primary objective of the tests is to assess the quality of programs rather than individuals. The ECAES was introduced for selected university programs in 2000 and became mandatory by 2003. The range of programs in which the examination was administered was gradually expanded to include 50 undergraduate and 5 other postsecondary programs by 2006. The content of the ECAES differs depending on the field of study, but overall, the exam focuses on the basic competencies in each profession and consists of approximately 220 multiple-choice questions. The exam is offered twice a year in all major cities. More information about ECAES is available on the ICFES website.

#### Conclusion

Any undergraduate degree from Colombia represents a minimum of 4-5 years of full-time postsecondary study. Admission to undergraduate degree programs is based on the title of *bachiller* in any specialization (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Alternatively, students with a title of *tecnólogo* in several applied disciplines may also be admitted to undergraduate degree programs in a related field and qualify for significant transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

An undergraduate degree in Colombia gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares an undergraduate title (*profesional*, *licenciado/a*, *maestro/a*, and others) from Colombia to the completion of a four-year Bachelor's Degree with a focus in xx.

## **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

#### Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. (See examples above.) All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

## COLOMBIA (República de Colombia)

# *Licenciado/a* (Licentiate)

**Credential English Name:** 

**Date Entered:** July 2008

**Credential Actual Name:** 

Category: Undergraduate degree program in education

Licenciado/a en xx Licentiate in xx Licenciatura en xx **Credential Alternate Actual Name(s): Credential Alternate English Name(s):** Licenciado/a / Licenciatura en Educación Licentiate in Basic Education with Emphasis Básica con Enfasis en Humanidades y on Humanities and Spanish Language Lengua Castellana Licenciado/a / Licenciatura en Educación Licentiate in Basic Education with Emphasis Básica con Enfasis en Ciencias Naturales y on Natural Sciences and Environmental Educación Ambiental Education Licenciado/a / Licenciatura en Matemáticas Licentiate in Mathematics Licenciado/a / Licenciatura en Inglés Licentiate in English Licenciado/a / Licenciatura en Educación Licentiate in Physical Education, Recreation Física, Recreación y Deportes and Sports Licenciado/a / Licenciatura en Pedagogía Licentiate in Early Childhood Education Infantil Licenciado/a / Licenciatura en (Educación) Licentiate in Preschool Education Preescolar Licenciado/a / Licenciatura en Educación Licentiate in Special Education Especial Licenciado/a / Licenciatura en Psicopedagogía Licentiate in Psychopedagogy with Emphasis con Enfasis en Asesoría Educativa on Educational Consulting Etc. Etc.

## Time Period Credential Offered: Current

Note: Prior to the 1990s, the term *licenciado/a* was used not only in reference to teaching degrees but also when referring to degrees in some non-teaching professions.

## **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate degree programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas* 

tecnológicas). In rare instances, undergraduate programs in education can also be offered by professional technical institutions (instituciones técnicas profesionales) and technological institutions (instituciones tecnológicas). In Spanish, the actual name of any one of the above institutions can include the words corporación (corporation), fundación (foundation), escuela (school), colegio or colegio mayor (college), politécnico (polytechnic), unidad (unit), or instituto (institute). Most universities and university institutions will have the word universidad or universitaria in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are faculdades (faculties), escuelas (schools or colleges), and departamentos (departments).

In 2004, there were 70 faculties of education (*facultades de educación*) within various postsecondary institutions, 45 of which were private and 25 public. The two universities that specialize in teacher training are the <u>Universidad Pedagógica Nacional</u> (National Pedagogical University) and the <u>Universidad Pedagógica y Tecnológica de Colombia</u> (Pedagogical and Technological University of Colombia), but only the former is dedicated exclusively to teacher training.

## **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). The vast majority of students entering undergraduate programs in education are admitted based on the title of *bachiller académico*. Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement.

After the reforms of the mid-1990s, students can also be admitted to undergraduate degree programs in education and qualify for significant transfer of credit after completing the postsecondary diploma cycle in teacher training (*ciclo complementario*) and obtaining the title of *normalista superior* (teacher for the preschool and elementary school levels). Still, the number of students who continue with undergraduate studies after completing the postsecondary diploma cycle is minimal. The structure of educational cycles that would allow graduates from related technological programs to transfer into undergraduate degree programs and receive advanced placement is not applicable to education programs either.

All applicants must generally pass an additional admission exam, a personal interview, and a test of pedagogical potential (*prueba de potencialidad pedagógica*) administered by the higher education institution.

## **Program Description:**

In Colombia, an undergraduate degree program in education is called *licenciatura* (licentiate), and the name of the credential or the title that students receive upon graduation is *licenciado* (licentiate, masculine form) or *licenciada* (licentiate, feminine form). The term *licenciado/a* is also used in reference to the person holding the title.

According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, currently there are nearly 600 undergraduate degree programs in education (*licenciaturas*) offered throughout Colombia. At the graduate level, there are several hundred specializations (*especializaciones*) in addition to 69 master's (*maestrías*) and 12 doctoral programs (*doctorados*) in education. Prior to mid-1990s, undergraduate degree programs in education typically lasted 8 semesters. Presently, they must have a minimum duration of 10 semesters.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration). Theoretically, an undergraduate degree in education entitles the holder to teach at any level, but many of the *licenciatura* programs are designed specifically to train secondary school teachers.
- <u>Admission to graduate studies</u>: Holders of an undergraduate degree in education can continue their studies at the graduate level. (Graduate specializations in particular are very common among education students.)

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

 Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard. **IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- *Licenciado en xx* / Licentiate in xx (4-5 years of full-time study) comparable to a Bachelor of Arts/Science degree.
- *Licenciado en (Ciencias de) Educación* / Licentiate in Education (Science) (4-5 years of full-time study) comparable to a Bachelor of Arts/Science/Education degree.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• Any undergraduate degree (minimum 4 years of full-time study) – may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Any undergraduate degree (4-5 years of full-time study) – comparable to a Bachelor Degree.

# **IQAS** Recommendations for:

The title of *Licenciado/a* (licentiate), representing a minimum of four years of full-time study, generally compares to the completion of a four-year Bachelor's Degree with a focus in xx and courses in education.

Note: If the program completed included a sufficient number of education courses, it may be considered generally comparable to the completion of a four-year Bachelor of Education Degree with a focus in xx.

## **IQAS** Rationale:

• <u>Length of program</u>: Prior to mid-1990s, undergraduate degree programs in education typically lasted 8 semesters. Presently, they must have a minimum duration of 10 semesters. Undergraduate evening programs and programs completed through distance education have a minimum duration of 12 semesters. As of the late 1990s, students admitted to an undergraduate program based on the title of *normalista superior* will typically receive credit for 3-4 semesters of undergraduate study in their area of specialization.

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in education can have different durations and credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in education tend to consist of a large core component, obligatory for all students in the program, and a small number of elective courses. All of the teacher training programs are structured around four core areas:
  - o pedagogical training,
  - o discipline-related training,
  - o scientific and research training, and
  - o training related to social obligations, ethics, and moral values associated with the teaching profession.

For all programs, theoretical instruction is complemented by a teaching practicum (*práctica pedagógica*), giving students the opportunity to acquire experience as teaching assistants and practicing teachers at different educational institutions. In the last year of study, students are usually required to complete a small research project (*trabajo de grado* or *proyecto de grado*) as well.

### Basic curricular structure of undergraduate programs in education

Time period	Areas of study	
Semesters I – III (or I – IV)*	<ul> <li>Oral and written communication</li> <li>Fundamentals of pedagogy and teaching</li> <li>History of education and pedagogy</li> <li>Education – society – values</li> <li>Introduction to scientific knowledge, philosophy, epistemology</li> <li>Fundamentals of research</li> <li>General psychology</li> <li>Pedagogical practica (only for some programs)</li> </ul>	
Semesters IV – VII (or V – VIII)*	<ul> <li>Specialization/disciplinary focus</li> <li>Teaching methodology associated with the discipline</li> <li>Curriculum and evaluation</li> <li>Research methodology</li> <li>Psychology of learning</li> <li>Computing and technology for teaching purposes</li> <li>Elective subjects</li> <li>Pedagogical practica (for most programs)</li> </ul>	
Semesters VIII – X (or IX – XII)*	<ul> <li>Politics and educational legislation</li> <li>Final project (in most cases related with the pedagogical practica)</li> <li>Pedagogical practica</li> </ul>	

\* The time period indicated in parenthesis applies to undergraduate programs in education completed as evening study or through distance education.

# Sample curriculum for a licentiate in basic education with emphasis on social sciences (Universidad Pedagógica Nacional, 2008) (Source: <a href="http://www.pedagogica.edu.co:8080/Esquemas/esquema552/Lic ciencias sociales.pdf">http://www.pedagogica.edu.co:8080/Esquemas/esquema552/Lic ciencias sociales.pdf</a>)

Semester	Course	Hours of instruction per week	Credits
	Introduction to social sciences	3	2
	History workshop	3	2
	Geography workshop	3	2
	Philosophy and epistemology of social sciences I	3	2
I	Colombian system of education	5	3
1	Spanish language I	4	2
	Foreign language I	4	2
	Physical education and culture I	3	2
	Elective course: Artistic education and culture I	3	2
	TOTAL	31	19
	Social sciences in Colombia	3	2
	Time, space, and society	3	2
	Philosophy and epistemology of social sciences II	3	2
	History and epistemology of pedagogy	5	3
II	Spanish language II	3	2
	Foreign language II	3	2
	Physical education and culture II	3	2
	Elective course: Artistic education and culture II	3	2
	TOTAL	26	17
	Spatial systems of the world	5	3
	Spatial systems of Colombia	5	3
	Theories and methods of social research and investigation	5	3
III	Socialization and learning	3	2
	Basic computing	3	2
	Foreign language III	4	2
	TOTAL	25	15
	Ancient societies	5	3
	Society and the environment	5	3
	Theories and methods of research in history I	3	2
137	Theories and methods of research in geography I	3	2
IV	Psychology and pedagogy of social sciences	5	3
	Foreign language IV	4	2
	Values and moral development	3	2
	TOTAL	28	17
V	Modern societies	5	3
V	Socio-economic development of Latin America	5	3
	Theories and methods of research in history II	3	2
	Theories and methods of research in geography II	3	2
	School curriculum and evaluation	3	2
	School organization, administration, and culture	3	2
	Applied computing	4	2

	TOTAL	26	16
	Contemporary societies	5	3
	Socio-economic development of Colombia	5	3
	Methods and techniques of research in education	4	2
VI	Teaching methodology – history	5	3
	Teaching methodology – geography	5	3
	Collective memory and construction of identity	3	2
	TOTAL	27	16
	Democracy, citizenship, and human rights	5	3
VII	Elective course	4	2
V 11	Pedagogical research/project/practicum	16	10
	TOTAL	25	15
	Contemporary world problems	5	3
	Pedagogical research/project/practicum	16	10
VIII	In-depth study seminar: Use and production of educational materials	3	2
	TOTAL	24	15
	Contemporary problems of Latin America	5	3
IX	Pedagogical research/project/practicum	16	10
IX	Open seminar on cultural studies	3	2
	TOTAL	24	15
X	Contemporary problems of Colombia	5	3
	Pedagogical research/project/practicum	16	10
	Ethics and teaching	3	2
	TOTAL	24	15

• Exit credential: The academic title awarded to students who complete an undergraduate program in education is always *licenciado* (licentiate). Sometimes the title will end in an *a* instead of an *o*, indicating that the recipient of the credential is female. Oftentimes, though, the masculine version of the title will be used even when it is being awarded a female. Licentiates can be awarded in general areas of education like child pedagogy (e.g. *Licenciado en Pedagogía Infantil*) or in specific subjects like mathematics (e.g. *Licenciado en Matemáticas*). Often licentiates will also indicate an area of focus (*énfasis*) within a particular stream of education; for example, *Licenciado en Educación Básica con Énfasis en Humanidades y Lengua Castellana* (Licentiate in Basic Education with Focus on Humanities and Spanish Language).

Prior to the 1990s, the term *licenciado* was used not only in reference to teaching degrees but also when referring to degrees in some non-teaching professions (e.g. *Licenciado en Terapia del Lenguaje*, translating to Licentiate in Speech Therapy).

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

- título de... (title of...),
- título profesional de... (professional title of...),
- diploma de... (diploma of...),

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grado de... (degree of...),grado profesional de... (professional degree of...).
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In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

- Examinations: Students enrolled in the last year of their undergraduate program in education are required to take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES tests became mandatory in 2003 and were first administered to undergraduate students in education in 2004. Depending on the branch of education, the exam currently consists of 180-220 multiple-choice questions that focus on the basic competencies in the field. More information about ECAES is available on the ICFES website.
- <u>Professional registration</u>: In order to teach at a public institution, an instructor must first be inscribed in the *escalafón docente* (teachers' echelon). The current *escalafón*, introduced in 2002, consists of three grades, each further subdivided into four salary levels. Instructors are inscribed into the *escalafón* according to their level of education and are promoted based on their experience, performance, and further professional development. Instructors employed at private institutions do not have to be inscribed in the teachers' echelon.
- <u>Faculty associations</u>: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for education is the <u>Colombian Association of Faculties of Education</u> (Asociación Colombiana de Facultades de Educación).

#### **Conclusion**

In Colombia, a typical undergraduate degree in education represents 5 years of full-time postsecondary study. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). The vast majority of students entering undergraduate programs in education (*licenciaturas*) are admitted based on the title of *bachiller académico*. Alternatively, students can be admitted to undergraduate degree programs in education and qualify for significant transfer of credit after completing the postsecondary diploma cycle in teacher training (*ciclo complementario*) and obtaining the title of *normalista* 

superior (teacher for the preschool and elementary school levels). All applicants must generally pass an additional admission exam, a personal interview, and a test of pedagogical potential (prueba de potencialidad pedagógica) administered by the higher education institution. The title of licenciado (licentiate) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of licenciado/a to the completion of a four-year Bachelor's Degree with a focus in xx and courses in education or, if applicable, to a four-year Bachelor of Education Degree with a focus in xx.

## **Grading:**

 Grading scale: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

Grading	scale for	r higher	education

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work

(unidades de labor académico) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

#### **Comments:**

Training in teaching-related occupations at the professional technical and technological levels is available, but such programs are extremely rare. Training for preschool teacher aids is widely available at institutions offering lower technical and vocational education.

# COLOMBIA (República de Colombia)

# *Ingeniero/a* (Engineer)

**Date Entered:** July 2008

Category: Undergraduate degree program in engineering

Credential Actual Name: Credential English Name:

Credential Alternate Actual Name(s): Credential Alternate English Name(s):

Ingeniero/a Aeronáutico/aAeronautical EngineerIngeniero/a AgrícolaAgricultural EngineerIngeniero/a AgroindustrialAgroindustrial EngineerIngeniero/a Agronómico/aAgronomic EngineerIngeniero/a Químico/aChemical EngineerIngeniero/a CivilCivil EngineerIngeniero/a Eléctrico/aElectrical Engineer

Ingeniero/a Electromecánico/a Electromechanical Engineer

Ingeniero/a Electrónico/a Electronic Engineer
Ingeniero/a Ambiental Environmental Engineer

Ingeniero/a de AlimentosFood EngineerIngeniero/a ForestalForestry EngineerIngeniero/a IndustrialIndustrial EngineerIngeniero/a Mecánico/aMechanical EngineerIngeniero/a Metalúrgico/aMetallurgical Engineer

Ingeniero/a NavalNaval EngineerIngeniero/a NuclearNuclear EngineerIngeniero/a Pesquero/aFishing EngineerIngeniero/a de PetróleosPetroleum EngineerIngeniero/a de SistemasSystems Engineer

Ingeniero/a de Telecomunicaciones Telecommunications Engineer Ingeniero/a de Transporte y Vías Transport and Roads Engineer

Etc. Etc.

**Time Period Credential Offered:** Current

#### **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In rare instances, undergraduate programs can also be offered by professional

technical institutions (instituciones técnicas profesionales) and technological institutions (instituciones tecnológicas). In Spanish, the actual name of any one of the above institutions can include the words corporación (corporation), fundación (foundation), escuela (school), colegio or colegio mayor (college), politécnico (polytechnic), unidad (unit), or instituto (institute). Most universities and university institutions will have the word universidad or universitaria in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are faculdades (faculties), escuelas (schools or colleges), and departamentos (departments).

## **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. In some cases, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in engineering and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

#### **Program Description:**

According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, presently there are 1,009 undergraduate programs, 106 graduate-level specialization programs, 66 master's programs, and 18 doctoral programs offered by various higher education institutions in the different types of engineering (*ingeniería*). Undergraduate programs in engineering typically require 10 semesters of full-time study.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

#### **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration).
- <u>Admission to graduate studies</u>: Holders of an undergraduate degree in engineering can continue their studies at the graduate level.

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• Undergraduate degree in engineering (4-6 years of full-time study) – comparable to a Bachelor of Science/Bachelor of XX degree.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• Any undergraduate degree (minimum 4 years of full-time study) –may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Undergraduate degree in engineering (5 years of full-time study) – comparable to a specialized Bachelor Degree.

#### **IQAS** Recommendations for:

The title of *Ingeniero/a* (engineer) generally compares to the completion of a four-year Bachelor of Science Degree with a focus in xx engineering.

#### **IQAS Rationale:**

• <u>Length of program</u>: Typically 10 semesters of full-time study, but the duration can be somewhat longer or shorter. After the introduction of educational cycles in 2002, students

can be admitted to undergraduate programs in engineering based on the title of *tecnólogo* in a related area, in which case they would only require an additional 3-4 semesters of study to obtain an undergraduate degree.

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in the same type of engineering can have different durations and credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in engineering tend to consist of a large core component, obligatory for all students in the program, and a small number of elective courses. Undergraduate engineering curricula are constructed around the following general subject areas, which are adapted accordingly to each of the branches:
  - basic sciences,
  - basic engineering sciences (i.e. theoretical foundations of engineering),
  - practical applications of engineering concepts,
  - problem solving,
  - planning, modeling, and design,
  - implementation,
  - evaluation,
  - project management.

Laboratories and practica are an essential part of the programs as great emphasis is placed on practical application of skills and knowledge. Usually students are also required to complete a small research project (*trabajo de grado* or *proyecto de grado*) in the last year of study.

# Sample curriculum for an undergraduate program in mechanical engineering (Universidad Nacional de Colombia, 2008)

(Source: <a href="http://www.ing.unal.edu.co/progsfac/mecanica">http://www.ing.unal.edu.co/progsfac/mecanica</a> mecatronica/docs/programas/pre plan e.html)

Semester	Course	
	Descriptive geometry	
	Basic drawing/drafting	
ī	Introduction to engineering	
1	Mathematics I	
	Oral and written communication	
	Economic geography	
11	Drawing/drafting of machines	

	Racia machanical tachnalasse
	Basic mechanical technology
	Physics I
	Mathematics II
	Computer programming
	Context course I
	Physics II
	Statistics
Ш	Materials I
111	Mathematics III
	Ecology
	Context course II
	Kinematics
	Materials II
IV	Physics III
	Mathematics IV
	Probability and statistics
	Thermodynamics
	Fluid mechanics
	Mathematics V
V	Electric installations and machines
	Kinetics
	Resistance of materials
	Machine elements I
	Numerical methods
VI	Fundamentals of economics
	Material components
	Basic electronics
	Heat transfer
	Machine elements II
	Mechanization processes
VII	Thermal installations and machines I
V 11	Hydraulic machines
	Linear programming and graphs
	Business administration
	Machine design
	Manufacture engineering
7 7777	Thermal installations and machines II
VIII	Dynamic systems and control
	Project preparation and evaluation
	Elective course I
	In-depth study course I
	In-depth study course II
IX	Elective course II
	Final degree project
X	In-depth study course III
	Final degree project

• Exit credential: The academic title awarded to students who complete an undergraduate program in engineering is *ingeniero* (engineer) in a specific branch (e.g. *ingeniero de petróleos* or *ingeniero industrial*). Sometimes the title will end in an *a* instead of an *o*,

indicating that the recipient of the credential is female. For example, the feminine version of *ingeniero químico* would be *ingeniera química*. Oftentimes, though, the masculine version of the title will be used even when it is being awarded a female.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

```
título de... (title of...),
título profesional de... (professional title of...),
diploma de... (diploma of...),
grado de... (degree of...),
grado profesional de... (professional degree of...).
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In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

- Examinations: Students enrolled in the last year of their undergraduate program in engineering must take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES tests became mandatory in 2003 and were first administered to undergraduate students in most branches of engineering the same year. The exam currently consists of 180 multiple-choice questions that focus on the basic competencies in each one of the engineering branches. More information about ECAES is available on the <a href="ICFES website">ICFES website</a>.
- Professional registration and licensing: Since engineering is a regulated profession in Colombia, an academic title alone does not entitle the degree-holders to practice as engineers. They must first be issued a certificate of professional registration (certificado de matrícula profesional) and a wallet-size professional license (tarjeta profesional). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with the appropriate body. Professional licenses are issued to engineers by the following councils and ministry:
  - Professional Council of Electrical and Mechanical Engineering and Related
     Professions (Consejo Profesional de Ingenierías Eléctrica, Mecánica y Profesiones Afines) for electrical, mechanical, nuclear, metallurgical, telecommunications, aeronautical, electronic, electromechanical, and naval engineers,
  - Professional Council of Chemical Engineering (Consejo Profesional de Ingeniería Química) – for chemical engineers,
  - Professional Council of Petroleum Engineering (Consejo Profesional de Ingeniería

- de Petróleos) for petroleum engineers,
- Professional Council of Transport and Road Engineering (Consejo Profesional de Ingeniería de Transportes y Vías) – for transport and road engineers,
- Ministry of Agriculture and Rural Development (Ministerio de Agricultura y Desarrollo Rural) – for forest, agricultural, and agronomic engineers,
- Professional Council of Fishing Engineering (Consejo Profesional de Ingeniería Pesquera) – for fishing engineers, and
- National Professional Council of Engineering (Consejo Profesional Nacional de Ingeniería) – for all remaining engineers.

All of the above councils work in close cooperation with the Ministry of National Education and other relevant ministries.

• <u>Faculty associations</u>: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for engineering is the <u>Colombian Association of Faculties of Engineering</u> (*Asociación Colombiana de Facultades de Ingeniería*).

#### Conclusion

In Colombia, a typical undergraduate degree in engineering represents 5 years of full-time postsecondary study. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Alternatively, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in engineering and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The title of *ingeniero/a* (engineer) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *ingeniero/a* to the completion of a four-year Bachelor of Science Degree with a focus in xx engineering.

## **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 - 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

#### **Comments:**

Training in engineering technology is also available at the professional technical and technological levels. Institutions offering lower technical and vocational can provide training related to engineering technology as well.

# COLOMBIA (República de Colombia)

# Enfermera/o (Nurse)

**Date Entered:** July 2008

**Category:** Undergraduate degree program in nursing

**Credential Actual Name: Credential English Name:** 

Enfermera/o Nurse

**Credential Alternate Actual Name(s): Credential Alternate English Name(s):** 

'Professional' in Nursing

Profesional en Enfermería Licenciado/a en Enfermería (older name for Profesional en Enfermería, used prior to

the early 1990s)

Licentiate in Nursing

**Time Period Credential Offered:** Current

## **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (universidades) but also by university institutions (institutciones universitarias) and technological schools (escuelas tecnológicas). In Spanish, the actual name of any one of the above institutions can include the words corporación (corporation), fundación (foundation), escuela (school), colegio or colegio mayor (college), politécnico (polytechnic), unidad (unit), or instituto (institute). Most universities and university institutions will have the word universidad or universitaria in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are faculdades (faculties), escuelas (schools or colleges), and departamentos (departments).

#### **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of bachiller and a sufficient score on the State Examination for Admission to Higher Education (Examen de Estado para Ingreso a la Educación Superior), commonly referred to as examen de estado (state exam) or pruebas ICFES (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. In some rare cases, students with a title of tecnólogo in a related field may also be admitted to undergraduate degree programs in nursing and qualify for transfer

of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

## **Program Description:**

According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, there are 55 undergraduate and 36 graduate-level specialization programs in nursing (*enfermería*) offered throughout Colombia. Master's and doctoral degrees in nursing are not common. As of 2007, only 4 master's and 1 doctoral programs were offered. Undergraduate nursing programs require 8-10 semesters of full-time study. The academic title students are granted after completing their undergraduate studies in nursing is *enfermera* (nurse, feminine form) or the less common *enfermero* (nurse, masculine form). Some universities may choose to use the title *profesional en enfermería* ('professional' in nursing) instead. All of the above titles are equivalent.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

## **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration).
- <u>Admission to graduate studies</u>: Holders of an undergraduate degree in nursing can continue their studies at the graduate level.

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- Older undergraduate degree in nursing (3-3.5 years of full-time study) comparable to a maximum 105 semester credits of undergraduate coursework.
- Current undergraduate degree in nursing (minimum 4 years of full-time study) comparable to a Bachelor Degree or a first professional degree in certain fields.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

- Older undergraduate degree in nursing (3-3.5 years of full-time study) may be considered for undergraduate admission with up to 30 semester hours of transfer credit for each year, determined through a course-by-course analysis.
- Current undergraduate degree in nursing (minimum 4 years of full-time study) may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Any undergraduate degree (4-5 years of full-time study) – comparable to a Bachelor Degree.

### **IQAS** Recommendations for:

The title of *Enfermera/o* (nurse), representing a minimum of four years of full-time study, generally compares to the completion of a four-year Bachelor of Science Degree with a focus in nursing.

## **IQAS Rationale:**

• <u>Length of program</u>: 8-10 semesters of full-time study. After the introduction of educational cycles in 2002, theoretically students can be admitted to undergraduate programs in nursing based on the title of *tecnólogo* in a related area, in which case they would only require an additional 3-4 semesters of study to obtain an undergraduate degree. In practice, however, this happens very rarely. (In the 1980s and earlier, some undergraduate degree programs in nursing required only 3-3.5 years of full-time study. These programs were not very common and no longer exist at the present time.)

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in nursing can have different durations and credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in nursing tend to consist of a large core component, obligatory for all students in the program, and a small number of elective courses. The undergraduate nursing curriculum is composed of subjects from these areas:
  - basic sciences (e.g., biology, microbiology and parasitology, biochemistry, morphophysiology, pharmacology and toxicology, pathology, anatomy),
  - clinical sciences (e.g., internal medicine, general surgery, psychiatry, dermatology, ophthalmology, orthopaedics and traumatology)
  - psycho-social and cultural aspects of health care,
  - health care for children and adolescents,
  - health care for women (including gynaecology and obstetrics),
  - health care for adults and seniors,
  - preventive medicine and public health,
  - historical, legal, and ethical development of nursing,
  - foundations of research and epidemiology,
  - administration, management, and education (e.g., law, policies, programs).

Laboratories and practica are an essential part of the program as great emphasis is placed on practical application of skills and knowledge. Usually students are also required to complete a small research project (*trabajo de grado* or *proyecto de grado*) in the last year of study.

Sample curriculum for an undergraduate program in nursing (Universidad Nacional de Colombia, 2008) (Source: http://www.enfermeria.unal.edu.co/docs/pregrado.htm#prog)

<b>Basic co</b> 3,375 hou	Flexible core courses	
3,375 hou  Professional area 1,860 hours (44.3%)  Nursing for children (sem.V)*  Nursing for adolescents (sem.IV)  Prenatal and maternal nursing (sem.VI)  Nursing for adults (sem.VII)  Geriatric nursing (sem.IV)  Management of health care programs (sem.VI)	Basic area 1,515 hours (36.1%)  Disciplinary area (540 hours):  • Morphophysiology (sem.I)  • Biochemistry (sem.I)  • Microbiology (sem.II)  • Pharmacology (sem.II)  • Psychology of the life cycle (sem.I)  • Social anthropology (sem.II)	Flexible core courses 825 hours (19.6%)  Two courses in one of the following areas of in-depth study; selection may vary from year to year (420 hours, sem.VII & VIII):  • Health promotion and disease prevention, levels I and II  • Health and work, levels I and II  • Emergencies and critical care, levels I and II
		Mental health in a general hospital, levels I and II

Professional area (975 hours):  The human being and health (sem.I)  Human sexuality (sem.I)  Knowledge and nursing (sem.II)  Family and health (sem.III)  Community and health (sem.III)  Management in health (sem.IV)	Three of the following elective courses; selection may vary from year to year (135 hours, sem.III & V):  Coronaropathies Epidemiological vigilance Death in everyday life of human beings Information management Nursing legislation Life protection and improper
<ul> <li>Project seminar (sem.V)</li> <li>Fundamentals and techniques of patient care (sem.III)</li> <li>Psychosocial fundamentals (sem.II)</li> </ul>	drug use • First aid  Two of the following context courses (90 hours, sem.VII & VIII): • Socioeconomic aspects of health care • Ethics • Bioethics  Final degree project (180 hours, sem.II, IV, & V)

<sup>\*</sup> The number in parenthesis indicates the semester in which the course is taken.

• Exit credential: The academic title students are granted upon completion of their undergraduate studies in nursing is *enfermera* (nurse, feminine form) or the less common *enfermero* (nurse, masculine form). Some universities may choose to use the title *profesional en enfermería* ('professional' in nursing) instead. Prior to the early 1990s, the last credential was referred to as *licenciado en enfermería* (licentiate in nursing). All of the above titles were granted upon completion of undergraduate programs in nursing.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

- título de... (title of...),
- título profesional de... (professional title of...),
- *diploma de...* (diploma of...),
- grado de... (degree of...),
- grado profesional de... (professional degree of...).

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

- Examinations: Students enrolled in the last year of their undergraduate program in nursing must take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES was first administered to undergraduate students in nursing in 2003 and became mandatory the same year. The exam currently consists of 220 multiple-choice questions that focus on the basic competencies in nursing. More information about ECAES is available on the ICFES website.
- Professional registration and licensing: Since nursing is a regulated profession in Colombia, an academic title alone does not entitle the degree-holders to practice as nurses. They must first be issued a certificate of professional registration (certificado de matrícula profesional) and a wallet-size professional license (tarjeta profesional). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with the appropriate body. Professional licenses are issued to nurses by the regional Secretariats or Directorates of Health (Secretarias o Direcciones de Salud), representing the former Ministry of Health (Ministerio de Salud) and the current Ministry of Social Protection (Ministerio de la Protección Social). Professional registration is often solicited through the National Association of Nurses of Colombia (Asociación Nacional de Enfermeras de Colombia).
- Obligatory social service: The completion of obligatory social service (*servicio social obligatorio*) is a unique requirement for students who graduated from health-related technological and undergraduate programs, including nursing, and who are applying for a professional license. In order to fulfill this requirement, recent graduates must spend 6-12 months at officially pre-approved locations in the rural and disadvantaged areas of the country. The service is seen as a contribution of health care professionals to Colombia's overall development. It is also a way for them to get acquainted with the realities of providing health care under difficult circumstances. The graduates can complete their service by providing health care services, teaching the locals about health issues, or conducting research on relevant topics. If the number of available graduates exceeds the number of health care professionals needed, the selection is based on a draw.
- <u>Faculty associations</u>: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for this area of study is the <u>Colombian Association of Faculties of Nursing</u> (*Asociación Colombiana de Facultades de Enfermería*).

#### Conclusion

In Colombia, an undergraduate degree in nursing represents 4-5 years of full-time postsecondary study. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Alternatively, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in nursing and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The title of *enfermera/o* (nurse) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares a Colombian title of *enfermera/o*, representing a minimum of four years of full-time study, to the completion of a four-year Bachelor of Science Degree with a focus in nursing.

#### **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

#### Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a

specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

#### **Comments:**

Training in nursing-related occupations is also available at the professional technical and technological levels, even though the number of these programs is very limited. Institutions offering lower technical and vocational education provide training in assistant health occupations as well.

# COLOMBIA (República de Colombia)

# Fisioterapeuta (Physiotherapist) and Terapeuta Ocupacional (Occupational Therapist)

**Date Entered:** July 2008

**Category:** Undergraduate degree program in physical or occupational therapy

Credential Actual Name: Credential English Name:

Fisioterapeuta Physiotherapist
Terapeuta Físico/a Physical Therapist
Terapeuta/Terapista Ocupacional Occupational Therapist

Credential Alternate Actual Name(s): Credential Alternate English Name(s): Licenciado/a / Licenciatura en Terapia Licentiate in Physical/Occupational Therapy

Física/Ocupacional (prior to the 1990s) (prior to the 1990s)

**Time Period Credential Offered:** Current

#### **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

#### **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. In some rare cases, students with a title of *tecnólogo* in a related

field may also be admitted to undergraduate degree programs in physiotherapy/occupational therapy and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

# **Program Description:**

The first Colombian programs in physiotherapy (*fisioterapia* or *terapia física*) and occupational therapy (*terapia ocupacional*) were developed in the 1950s by the Escuela Colombiana de Rehabilitación. According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, presently there are 34 undergraduate programs in physiotherapy and 15 undergraduate programs in occupational therapy offered by institutions of higher education throughout Colombia. Even though there are several related graduate-level specialization programs, there are presently no programs in either field of study at the master's or doctoral level. Undergraduate programs in physiotherapy/occupational therapy require 8-10 semesters of full-time study. The academic title students are granted after completing their undergraduate studies is *fisioterapeuta* (physical therapist) or *terapeuta/terapista ocupacional* (occupational therapist).

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

## **Provides Access to in the Home Country:**

- Employment (following appropriate professional registration).
- Admission to graduate studies: Holders of an undergraduate degree in physiotherapy/occupational therapy can continue their studies at the graduate level. (There are presently no programs in either field of study at the master's or doctoral level.)

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- Older undergraduate degrees in physiotherapy/occupational therapy (3-3.5 years of full-time study) comparable to a maximum 105 semester credits of undergraduate coursework.
- Current undergraduate degrees in physiotherapy/occupational therapy (minimum 4 years of full-time study) comparable to a Bachelor Degree or a first professional degree in certain fields.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

- Older undergraduate degrees in physiotherapy/occupational therapy (3-3.5 years of full-time study) may be considered for undergraduate admission with up to 30 semester hours of transfer credit for each year, determined through a course-by-course analysis.
- Current undergraduate degrees in physiotherapy/occupational therapy (minimum 4 years of full-time study) may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

- Undergraduate degree in physiotherapy (4-5 years of full-time study) comparable to a specialized Bachelor Degree with a duration of 3.5 years.
- Any undergraduate degree (4-5 years of full-time study) comparable to a Bachelor Degree.

## **IQAS** Recommendations for:

- The title of *Fisioterapeuta* (physiotherapist), representing a minimum of four years of full-time study, generally compares to the completion of a four-year Bachelor of Science Degree with a focus in physiotherapy.
- The title of *Terapeuta Ocupacional* (occupational therapist), representing a minimum of four years of full-time study, generally compares to the completion of a four-year Bachelor of Science Degree with a focus in occupational therapy.

## **IQAS** Rationale:

• <u>Length of program</u>: 8-10 semesters of full-time study. After the introduction of educational cycles in 2002, theoretically students can be admitted to undergraduate programs in physiotherapy/occupational therapy based on the title of *tecnólogo* in a related area, in which case they would only require an additional 3-4 semesters of study to obtain an undergraduate

degree. In practice, however, this happens very rarely. (In the 1980s and earlier, some undergraduate degree programs in physiotherapy/occupational therapy required only 3-3.5 years of full-time study. These programs were not very common and no longer exist at the present time.)

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in physiotherapy/occupational therapy can have different durations and credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in physiotherapy/occupational therapy tend
  to consist of a large core component, obligatory for all students in the program, and a small
  number of elective courses. The core of the undergraduate curricula for physiotherapy and
  occupational therapy is similar in many ways for both programs. The courses focus on the
  following main areas:
  - basic sciences (e.g., biology, biochemistry, biophysics, psychology, anatomy, physiology),
  - mental and physical health,
  - movement and functioning of the human body,
  - sports and recreation,
  - work, research, and education,
  - administration and management.

Laboratories and practica are an essential part of the program as great emphasis is placed on practical application of skills and knowledge. Usually students are also required to complete a small research project (*trabajo de grado* or *proyecto de grado*) in the last year of study.

# Sample curricula for undergraduate programs in physiotherapy and occupational therapy (Escuela Colombiana de Rehabilitación, 2008) (Source: <a href="http://www.ecr.edu.co/estudios/fisioterapia">http://www.ecr.edu.co/estudios/fisioterapia</a> plan.htm and <a href="http://www.ecr.edu.co/estudios/terapia">http://www.ecr.edu.co/estudios/fisioterapia</a> plan.htm)

		Weekly intensity and course weight		
Semester	Course	Physiotherapy	Occupational Therapy	
I	Study methods and computing	4 hours / 3 credits	3 hours / 3 credits	
	Context of disabilities	2 hours / 2	2 credits	
	Culture and society	2 hours / 2 credits		
	Applied biophysics	3 hours / 3 credits		
	Molecular and cellular biology	4 hours / 4 credits	4 hours / 2 credits	
	Human structure and function I	4 hours / 4 credits		
	English I	3 hours / 2 credits		
	TOTAL	22 hours / 21 credits	21 hours / 18 credits	
	Statistics I	3 hours / 3 credits	3 hours / 2 credits	
	Habilitation / Rehabilitation	2 hours / 2 credits		
	Psychology of development	4 hours / 3 credits		
II	Biomechanics	4 hours / 3 credits	4 hours / 4 credits	
11	Human structure and function II	8 hours / 6 credits	6 hours / 6 credits	
	English II	3 hours / 3 credits	3 hours / 2 credits	
	Biochemistry	2 hours / 2 credits	-	
	TOTAL	26 hours / 22 credits	22 hours / 19 credits	
	Statistics II	3 hours / 3 credits	3 hours / 2 credits	
	Public health	2 hours / 2 credits		
	Physiopathology	3 hours / 3 credits	6 hours / 7 credits	
	Psychopathology	3 hours / 3 credits	3 hours / 2 credits	
III	English III	2 hours / 2 credits	3 hours / 2 credits	
	Human bodily movement	2 hours / 2 credits	-	
	Neurokinetics	3 hours / 3 credits	-	
	Exercise physiology	3 hours / 3 credits	-	
	Fundamentals of occupational therapy	-	3 hours / 3 credits	
	TOTAL	21 hours / 21 credits	20 hours / 18 credits	
	Family and community		2 hours / 2 credits	
	General ethics	2 hours / 2 credits		
IV	Epidemiology	3 hours / 3 credits		
	English IV	2 hours / 2 credits	3 hours / 2 credits	
	Cardiopulmonary clinic	4 hours / 4 credits	-	
	Osteomuscular clinic	4 hours / 4 credits	-	
	Neurological clinic	3 hours / 2 credits	-	
	Exercise prescriptions	6 hours / 6 credits	-	
	Assessment procedures	-	3 hours / 3 credits	
	Technology in occupational therapy	-	3 hours / 3 credits	
	Occupational duties and performance	-	3 hours / 3 credits	
	Practicum	-	8 hours / 4 credits	
	TOTAL	26 hours / 25 credits	27 hours / 22 credits	
V	Research methodology I	2 hours / 2 credits	3 hours / 3 credits	
	English V	2 hours / 2		
	Practicum	4 hours / 1 credit	8 hours / 4 credits	
	Cardiopulmonary assessment and procedures	6 hours / 5 credits	-	
	Osteomuscular assessment and procedures	6 hours / 5 credits	-	

	Massage	4 hours / 1 credit	-	
	Psychosocial intervention	-	3 hours / 3 credits	
	Psychobiological intervention	-	3 hours / 3 credits	
	Bioethics	-	2 hours / 2 credits	
	Administration and management	-	3 hours / 2 credits	
	Intervention in education	-	3 hours / 3 credits	
	Occupational intervention	-	3 hours / 3 credits	
	TOTAL	28 hours / 18 credits	30 hours / 25 credits	
	Research methodology II	2 hours / 2 credits	3 hours / 3 credits	
	English VI	2 hours / 2 credits	2 hours / 6 credits	
	Practicum	16 hours / 3 credits	12 hours / 2 credits	
	Administration and management	2 hours / 2 credits	-	
	Neuromuscular assessment and procedures	6 hours / 6 credits	-	
VI	Osteomuscular and neuromuscular physiotherapeutic intervention	4 hours / 4 credits	-	
	In-depth study seminar	2 hours / 2 credits	-	
	Project management	-	3 hours / 2 credits	
	Occupational diagnostic	-	3 hours / 3 credits	
	Professional ethics	-	2 hours / 2 credits	
	Professional seminar	-	3 hours / 3 credits	
	TOTAL	34 hours / 21 credits	28 hours / 21 credits	
VII	In-depth study seminar	2 hours / 2 credits	2 hours / 4 credits	
	Practicum	16 hours / 4 credits	12 hours / 6 credits	
	Final degree project I	3 hours / 3 credits	10 hours / 4 credits	
	Bioethics	2 hours / 2 credits	-	
	Clinical evidence	-	3 hours / 3 credits	
	TOTAL	23 hours / 11 credits	27 hours / 17 credits	
	Practicum	16 hours / 4 credits	12 hours / 6 credits	
	Final degree project II	4 hours / 8 credits	10 hours / 4 credits	
VIII	In-depth study seminar	2 hours / 2 credits	-	
	Professional seminar	-	2 hours / 4 credits	
	TOTAL	22 hours / 14 credits	24 hours / 14 credits	
Any	Elective I		2 hours / 2 credits	
	Elective II		2 hours / 2 credits	
	Elective III	2 hours / 2 credits		
	TOTAL	6 hours / 6 credits		

• Exit credential: Undergraduate studies in physiotherapy lead to the academic title of fisioterapeuta or its less common version terapeuta físico/a (both translating to 'physiotherapist'). Occupational therapy students receive the title of terapeuta ocupacional or terapista ocupacional (both translating to 'occupational therapist'). Prior to the early 1990s, some institutions granted the undergraduate titles of licenciado/a en terapia física and licenciado/a en terapia ocupacional (licentiates in physiotherapy and occupational therapy). This nomenclature is no longer in use.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

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título de... (title of...),
título profesional de... (professional title of...),
diploma de... (diploma of...),
grado de... (degree of...),
grado profesional de... (professional degree of...).
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In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

- Examinations: Students enrolled in the last year of their undergraduate program in physiotherapy/occupational therapy must take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES tests were first administered to undergraduate students in physiotherapy and occupational therapy in 2003 and became mandatory the same year. The exam for both professions currently consists of 220 multiple-choice questions that focus on the basic competencies in the field. More information about ECAES is available on the ICFES website.
- Professional registration and licensing: Since physiotherapy and occupational therapy are regulated professions in Colombia, an academic title alone does not entitle the degree-holders to practice their professions. They must first be issued a certificate of professional registration (certificado de matrícula profesional) and a wallet-size professional license (tarjeta profesional). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with the appropriate body. Professional licenses are issued to physiotherapists and occupational therapists by the regional Secretariats or Directorates of Health (Secretarias o Directiones de Salud), representing the former Ministry of Health (Ministerio de Salud) and the current Ministry of Social Protection (Ministerio de la Protección Social).
- Faculty associations: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty associations for physiotherapy and occupational therapy are the Colombian Association of Faculties of Physiotherapy (Asociación Colombiana de Facultades de Fisioterapia) and the Colombian Association of Faculties of Occupational Therapy (Asociación Colombiana de Facultades de Terapia Ocupacional).

#### Conclusion

In Colombia, an undergraduate degree in physiotherapy/occupational therapy represents 4-5 years of full-time postsecondary study. Admission to the program is based on the title of bachiller (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (Examen de Estado para Ingreso a la Educación Superior), commonly referred to as examen de estado (state exam) or pruebas ICFES (ICFES tests). Alternatively, students with a title of tecnólogo in a related field may also be admitted to undergraduate degree programs in physiotherapy/occupational therapy and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The title of fisioterapeuta (physiotherapist) or terapeuta ocupacional (occupational therapist) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of fisioterapeuta (physiotherapist) or terapeuta ocupacional (occupational therapist) to the completion of a four-year Bachelor of Science Degree with a focus in physical/occupational therapy.

# **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

### Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 - 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• <u>Academic credits</u>: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the

undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

#### **Comments:**

Training in occupations related to physiotherapy/occupational therapy is also available at the professional technical and technological levels, even though the number of these programs is very limited. Institutions offering lower technical and vocational education provide training in assistant health occupations as well.

# COLOMBIA (República de Colombia)

# Abogado/a (Lawyer)

**Date Entered:** July 2008

**Category:** Undergraduate degree program in law

Credential Actual Name: Credential English Name:

Abogado/a Lawyer

Credential Alternate Actual Name(s): Credential Alternate English Name(s):

Doctor en Derecho Doctor of Law

(used by some universities prior to the 1980s)

Time Period Credential Offered: Current

### **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

### **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. In some cases, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in law and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

# **Program Description:**

Ever since the colonial times, law (*derecho*) has been one of the traditional professions to be taught at Colombian universities. According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, presently there are 183 undergraduate programs, 566 graduate-level specializations, 28 master's programs, and 5 doctoral programs in law offered throughout Colombia. Undergraduate programs in law typically require 10 semesters of full-time study.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration).
- <u>Admission to graduate studies</u>: Holders of an undergraduate degree in law can continue their studies at the graduate level.

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• Undergraduate degree in a professional field (4-6 years of full-time study) – comparable to a Bachelor Degree.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United

States." (1984).

• Any undergraduate degree (minimum 4 years of full-time study) – may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Undergraduate degree in law – comparable to a specialized Bachelor Degree.

### **IQAS Recommendations for:**

The title of *Abogado/a* (lawyer) generally compares to the completion of a first professional university degree in law (as practiced in the Republic of Colombia), preceded by preprofessional university study.

Note: The law degree program in Colombia usually requires five years of continuous study in the Faculty of Law. In Canada, the usual pattern of study in law requires at least two years of preprofessional university study followed by three years of professional law study.

# **IQAS** Rationale:

• <u>Length of program</u>: Typically 10 semesters of full-time study. After the introduction of educational cycles in 2002, students can be admitted to undergraduate programs in law based on the title of *tecnólogo* in a related area, in which case they would only require an additional 3-4 semesters of study to obtain an undergraduate degree.

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in law can have different durations and credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in law tend to consist of a large core component, obligatory for all students in the program, and a small number of elective courses. Undergraduate law courses focus on the following areas:
  - general theory of law,
  - constitutional law.
  - administrative law,
  - international law,

- occupational law,
- civil and family law,
- commercial law,
- penal law,
- professional responsibility,
- humanities (e.g., philosophy, political history, history of law, sociology).

Practica are an essential part of the programs as great emphasis is placed on practical application of skills and knowledge. In the last year of study, students are usually required to complete a small research project (*trabajo de grado* or *proyecto de grado*) and pass the so-called preparatory exams (*exámenes preparatorios*) that test their knowledge of various branches of law.

Sample curriculum for an undergraduate program in law (Pontificia Universidad Javeriana, 2008) (Source: http://www.javeriana.edu.co/Facultades/C Juridicas/car plan est/)

Semester	Course	Hours of instruction per week	Credits
	Individual persons	4	3
	Roman law I	4	3
	Constitutional law I	3	2
	Microeconomics	4	3
I	Introduction to law	3	2
	Theory and management of sources	2	1
	History of law I	3	2
	Theology and law I	2	1
	TOTAL	25	17
	Goods I	4	3
	Roman law II	3	2
	Constitutional law II	3	2
	Macroeconomics	4	3
II	History of political ideas	3	2
	Practical philosophy	3	2
	History of law II	3	2
	Theology and law II	2	1
	TOTAL	25	17
	Goods II	4	3
	Obligations I	4	3
	Colombian constitutional law I	4	3
III	Financial accounting	4	3
111	Theory of law I	3	2
	Judicial interpretation	2	1
	Theology and law III	2	2
	TOTAL	23	17
IV	Obligations II	4	3
1 4	Colombian constitutional law II	4	3
	Economic law	4	3
	Theory of law II	3	2

	International law I	4	3
	Judicial sociology	2	<u></u>
		3	2
	Judicial argumentation TOTAL		
		24	17
	Contract law I	4	3
	Family law I	3	2
	International law II	4	3
V	General penal law I	4	3
	Public fiscal administration	4	3
	Individual labour law I	3	2
	Law research	2	1
	TOTAL	24	17
	Commercial law I	3	2
	General penal law II	4	3
	Individual labour law II	3	2
VI	Contract law II	4	3
V 1	Family law II	3	2
	General trial theory	4	3
	Socio-judicial research	2	1
	TOTAL	23	16
	Collective labour law	2	1
	Social security	4	3
	Administrative law I	4	3
	Special penal law I	3	2
VII	Societies	4	3
	General civil trial theory I	4	3
	General criminal trial theory	3	2
	Legal practice	-	
	TOTAL	24	17
	Commercial law II	3	2
	Administrative law II	4	3
	Special penal law II	3	2
	Environmental law	4	3
VIII	Competition law	4	3
, 111	General civil trial theory II	4	3
	Special criminal trial proceedings	2	1
	Legal practice	-	-
	TOTAL	24	17
	Taxation law	4	3
	Stocks and securities	3	2
	Administrative contracting	3	2
	Civil responsibility I	3	2
IX	Financial law – banks	4	3
1/		3	2
	Special civil trial proceedings	4	3
	General theory of evidence		3
	Legal practice	- 24	17
	TOTAL	24	17
X	State responsibility	3	2
	International business law	3	2
	Evidence	3	2
	Financial law – stock exchange	4	3
	Civil responsibility II	3	2

Special proceedings	4	3
Inheritance	3	2
Legal practice	-	-
TOTAL	23	16

• Exit credential: The academic title awarded to students who complete an undergraduate program in law is *abogado* (lawyer). Sometimes the title will end in an *a* instead of an *o*, indicating that the recipient of the credential is female. Oftentimes, though, the masculine version of the title will be used even when it is being awarded a female. Prior to the 1980s, some universities would grant the title of *Doctor en Derecho* (Doctor of Law) to those who completed an undergraduate program. Currently, the degree of *doctor* is strictly a graduate-level title.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

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título de... (title of...),
título profesional de... (professional title of...),
diploma de... (diploma of...),
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- grado de... (degree of...),

- grado profesional de... (professional degree of...).

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

• Examinations: Students enrolled in the last year of their undergraduate program in law are usually required to pass the so-called preparatory exams (*exámenes preparatorios*) that test their knowledge of various branches of law. These tests are designed and administered by individual institutions and are part of graduation pre-requisites.

In addition to the preparatory exams, law students must also take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES tests were first administered to undergraduate students in law in 2002 and became mandatory in 2003. The exam currently consists of 230 multiple-choice questions that focus on the basic competencies in the field. More information about ECAES is available on the <u>ICFES</u> website.

- <u>Professional registration and licensing</u>: Since law is a regulated profession in Colombia, an academic title alone does not entitle the degree-holders to practice as lawyers. They must first be issued a certificate of professional registration (*certificado de matrícula profesional*) and a wallet-size professional license (*tarjeta profesional*). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with the appropriate body. Professional licenses are issued by a regional branch (*seccional*) of the <u>Superior Council of the Judiciary</u> (*Consejo Superior de la Judicatura*), affiliated with the Ministry of Justice (*Ministerio de Justicia*).
- <u>Faculty associations</u>: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for law is the Colombian Association of Faculties of Law (*Asociación Colombiana de Facultades de Derecho*).

### **Conclusion**

In Colombia, a typical undergraduate degree in law represents 5 years of full-time postsecondary study. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). In some rare cases, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in law and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The title of *abogado/a* (lawyer) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares a Colombian title of *abogado/a* to the completion of a first professional university degree in law (as practiced in the Republic of Colombia), preceded by preprofessional university study.

# **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

#### Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 - 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 - 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

### **Comments:**

Training in related occupations is also available at the professional technical and technological levels. Some institutions offering lower technical and vocational education provide law-related training as well.

# COLOMBIA (República de Colombia)

# Odontólogo/a (Dentist)

**Date Entered:** July 2008

**Category:** Undergraduate degree program in dentistry

Credential Actual Name: Credential English Name:

Odontólogo/a Dentist

Credential Alternate Actual Name(s): Credential Alternate English Name(s):

Doctor en Odontología Doctor in Dentistry

(used by some universities prior to the 1980s)

Time Period Credential Offered: Current

### **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

### **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of bachiller and a sufficient score on the State Examination for Admission to Higher Education (Examen de Estado para Ingreso a la Educación Superior), commonly referred to as examen de estado (state exam) or pruebas ICFES (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. In some rare cases, students with a title of tecnólogo in a related field may also be admitted to undergraduate degree programs in dentistry and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

# **Program Description:**

Presently, there are 19 institutions of higher education offering nearly 40 undergraduate programs and numerous graduate-level specializations in dentistry (*odontología*). There are currently no master's or doctoral programs in dentistry. Most undergraduate programs in dentistry have a duration of 10 semesters of full-time study and lead to the title of dentist (*odontólogo/a*).

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

### **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration).
- Admission to graduate studies: Holders of an undergraduate degree in dentistry can continue their studies at the graduate level. (In Colombia there are currently no master's or doctoral programs in dentistry. Graduate specializations are very common.)

### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• Undergraduate degree in dentistry (minimum 4 years of full-time study) – comparable to a first professional degree in dentistry (e.g. DD or DDS).

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• Undergraduate degree in dentistry – may be considered to have the first professional degree in the field; may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Undergraduate degree in dentistry – comparable to a specialized Bachelor Degree.

# **IQAS** Recommendations for:

The title of *Odontólogo/a* (dentist), representing a minimum of five years of full-time study, generally compares to the completion of a first professional university degree in dentistry, preceded by preprofessional university study in science.

Note: The dentistry degree program in Colombia usually requires [four or five] years of continuous study in the Faculty of Dentistry (Odontology). In Canada, dentistry degrees, in general, require at least two years of preprofessional university study followed by four years of professional dentistry study.

### **IQAS** Rationale:

• <u>Length of program</u>: Typically 10 semesters of full-time study. Often the duration of a program will be expressed in academic credits only.

As of 2002, theoretically students can be admitted to undergraduate programs in dentistry based on the title of *tecnólogo* in a related area, in which case they would only require an additional 3-4 semesters of study to obtain an undergraduate degree. In practice, however, this happens very rarely.

Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in dentistry can have different credit requirements and a slightly different duration at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

• <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)

- <u>Curriculum</u>: Colombian undergraduate programs in dentistry tend to consist of a large core component, obligatory for all students in the program, and a small number of elective courses. Undergraduate dentistry courses focus primarily on these areas:
  - basic sciences (e.g., biology, histology, anatomy, pathology, physiology),
  - pharmacology and therapeutic treatment,
  - public health,
  - ethics and bioethics,
  - rehabilitation,
  - growth and development,
  - peridontics,
  - endodontics,
  - orthodontics,
  - oral surgery.

Laboratories and practica are an essential part of the program as great emphasis is placed on practical application of skills and knowledge. Usually students are also required to complete a small research project (*trabajo de grado* or *proyecto de grado*) in the last year of study.

Sample curriculum for an undergraduate program in dentistry (Universidad Nacional de Colombia, 2008) (Source: http://www.unal.edu.co/odontologia/pagina%20pregrado.php)

Semester	Courses	Intensity (hou	Intensity (hours per week)	
		Theory	Practice	
	Cellular biology	5	4	
	Biophysics	5	-	
I	Biochemistry I	2	4	
	Introduction to dentistry	4	-	
	Oral morphology I	1	2	
	Biochemistry II	3	1	
	Morphology	10	10	
II	Oral morphology II	1	2	
	Vital human processes	2	2	
	Health clinic	2	2	
	Physiology	8	4	
	Oral morphology III	1	2	
Ш	Imagenology	6	-	
	The health-illness process	4	2	
	General pathology	3	2	
	Introduction to the clinic I	6	3	
IV	Oral microbiology	4	3	
1 V	Oral pathology	8	2	
	Pharmacology I	4	-	
	Introduction to the clinic II	6	6	
V	Clinical and social semiology	6	6	
V	Pharmacology and therapeutics	6	-	
	Anaesthesiology	-	3	
WI	Integral dentistry – adults I	2	6	

	Integral dentistry shildren I	2	6
	Integral dentistry – children I	2	6
	Introduction to the clinic III	2 2	8
	Oral surgery clinic I		6
	Pharmacology II	4	-
	Oral surgery clinic II	2	6
3777	Introduction to the clinic IV	3	5
VII	Integral dentistry – adults II	2	6
	Integral dentistry – children II	2	6
	Research workshop	3	-
	Integral dentistry – adults III	2	6
****	Integral dentistry – children III	2	6
VIII	Integral dentistry – geriatrics	2	4
	Organization and management	4	-
	Biostatistics	3	-
	Integral dentistry	4	6
	One of the following courses (in-depth study):		10
	Hospital dentistry – adults I	4	10
	Hospital dentistry – children I	4	10
IX	Biomaterials and biotechnology I	4	10
121	Family and community health I	4	10
	Basic sciences I	4	10
	Dental laboratory I	4	10
	Integral attention – older adults I	10	19
	Final degree project	-	=
	One of the following courses (in-depth study):		
	Hospital dentistry – adults II	6	14
	Hospital dentistry – children II	6	14
	Biomaterials and biotechnology II	6	14
X	Family and community health II	6	14
	Basic sciences II	6	14
	Dental laboratory II	6	14
	Integral attention – older adults II	10	19
	Final degree project	-	-
	Both of the following context courses:		
	Quality of life		
	Violence, health, and peace		
	Three of the following elective courses	1	
Any	(selection may vary from year to year):		
	Ceramic materials science	Each course has an intensity of	
	Immunology	2 -3 hours	
	Protein quantification	and is taken for	one semester.
	Dental geriatrics		
	Medical and surgical treatment of dental infections		
	Oral-facial pain		
	Biological risk		
	- Diological fisk	1	

• Exit credential: Upon completion of undergraduate studies in dentistry, students are awarded the title of *Odontólogo* or *Odontóloga* (Dentist). Prior to the 1980s, some universities would grant the title of *Doctor en Odontología* (Doctor in Dentistry) to those who completed an undergraduate program in dentistry. Currently, the degree of *doctor* is strictly a graduate-

level title.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

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título de... (title of...),
título profesional de... (professional title of...),
diploma de... (diploma of...),
grado de... (degree of...),
grado profesional de... (professional degree of...).
```

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

- Examinations: Students enrolled in the last year of their undergraduate program in dentistry must take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES was first administered to undergraduate dentistry students in 2003 and became mandatory the same year. The exam currently consists of 220 multiple-choice questions that focus on the basic competencies in dentistry. More information about ECAES is available on the ICFES website.
- <u>Professional registration and licensing</u>: Since dentistry is a regulated profession in Colombia, an academic title alone does not entitle the degree-holders to practice as dentists. They must first be issued a certificate of professional registration (*certificado de matrícula profesional*) and a wallet-size professional license (*tarjeta profesional*). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with a regional Secretariat or Directorate of Health (*Secretarias* or *Direcciones de Salud*), acting on behalf of the Ministry of Social Protection (*Ministerio de Proteccion Social*), which encompasses the former Ministry of Health (*Ministerio de Salud*).
- Obligatory social service: The completion of obligatory social service (servicio social obligatorio) is a unique requirement for students who graduated from health-related technological and undergraduate programs, including dentistry, and who are applying for a professional license. In order to fulfill this requirement, recent graduates must spend 6-12 months at officially pre-approved locations in the rural and disadvantaged areas of the country. The service is seen as a contribution of health care professionals to Colombia's overall development. It is also a way for them to get acquainted with the realities of providing health care under difficult circumstances. The graduates can complete their service

by providing health care services, teaching the locals about health issues, or conducting research on relevant topics. If the number of available graduates exceeds the number of health care professionals needed, the selection is based on a draw.

• <u>Faculty associations</u>: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for dentistry is the <u>Colombian Association of Faculties of Dentistry</u> (*Asociación Colombiana de Facultades de Odontología*).

#### Conclusion

In Colombia, a typical undergraduate degree in dentistry represents 5 years of full-time postsecondary study. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Alternatively, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in dentistry and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The title of *odontólogo/a* (dentist) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *odontólogo/a* to the completion of a first professional university degree in dentistry, preceded by preprofessional university study in science.

### **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

### Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 - 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 - 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are

required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

#### **Comments:**

Training in dentistry-related occupations is also available at the professional technical and technological levels, even though the number of these programs is very limited. Technical and technological programs in dental prosthetics (*prótesis dental*) and dental mechanics (*mecánica dental*) are the most popular ones. Institutions offering lower technical and vocational education can provide dentistry-related training as well.

# COLOMBIA (República de Colombia)

# Médico (Physician) / Médico y Cirujano (Physician and Surgeon)

**Date Entered:** July 2008

Category: Undergraduate degree program in medicine

Credential Actual Name: Credential English Name:

*Médico* Physician

Médico GeneralGeneral PhysicianMédico CirujanoPhysician SurgeonMédico y CirujanoPhysician and Surgeon

**Credential Alternate Actual Name(s): Credential Alternate English Name(s):** 

Doctor en Medicina Doctor in Medicine

(used by some universities prior to the 1980s)

Time Period Credential Offered: Current

### **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

### **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Some students choose to complete a pre-university program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. Students can be admitted to undergraduate programs in medicine

only based on the title of *bachiller* since there are no technological programs in general medicine that would qualify the students for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

# **Program Description:**

Currently, Colombia has 53 faculties of medicine spread throughout the country offering numerous programs in medicine (*medicina*), mostly at the undergraduate and specialization levels. Undergraduate programs in medicine have a duration of 12 semesters of full-time study, consisting of 10 semesters of theoretical instruction and clinical practica plus 2 semesters of rotation-based internship at a designated clinic or hospital. The academic title students are granted after completing their undergraduate studies in medicine can be expressed as *médico* (physician), *médico general* (general physician), *médico cirujano* (physician surgeon), or *médico y cirujano* (physician and surgeon). All of the above titles are equivalent.

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration).
- Admission to graduate studies: Holders of an undergraduate degree in medicine can continue their studies at the graduate level. (Graduate specializations in particular are very common among medical students.)

### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-time study) comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British

Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• Undergraduate degree in medicine (4-6 years of full-time study) – comparable to a first professional degree in medicine (i.e. MD).

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• Undergraduate degree in medicine – may be considered to have the first professional degree in the field; may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Undergraduate degree in medicine (6-7 years of full-time study) – comparable to a first professional degree in medicine (i.e. MD).

### **IQAS** Recommendations for:

The title of *Médico* (physician) or *Médico y Cirujano* (physician and surgeon) generally compares to the completion of a first professional university degree in medicine, preceded by preprofessional university study in science.

Note: The medical degree program in Colombia usually requires five years of continuous study in the Faculty of Medicine followed by a one-year clinical internship. In Canada, medical degrees, in general, require at least two years of university study in science followed by four years of professional medical studies.

### **IQAS Rationale:**

• <u>Length of program</u>: 12 semesters of full-time study (10 semesters of theoretical instruction and clinical practica + 2 semesters of rotation-based internship at a designated clinic or hospital). Often the duration of a program will be expressed in academic credits only. Students can be admitted to undergraduate programs in medicine only based on the title of *bachiller* since there are no technological programs in general medicine.

Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in medicine can have different credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in medicine tend to consist of a large core
  component, obligatory for all students in the program, and a small number of elective
  courses. The undergraduate medical curriculum is designed to provide students with general
  knowledge of the relevant sciences, medical disciplines, and methods of diagnosis and
  treatment. Individual courses during the initial 10 semesters of the program are structured
  around these areas:
  - basic sciences (e.g., biochemistry, microbiology),
  - children's health (paediatrics),
  - women's health (including gynaecology and obstetrics),
  - adults' health,
  - seniors' health (geriatrics),
  - family health,
  - preventive medicine,
  - general surgery,
  - public health and environment,
  - ethics and bioethics,
  - legal-medical framework,
  - administration and management.

Laboratories and practica are an essential part of the program as great emphasis is placed on practical application of skills and knowledge.

Semesters 11 and 12 consist of a clinical internship based on rotations in specialized areas such as emergencies, anaesthesia, orthopaedics, internal medicine, general surgery, paediatrics, gynaecology and obstetrics, etc. The internship is viewed as an integral part of the undergraduate program.

# Sample core curricula for two undergraduate programs in medicine (Universidad Nacional de Colombia and Pontificia Universidad Javeriana, 2008)

 $(Source: \underline{http://www.medicina.unal.edu.co/Pregrado/Medicina/ProPreMedPlan.html} \ and \underline{http://med.javeriana.edu.co/plan \ estudios.htm})$ 

Semester	Courses		
	Universidad Nacional de Colombia	Pontificia Universidad Javeriana	
I	Biology I Physiology and basic biochemistry Social sciences and health I	Morphology (anatomy, histology, radiological anatomy) Basic biochemistry Human health and development Anthropology of health Person, perception, and sensations	

II	Biology II Physiology and biochemistry of systems Social sciences and health II	Structure and function I (anatomy, histology, physiology) Metabolic biochemistry Community, reception, and dialogue Basic biostatistics
III	Biology III Social sciences and health III	Structure and function II (neuroanatomy, histology, neuroendocrine physiology, embryology) Basic genetics Molecular biology Human behaviour Medicine and human values
IV	Physiology and medical biochemistry Social sciences and health IV	Pathology Medical microbiology Psychopathology Advanced biostatistics
V	Microbiology Pathology Parasitology Introduction to internal medicine	General semiology Mechanisms of disease Introduction to psychiatry Pharmacology for medicine Family medicine
VI	Medicine I (theoretical instruction and clinical practica) Pharmacology	Basic internal medicine General ethics Research design Fundamentals of radiology
VII	Medicine II (theoretical instruction and clinical practica) Rehabilitation I	Advanced internal medicine (dermatology, clinical neurology) Clinical psychiatry Evidence-based medicine
VIII	Paediatrics Rehabilitation II	Gynaecology and obstetrics General surgery Civil responsibility and crime
IX	Surgery	Paediatrics Clinical genetics Bioethics Ophthalmology Otorhinolaryngology Preventive medicine
X	Legal medicine Psychiatry Gynaecology and obstetrics Administration, management, legislation, and quality of health care	Anaesthesia Urology Orthopaedics Neurosurgery Legal medicine Public health Occupational health Health care administration and management

- Exit credential: The academic title students are granted after completing their undergraduate studies in medicine can be expressed as one of the following:
  - *Médico* (Physician),
  - Médico General (General Physician),
  - Médico Cirujano (Physician Surgeon), or
  - Médico y Cirujano (Physician and Surgeon).

All of the above titles are equivalent and are granted upon completion of similar programs of study. The feminine version of the title – *Médica* – does exist but is rarely used. Prior to the 1980s, some universities would grant the title of *Doctor en Medicina* (Doctor in Medicine) to those who completed an undergraduate program in medicine. Currently, the degree of *doctor* is strictly a graduate-level title.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

- título de... (title of...),
- título profesional de... (professional title of...),
- diploma de... (diploma of...),
- grado de... (degree of...),
- grado profesional de... (professional degree of...).

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

• Examinations: Students enrolled in the last year of their undergraduate program in medicine must take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES was first administered to undergraduate students in medicine in 2002 and became mandatory in 2003. The exam currently consists of 220 multiple-choice questions that focus on the basic competencies in medicine. More information about ECAES is available on the ICFES website.

• Specializations and further studies: The knowledge and skills acquired at the undergraduate level through theoretical instruction, clinical practica, and internships is designed to train general physicians and allows for very little specialization. However, numerous graduate-level specialization programs, similar to Canadian residency programs, are available. Most students of medicine will complete a specialization in the field of their interest. The most popular medical specializations in Colombia and their average durations are listed below. Master's and doctoral degrees in medical fields are not common.

### Most common medical specializations and typical length of programs in Colombia

Specialization	<b>Duration (in semesters)</b>
Internal Medicine (Medicina Interna)	6
Paediatrics (Pediatría)	6
Gynaecology and Obstetrics (Ginecología y Obstetricia)	6-8
Anaesthesiology and Reanimation (Anestesiología y Reanimación)	6
General Surgery (Cirugía General)	6-8
Ophthalmology (Oftalmología)	6-8
Orthopaedics and Traumatology (Ortopedia y Traumatología)	8
Radiology and Imaging (Radiología e Imágenes)	6-8
Neurosurgery (Neurocirugía)	8-10
Otorhinolaryngology (Otorrinolaringología)	6-8
Psychiatry (Psiquiatría)	6
Urology (Urología)	6-8
Paediatric Surgery (Cirugía Pediátrica)	4-6
Cardiovascular Surgery (Cirugía Cardiovascular)	4-6
Plastic and Maxillofacial Surgery (Cirugía Plástica y Maxilofacial)	8-10
Dermatology (Dermatología)	6-8
Pain and Palliative Care (Dolor y Cuidado Paliativo)	2-6
Physical Medicine and Rehabilitation (Medicina Física y Rehabilitación)	4-6

• Professional registration and licensing: Since medicine is a regulated profession in Colombia, an academic title alone does not entitle the degree-holders to practice as physicians. They must first be issued a certificate of professional registration (certificado de matrícula profesional) and a wallet-size professional license (tarjeta profesional). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with the appropriate body. In the past, professional licenses were issued to physicians by the regional Secretariats or Directorates of Health (Secretarias o Direcciones de Salud), representing the Ministry of Health (Ministerio de Salud). As of 2002, physicians can apply for professional registration either directly to the General Directorate of Analysis and Policy of Human Resources (Dirección General de Análisis y Política de Recursos Humanos) or to the existing regional Secretariats or Directorates of Health, both of which are affiliated with the Ministry of Social Protection (Ministerio de la Protección Social). In October 2007, new legislation delegated the

responsibilities for professional registration and issuing of professional licenses to the professional colleges (*colegios profesionales*) in each medical field (e.g., *Colegio Médico Colombiano*), but thus far the reforms remain only theoretical. The new legislation also decreed a process of periodic re-certification for all medical professionals and health care support staff. Details of this point remain to be defined by additional decrees.

- Obligatory social service: The completion of obligatory social service (servicio social obligatorio) is a unique requirement for students who graduated from health-related technological and undergraduate programs and who are applying for a professional license. In order to fulfill this requirement, recent graduates must spend 6-12 months at officially preapproved locations in the rural and disadvantaged areas of the country. The service is seen as a contribution of health care professionals to Colombia's overall development. It is also a way for them to get acquainted with the realities of providing health care under difficult circumstances. The graduates can complete their service by providing health care services, teaching the locals about health issues, or conducting research on relevant topics. If the number of available graduates exceeds the number of health care professionals needed, the selection is based on a draw.
- Faculty associations: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for medicine is the Colombian Association of Faculties of Medicine (Asociación Colombiana de Facultades de Medicina), which offers plenty of detailed information about Colombian medical schools and the programs they offer. The association also ensures that medical training in Colombia conforms to international standards.

### **Conclusion**

In Colombia, a typical undergraduate degree in medicine represents 5 years of full-time postsecondary study and 1 year of rotation-based internship. Admission to the program is based on the title of *bachiller* (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The title of *médico* (physician) gives students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *médico* or *médico* y *cirujano* to the completion of a first professional university degree in medicine, preceded by preprofessional university study in science.

### **Grading:**

 Grading scale: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

Numerical grade	Description	IQAS comparison		
4.60 - 5.00	Excellent; maximum grade	91% – 100%		
4.00 – 4.59	Very good	79% – 90%		
3.50 – 3.99	Good	66% – 78%		
3.00 – 3.49	Sufficient; minimum pass	50% - 65%		
0.00 - 2.99	Failing grade	Fail		

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

# **Comments:**

Training in health-related occupations is also available at the professional technical and technological levels, even though the number of these programs is very limited. Institutions offering lower technical and vocational education provide training in assistant health occupations as well.

# COLOMBIA (República de Colombia)

# Médico Veterinario (Veterinarian), Zootecnista (Zootechnist), and Médico Veterinario y Zootecnista (Veterinarian and Zootechnist)

**Date Entered:** April 2008

Category: Undergraduate degree program in veterinary medicine and animal science

Credential Actual Name: Credential English Name:

Médico VeterinarioVeterinarianZootecnistaZootechnist

Médico Veterinario (y) Zootecnista Veterinarian (and) Zootechnist

Credential Alternate Actual Name(s): Credential Alternate English Name(s):

Doctor en Medicina (y) Veterinaria (used by some universities prior to the 1980s)

Doctor in Veterinary Medicine

Veterinario (y) Zootecnista Veterinarian (and) Zootechnist

Time Period Credential Offered: Current

# **Issuing Body:**

Undergraduate degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Undergraduate programs are delivered predominantly by universities (*universidades*) but also by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. Universities are also the only type of institutions in Colombia authorized to offer all kinds of programs and grant all academic titles up to the doctoral level. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

### **Admission Requirements:**

Admission requirements for all Colombian undergraduate programs include the title of *bachiller* and a sufficient score on the State Examination for Admission to Higher Education (*Examen de Estado para Ingreso a la Educación Superior*), commonly referred to as *examen de estado* (state exam) or *pruebas ICFES* (ICFES tests). Some students choose to complete a pre-university

program preparing them for the admission exam and university studies. Such courses, however, are not entrance pre-requisites, have no academic value, and do not offer students any privileges such as advanced placement. In some rare cases, students with a title of *tecnólogo* in a related field may also be admitted to undergraduate degree programs in veterinary medicine and/or zootechnics and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution.

### **Program Description:**

The history of veterinary medicine as a profession in Colombia dates back to 1884 when the first postsecondary training programs for veterinarians were created. As of 1966, Colombian undergraduate programs in animal sciences have been classified as programs in veterinary medicine (*medicina veterinaria*), zootechnics (*zootecnia*), or veterinary medicine and zootechnics (*medicina veterinaria y zootecnia*). Currently, various institutions of higher education offer 9 undergraduate programs leading to the title of veterinarian (*médico veterinario*), 16 undergraduate programs leading to the title of zootechnist (*zootecnista*), and 14 undergraduate programs leading to the title of veterinarian and zootechnist (*médico veterinario y zootecnista*). Even though there are several related graduate-level specialization programs in animal sciences, programs at the master's or doctoral level are not common. Undergraduate programs in any of the above fields typically require 10 semesters of full-time study.

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

- <u>Employment</u> (following appropriate professional registration).
- <u>Admission to graduate studies</u>: Holders of an undergraduate degree in veterinary medicine and/or zootechnics can continue their studies at the graduate level.

#### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- Undergraduate degree from a leading higher education institution (4-5 years of full-time study) comparable to an Australian Bachelor Degree.
- Undergraduate degree from any other higher education institution (minimum 4 years of full-time study) in the first instance comparable to an AQF Associate Degree or AQF Advanced Diploma depending on the field of study; consideration may be given for assessment at Australian Bachelor Degree level on a case-by-case basis.
- Undergraduate degree from any other higher education institution (minimum 5 years of full-

time study) – comparable to an Australian Bachelor Degree.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Any undergraduate degree (minimum 4 years of full-time study) – comparable to British Bachelor Degree standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• Undergraduate degree in veterinary medicine – comparable to a first professional degree in veterinary medicine (i.e. DVM).

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• Undergraduate degree in veterinary medicine – may be considered to have the first professional degree in the field; may be considered for graduate admission.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• Undergraduate degree in veterinary medicine or zootechnics (5 years of full-time study) – comparable to a specialized Bachelor Degree.

### **IQAS** Recommendations for:

- The title of *Médico Veterinario* (veterinarian), representing a minimum of five years of full-time study, generally compares to the completion of a first professional university degree in veterinary medicine, preceded by preprofessional university study in science.
- The title of *Zootecnista* (zootechnist) generally compares to the completion of a four-year Bachelor of Science Degree with a focus in agriculture (animal science).
- The title of *Médico Veterinario* (y) *Zootecnista* (veterinarian and zootechnist) will be assessed on a case-by-case basis in order to determine the most appropriate comparison.

Note: Veterinary medicine degrees in Colombia generally require five years of continuous study in the Faculty of Veterinary Medicine. In Canada, veterinary medicine degrees require in general at least two years of undergraduate study in science followed by four years of professional veterinary medical studies.

### **IQAS** Rationale:

• <u>Length of program</u>: Typically 10 semesters of full-time study. After the introduction of educational cycles in 2002, theoretically students can be admitted to undergraduate programs in veterinary medicine and/or zootechnics based on the title of *tecnólogo* in a related area, in

which case they would only require an additional 3-4 semesters of study to obtain an undergraduate degree. In practice, however, this happens very rarely.

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, the total number of academic credits required for graduation is not officially legislated but rather is determined by individual institutions. In other words, an undergraduate program in veterinary medicine and/or zootechnics can have different durations and credit requirements at various Colombian institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (Solid knowledge of a foreign language, typically English, is usually a requirement for graduation as well and must be demonstrated by passing an international language test like TOEFL.)
- <u>Curriculum</u>: Colombian undergraduate programs in veterinary medicine and/or zootechnics tend to consist of a large core component, obligatory for all students in the program, and a small number of elective courses. The core of the undergraduate curricula for veterinary medicine and/or zootechnics is similar in some ways for the three programs. The courses focus on the main areas shown below.

Veterinary medicine	Veterinary medicine and zootechnics	Zootechnics
<ul> <li>morphophysiology</li> <li>pharmacology and toxicology</li> <li>infectology</li> <li>pathology</li> <li>reproduction and genetics</li> <li>public health and epidemiology</li> <li>surgery</li> <li>clinical topics</li> </ul>	<ul> <li>biology</li> <li>mathematics</li> <li>infectology</li> <li>pathology</li> <li>pre-production</li> <li>production systems</li> <li>medical surgery</li> <li>pre-clinical topics</li> <li>clinical topics</li> <li>socio-humanistic topics</li> </ul>	<ul> <li>physiology</li> <li>reproduction</li> <li>genetics and improvement</li> <li>diet and nutrition</li> <li>grasslands, pastures, and fodder</li> <li>production systems (cattle, poultry, pigs, fish, wild species)</li> <li>meat and dairy technology</li> <li>economic administration</li> <li>sociology and politics</li> </ul>

Laboratories and practica are an essential part of the programs as great emphasis is placed on practical application of skills and knowledge. Usually students are also required to complete a small research project (*trabajo de grado* or *proyecto de grado*) in the last year of study.

# Sample curricula for undergraduate programs in veterinary medicine and zootechnics (Universidad Nacional de Colombia, 2008)

(Source: <a href="http://www.unal.edu.co/veterinaria/carrera\_mv\_plan.html">http://www.unal.edu.co/veterinaria/carrera\_mv\_plan.html</a> and <a href="http://www.veterinaria.unal.edu.co/carrera\_zoo\_plan.html">http://www.veterinaria.unal.edu.co/carrera\_zoo\_plan.html</a>)

	Veterinary m	Course  Veterinary medicine  Hours of instruction per week  Theory  Practice		Zootechnics		
Semester				Course	instr	Hours of instruction per week  Theory Practice
	Anatomy I	1	lab 4	Anatomy	1	lab 5
	Biochemistry I	4	-	Biochemistry I	4	-
I	Biology and ecology	4	_	Biology	3	3
	Biophysics	4	-	Introduction to animal sciences	2	2
	General zootechnics	3	1	Mathematics	4	-
	TOTAL	21		TOTAL		
	Anatomy II	1	5	Biochemistry II	4	-
	Biochemistry II	4	-	Biostatistics I	4	-
**	Histology and embryology	3	3	Economics of agricultural production	4	-
II	Pastures and fodder	2	2	General microbiology	3	-
	Context course		3	General zootechnics	2	2
	-	,	=	Context course	3	
	TOTAL			TOTAL	22	
	Biostatistics	4	-	Biostatistics II	4	-
	Immunology	2	1	Environmental ecology and physiology	4	-
III	Physiology I	3	2	General nutrition	3	1
	Nutrition	4	-	General physiology	4	2
	Elective course	3		Soils	3	2
TOTAL		1	9	TOTAL	1	23
	Animal genetics	4	-	Administration of agricultural enterprises	5	-
	Microbiology	3	3	Animal genetics	4	-
IV	Parasitology	3	3	Nutrition of ruminants	3	1
	Physiology II	3	2	Physiology of plants	2	1
	Virology	2	2	Physiology of production	3	
	Context course	3		Physiology of reproduction	3	-
-		-		Context course	3	
	TOTAL		8	TOTAL		5
V	Mechanisms of disease  Pharmacology	3	3	Animal improvement Applied animal reproduction	1	4
	Rural societies	3		Colombian agricultural policy	3	-
	Semiology	3	3	Diet	3	1
	Elective course		3	Pastures and fodder	2	1

	TOTAL	2	4	TOTAL	1	.8
	Clinical pathology	4	2	Animal sanitation	3	1
VI	Colombian agricultural	2		Applied animal	2	1
	policy	3 -		improvement	2 1	
	Surgery	3	3	Management of grasslands	2	2
	Systematic pathology	2	5	Rural development	3	-
	-	-		Elective course 3		3
	TOTAL	22		TOTAL 17		.7
	Avian medicine	2	2	Production systems - birds	2	2
	Preventive medicine 3			Production systems –	2	2
	Freventive medicine	3	-	equine	2	2
	Production systems –	3		Production systems –	2	2
	cattle	J	_	minor species		2
VII	Production systems –	3	_	Production systems –	2	2
	minor species			water species	2 2	
	Toxicology	4	2	Elective course		3
	Veterinary medicine I	4	2	-		-
	Observation fieldtrip I			-		
	TOTAL	25 TOTAL			19	
	Planning and assessment		_	Production systems –	2	2
	of agricultural enterprises	·		dairy cows		_
	Public health 6	6	_	Production systems – meat	2	2
				cows		
X / I I I	Reproduction	3	4	Production systems – pigs	2	2
VIII	Rural development	2 -		Production systems –	2	2
	workshop Veterinary medicine II	4	2	sheep and goats		1
	Observation fieldtrip II	4		In-depth study course 4 Elective course 3		
	In-depth study course	+		Elective course	3	
	TOTAL			TOTAL	23	
	IOIAL		.o	Planning and assessment		.S
	Clinics	-	40	of agricultural enterprises	3 -	
				Dairy and derivatives		
	Observation fieldtrip III	-		technology	2	2
IX				Meat and derivatives		
	In-depth study course 2		1	technology	2	2
	Final degree project setup	<u> </u>		In-depth study course	4	
	-	_		Elective course	3	
	-	-		Final degree project setup	-	
	TOTAL	43		TOTAL	18	
	In-depth study course			In-depth study course		
*7	(20 weeks)	- 40		(20 weeks)	-	40
X	Final degree project	-		Final degree project -		-
	TOTAL	4	0	TOTAL	4	10

- Exit credential: Undergraduate studies in veterinary medicine and/or zootechnics lead to one of the following academic titles:
  - médico veterinario (after completion of an undergraduate program in veterinary medicine)
  - zootecnista (after completion of an undergraduate program in zootechnics)

 médico veterinario (y) zootecnista (after completion of an undergraduate program in veterinary medicine and zootechnics)

Prior to the 1980s, some universities would grant the title of *doctor en medicina veterinaria* (doctor in veterinary medicine) to those who completed the corresponding undergraduate program. Currently, the degree of *doctor* is strictly a graduate-level title. The title of *veterinario* is used very rarely.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, all undergraduate degrees can be preceded by phrases like the following:

```
título de... (title of...),
título profesional de... (professional title of...),
diploma de... (diploma of...),
grado de... (degree of...),
grado profesional de... (professional degree of...).
```

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

- Examinations: Students enrolled in the last year of their undergraduate program in veterinary medicine and/or zootechnics must take the national Examination of Quality of Higher Education (*Examen de Calidad de la Educación Superior*), commonly referred to as ECAES and administered by the Colombian Institute for the Promotion of Higher Education (*Instituto Colombiano para el Fomento de la Educación Superior*) or ICFES. Individual ECAES scores have no direct impact on whether or not a student is awarded their degree. Graduation and the award of the academic title depend strictly on internal evaluations conducted by the institution of higher education as the ECAES is meant to assess the quality of programs rather than individuals. The ECAES tests became mandatory in 2003 and were first administered to undergraduate students in veterinary medicine and/or zootechnics in 2004. There are separate exams for those enrolled in each of the three undergraduate programs related to animal sciences. The exam for all three professions currently consists of 220 multiple-choice questions that focus on the basic competencies in the field. More information about ECAES is available on the ICFES website.
- <u>Professional registration and licensing</u>: Since veterinary medicine and zootechnics are regulated professions in Colombia, an academic title alone does not entitle the degree-holders to practice their professions. They must first be issued a certificate of professional registration (*certificado de matrícula profesional*) and a wallet-size professional license (*tarjeta profesional*). No additional examinations are administered. The issuing of the license is simply a process through which degree-holders register their qualification with the appropriate body. Professional licenses are issued to veterinarians and zootechnists by the <u>Professional Council of Veterinary Medicine and Zootechnics of Colombia</u> (*Consejo Profesional de Medicina Veterinaria y de Zootechia de Colombia*).

• <u>Faculty associations</u>: In terms of curriculum design for many higher education programs, the faculty associations fulfill a crucial role. Given the great autonomy of Colombian higher education institutions, these associations act as a forum for the individual faculties to exchange ideas and determine the core components of the curricula. The faculty association for veterinary medicine and zootechnics is the Colombian Association of Faculties of Veterinary Medicine and Zootechnics (*Asociación Colombiana de Facultades de Medicina Veterinaria y Zootecnia*).

#### Conclusion

In Colombia, a typical undergraduate degree in veterinary medicine and/or zootechnics represents 5 years of full-time postsecondary study. Admission to the program is based on the title of bachiller (i.e. 12 years of general education) and a sufficient score on the State Examination for Admission to Higher Education (Examen de Estado para Ingreso a la Educación Superior), commonly referred to as examen de estado (state exam) or pruebas ICFES (ICFES tests). Alternatively, students with a title of tecnólogo in a related field may also be admitted to undergraduate degree programs in veterinary medicine and/or zootechnics and qualify for transfer of credit. All applicants are generally required to pass an additional admission exam and a personal interview administered by the postsecondary institution. The titles of *médico veterinario*, *zootecnista*, and *médico veterinario* y *zootecnista* give students access to graduate studies as well as to employment. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *médico* veterinario to the completion of a first professional university degree in veterinary medicine, preceded by preprofessional university study in science. The title of *zootecnista* generally compares to the completion of a four-year Bachelor of Science Degree with a focus in agriculture (animal science). The title of médico veterinario y zootecnista is assessed on a caseby-case basis in order to determine the most appropriate comparison.

### **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

### Grading scale for higher education

Numerical grade	Description	IQAS comparison		
4.60 – 5.00	Excellent; maximum grade	91% – 100%		
4.00 – 4.59	Very good	79% – 90%		
3.50 – 3.99	Good	66% – 78%		
3.00 – 3.49	Sufficient; minimum pass	50% - 65%		
0.00 - 2.99	Failing grade	Fail		

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the undergraduate level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from an undergraduate program was 3200. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

#### **Comments:**

Training in occupations pertaining to animal sciences is also available at the professional technical and technological levels, even though the number of these programs is very limited. Institutions offering lower technical and vocational education provide training in occupations associated with veterinary care as well.

# COLOMBIA (República de Colombia)

# Especialista (Specialist)

**Date Entered:** July 2008

**Category:** Graduate specialization program

### **Credential Actual Name:**

Especialista en xx Especialización (Profesional) en xx

### **Credential Alternate Actual Name(s):**

Especialista en Medicina Familiar Especialista en Contabilidad Gerencial Especialista en Derecho Comercial Especialización (Profesional) en Medicina Familiar Especialización (Profesional) en Contabilidad Gerencial Especialización (Profesional) en Derecho Comercial Etc.

## **Credential English Name:**

Specialist in xx (Professional) Specialization in xx

### **Credential Alternate English Name(s):**

Specialist in Family Medicine Specialist in Managerial Accounting Specialist in Commercial Law (Professional) Specialization in Family Medicine (Professional) Specialization in Managerial Accounting (Professional) Specialization in Commercial Law Etc.

Time Period Credential Offered: Current

### **Issuing Body:**

Graduate specialization diplomas are issued by individual educational institutions, which have full authority over their format and content.

Graduate specialization programs are delivered by universities (universidades), university institutions (institutciones universitarias), and technological schools (escuelas tecnológicas). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), fundación (foundation), escuela (school), colegio or colegio mayor (college), politécnico (polytechnic), unidad (unit), or instituto (institute). Most universities and university institutions will have the word universidad or universitaria in their name, but there are exceptions. The smaller organizational units that comprise a university are faculdades (faculties), escuelas (schools or colleges), and departamentos (departments).

# **Admission Requirements:**

Undergraduate degree in a related area of study.

## **Program Description:**

A graduate-level specialization (*especialización profesional* or simply *especialización*) allows students who have completed their undergraduate studies to continue exploring a specific aspect of their area of study in greater detail. Specializations are particularly common in medical, legal, and management professions. The biggest difference between specializations and other graduate programs is that the former will usually not involve any extensive research. Currently, there are about 5,000 various specialization programs offered by various institutions throughout Colombia. Most of these programs require 2-3 semesters of full-time study. Medical specializations can last up to 10 semesters of full-time study.

The National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

### **Provides Access to in the Home Country:**

- Employment
- Admission to further graduate-level studies (Graduates who choose to enter a program leading to the titles of master or doctor will generally not be given any transfer of credit for the studies completed at the specialization level.)

### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

• No comparison given.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• Especialista / Especialización – comparable to British Postgraduate Diploma standard.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

- Especialista / Especialización (1-2 years of full-time study, following an older undergraduate degree program requiring only 3-3.5 years of full-time study) comparable to a Bachelor of Arts/Science degree.
- Especialista / Especialización in an academic program (1-2 years of full-time study, following an undergraduate degree program requiring 4-5 years of full-time study) comparable to up to 30 credits of graduate-level academic coursework for each year of full-time study.
- Especialista / Especialización in the field of medicine (1-4 years of full-time study, following an undergraduate degree program requiring 4-5 years of full-time study) comparable to completion of an advanced professional program in medical, veterinary, or dental fields.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

- Especialista / Especialización from a clinical training program in dentistry, medicine, nursing, veterinary medicine, or other clinically-based programs may be considered to have completed a specialized clinical training program.
- Especialista / Especialización from a program which is not clinically-based may be considered for graduate admission with transfer credit determined through a course-by-course analysis.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• *Especialista / Especialización* (1 year of full-time study) – comparable to the second cycle of university studies (a 1-year program).

### **IQAS** Recommendations for:

The title of *Especialista* (specialist) generally compares to the completion of a graduate Diploma with a focus in xx.

## **IQAS** Rationale:

• <u>Length of program</u>: Typically 2-3 semesters of full-time study for most programs; up to 10 semesters of full-time study for medical specializations.

### Duration of the most popular medical specialization programs

Specialization	<b>Duration (in semesters)</b>
Internal Medicine (Medicina Interna)	6
Paediatrics (Pediatría)	6
Gynaecology and Obstetrics (Ginecología y Obstetricia)	6-8
Anaesthesiology and Reanimation (Anestesiología y Reanimación)	6
General Surgery (Cirugía General)	6-8
Ophthalmology (Oftalmología)	6-8
Orthopaedics and Traumatology (Ortopedia y Traumatología)	8
Radiology and Imaging (Radiología e Imágenes)	6-8
Neurosurgery (Neurocirugía)	8-10
Otorhinolaryngology (Otorrinolaringología)	6-8
Psychiatry (Psiquiatría)	6
Urology (Urología)	6-8

Paediatric Surgery (Cirugía Pediátrica)	4-6
Cardiovascular Surgery (Cirugía Cardiovascular)	4-6
Plastic and Maxillofacial Surgery (Cirugía Plástica y Maxilofacial)	8-10
Dermatology (Dermatología)	6-8
Pain and Palliative Care (Dolor y Cuidado Paliativo)	2-6
Physical Medicine and Rehabilitation (Medicina Física y Rehabilitación)	4-6

Often the duration of a program will be expressed in academic credits only. Given the great autonomy Colombia's institutions of higher education enjoy, it is not uncommon for a specific program to have different durations and credit requirements at different institutions. Also, the duration of programs and number of credits can change from year to year. The most up-to-date information can be obtained directly from the institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- Language of instruction: Spanish.
- <u>Curriculum</u>: Graduate-level specializations focus on a very specific aspect of an area of study. These programs are particularly common in professions associated with medicine, law, and business administration. The biggest difference between specializations and other graduate programs is that the former will usually not require students to conduct any extensive research. Still, many programs will require students to prepare a small final project (trabajo de grado or proyecto de grado).
- Exit credential: Upon completion of the program, students are awarded the title of specialist (especialista). It is important to note that the word título (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, the title of especialista en xx can be preceded by phrases like the following:

```
título de... (title of...),
diploma de... (diploma of...),
grado de... (degree of...).
```

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

### **Conclusion**

Admission to graduate specialization (*especialización*) programs in Colombia is based on the successful completion of an undergraduate degree in a related area of study. For medical professions, a specialization represents 1-5 years of specialized graduate studies comparable to residency training. Other specialization programs typically represent 1-1.5 years of specialized graduate studies. The title of specialist (*especialista*) in Colombia gives students access to

employment at the appropriate level and to further graduate-level studies (normally without any transfer of credit). Based on the above information and placement recommendations of other assessment resources, IQAS compares the completion of a Colombian graduate specialization program to the completion of a graduate Diploma with a focus in xx.

# **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

Grading	scale for	higher	education

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: The coursework completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of 16 hours of lectures and 32 hours of independent study at the specialization level. In other words, students are expected to follow up every hour of classroom instruction with additional 2 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from a specialization program was 600 (in addition to the 3200 ULAs required for graduation from an undergraduate program). Even though the ULA system was made obligatory in 1980,

Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.		

# COLOMBIA (República de Colombia)

# Magíster (Master)

**Date Entered:** July 2008

**Category:** Graduate degree program

Credential Actual Name: Credential English Name:

Magíster en xx Master of xx

Credential Alternate Actual Name(s) Credential Alternate English Name(s):

Magíster en LiteraturaMaster in LiteratureMagíster en EducaciónMaster in Education

Magíster en Ciencias Biológicas Master in Biological Sciences

Etc. Etc.

Used extremely rarely:

Maestría en xx

Master's program in xx

Magíster Scientae en xx Master of Sciences in xx

Maestro en xxMaster of xxMaster en xxMaster of xx

Magístra en xx Master of xx (feminine form)

Time Period Credential Offered: Current

## **Issuing Body:**

Master's degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Master's degree programs are delivered predominantly by universities (*universidades*) and in some rare instances by university institutions (*institutciones universitarias*) and technological schools (*escuelas tecnológicas*). In Spanish, the actual name of any one of the above institutions can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities and university institutions will have the word *universidad* or *universitaria* in their name, but there are exceptions. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

### **Admission Requirements:**

Undergraduate degree, normally in a related area of study.

Certain master's programs will also accept students based on a technologist title plus a technological specialization since in Colombia this combination is comparable to an undergraduate degree. Prospective students may also be required to pass an entrance examination administered by the faculty they are applying to.

# **Program Description:**

In Spanish, the actual name of a master's program is *maestría* and it leads to the title of *magíster* (master). The latter term is also used in reference to the person holding the title. According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, there are currently over 600 master's programs offered by nearly 70 Colombian institutions of higher education. Still, enrollment in graduate programs (*programas de postgrado/posgrado*) remains low in Colombia. In 2006, only 1% of all the students enrolled in postsecondary education were pursuing a master's degree. In terms of curriculum, master's programs require students to complete some coursework, but the main emphasis is on research. Most of these programs require 2 years of full-time study.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

- Employment
- Admission to further graduate studies (at the doctoral level)

### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- *Magíster* and its equivalents from a leading higher education institution (2 years of full-time graduate study) comparable to an Australian Master Degree.
- *Magíster* and its equivalents from any other higher education institution (2 years of full-time graduate study) comparable to an Australian Graduate Diploma in the first instance.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• *Magíster* and its equivalents – comparable to British Master's Degree standard when awarded on the basis of coursework, research, and a thesis.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• *Magíster* and its equivalents (2 years of full-time study) – comparable to a Master of Arts/Science degree.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• *Magíster* and its equivalents – comparable to a Master's Degree in the U.S.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• *Magister* and its equivalents (2 years of full-time study) – comparable to a Master's Degree.

## **IQAS** Recommendations for:

The title of *Magíster* (master), representing a minimum of two years of full-time study, generally compares to the completion of a two-year Master's Degree with a focus in xx.

## **IQAS** Rationale:

• Length of program: Typically 4 semesters of full-time study.

The duration of a program can be expressed in academic credits as well. Given the great autonomy Colombia's institutions of higher education enjoy, it is not uncommon for a specific program to have different durations and credit requirements at different institutions. Also, the duration of programs and number of credits can change from year to year. The most up-to-date information can be obtained directly from the institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- Language of instruction: Spanish.
- <u>Curriculum</u>: Graduate courses tend to have the format of seminars (*seminarios*) rather than lectures. As a rule, master's students spend the first 2-3 semesters of the program on completing the required coursework. The remaining time is dedicated to the preparation and defense of a comprehensive research project (*trabajo de investigación / trabajo de grado*) or thesis (*tesis*).
- Exit credential: Upon completion of the program, students are awarded the title of *magíster* (master) in a specific field. Other variations of the name of the credential include the titles of *magíster scientae*, *maestro*, *master*, and *magístra* (feminine form of *magíster*), but none of these alternatives are commonly used.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, the title of *magíster* can be preceded by phrases like the following:

```
título de... (title of...),
diploma de... (diploma of...),
grado de... (degree of...).
```

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

#### Conclusion

Colombian master's programs (*maestrías*) typically represent 2 years of graduate studies. Admission to the program is based on successful completion of an undergraduate degree. In some cases, candidates may be required to pass an entrance exam administered by the faculty as well. The title of *magíster* gives students access to further graduate studies and to employment at the appropriate level. Based on the above information and placement recommendations of other assessment resources, IQAS compares a Colombian title of *magíster*, representing a minimum of two years of full-time study, to the completion of a two-year Master's Degree with a focus in xx.

# **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

### **Grading scale for higher education**

Numerical grade	Description	IQAS comparison
4.60 - 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: Academic work completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 12 hours of lectures and 36 hours of independent study at the master's level. In other words, students are expected to follow up every hour of classroom instruction with additional 3 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from a master's program was 800, with 30% of the ULAs in research. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

# COLOMBIA (República de Colombia)

# Magíster en Administración de Negocios/Empresas (Master of Business Administration, MBA)

**Date Entered:** July 2008

**Category:** Graduate degree program in business administration

### **Credential Actual Name:**

Magíster en Administración de Negocios Magíster en Administración de Empresas Magíster en Administración MBA

# **Credential Alternate Actual Name(s) – used extremely rarely:**

Maestría en Administración (de Negocios/Empresas) Magístra en Administración (de Negocios/Empresas) Etc.

## **Credential English Name:**

Master of Business Administration Master of Business Administration Master of Administration MBA

# **Credential Alternate English Name(s) – used extremely rarely:**

Master's Program in (Business)
Administration
Master in (Business) Administration
(feminine version, rarely used)
Etc.

Time Period Credential Offered: Current

## **Issuing Body:**

Master's degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

All master's degree programs are delivered predominantly by universities (universidades) and in some rare instances by university institutions (institutciones universitarias) and technological schools (escuelas tecnológicas). In Spanish, the actual name of any one of the above institutions can include the words corporación (corporation), fundación (foundation), escuela (school), colegio or colegio mayor (college), politécnico (polytechnic), unidad (unit), or instituto (institute). Most universities and university institutions will have the word universidad or universitaria in their name, but there are exceptions. The smaller organizational units that comprise a university are faculdades (faculties), escuelas (schools or colleges), and departamentos (departments).

## **Admission Requirements:**

Undergraduate degree in any field of study, usually supplemented by sufficient professional/managerial experience.

Certain master's programs may also accept students based on a technologist title plus a technological specialization since in Colombia this combination is comparable to an undergraduate degree. Prospective students may also be required to pass an entrance examination administered by the faculty they are applying to.

# **Program Description:**

In Spanish, the actual name of a master's program is *maestría* and it leads to the title of *magíster* (master). The latter term is also used in reference to the person holding the title. According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, there are currently about 25 master's programs in business administration offered by various Colombian institutions of higher education. <u>Universidad EAFIT</u>, one of the most prestigious Colombian schools of business administration, began offering the first program of this kind in the early 1970s. In terms of curriculum, master's programs in business administration normally require students to complete several courses and seminars, while placing equal emphasis on research. Most of these programs require 2 years of full-time study to complete.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

## **Provides Access to in the Home Country:**

- Employment
- <u>Admission to further graduate studies</u> (at the doctoral level)

### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

- *Magíster* and its equivalents in any field from a leading higher education institution (2 years of full-time graduate study) comparable to an Australian Master Degree.
- *Magíster* and its equivalents in any field from any other higher education institution (2 years of full-time graduate study) comparable to an Australian Graduate Diploma in the first instance.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• *Magister* and its equivalents in any field – comparable to British Master's Degree standard when awarded on the basis of coursework, research, and a thesis.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• *Magíster* and its equivalents in any field (2 years of full-time study) – comparable to a Master of Arts/Science degree.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• *Magister* and its equivalents in any field – comparable to a Master's Degree in the U.S.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• *Magíster* and its equivalents in any field (2 years of full-time study) – comparable to a Master's Degree.

## **IQAS** Recommendations for:

The title of *Magíster en Administración (de Empresas/Negocios)* (master of business administration) generally compares to the completion of a Master of Business Administration (MBA) Degree.

## **IQAS Rationale:**

• <u>Length of program</u>: Typically 4 semesters of full-time study.

The duration of a program can be expressed in academic credits as well. Given the great autonomy Colombia's institutions of higher education enjoy, it is not uncommon for a specific program to have different durations and credit requirements at different institutions. Also, the duration of programs and number of credits can change from year to year. The most up-to-date information can be obtained directly from the institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish.
- <u>Curriculum</u>: Graduate courses tend to have the format of seminars (*seminarios*) rather than lectures. As a rule, master's students spend the first 2-3 semesters of the program on completing the required coursework. The remaining time is dedicated to the preparation and defense of a comprehensive research project (*trabajo de investigación / trabajo de grado*) or thesis (*tesis*).

# Sample curriculum for a Master of Administration (MBA) program (Universidad EAFIT, 2008) (Source: http://www.eafit.edu.co/EafitCn/Administracion/Posgrados/MaestriaAdministracion/Index.htm/)

Fundamental Cycle		
Financial mathematics	3 credits	
Financial analysis for decision making	3 credits	
Business economics	3 credits	
Information systems and technologies	3 credits	
Applied statistics for business purposes	3 credits	
Administrative and organizational theory	3 credits	
Total	18 credits	
Contextualization Cycle		
Research methodology	2 credits	
International markets	3 credits	
National and international business contexts	3 credits	
International negotiation	2 credits	
Principles of management	3 credits	
Development of negotiation skills (workshop)	1 credits	
Total	14 credits	
Managerial Cycle		
Financial management	2	
Marketing management	3	
Human resources management	3	
Operations management	3	
Entrepreneurship and intra-entrepreneurship	3	
Business ethics and social responsibility	2	
Final degree project/thesis	2	
Total	18	
Emphasis Cycle		
Marketing	14 credits	
Finance	1.010010	
Project management	(students examine	
International business	2 different areas	
Human development	per semester)	
Business politics	3 credits	
Total	17 credits	

• Exit credential: Upon completion of the program, students are awarded the title of *magíster* (master) in a specific field. Other variations of the name of the credential include the titles of *magíster scientae*, *maestro*, *master*, and *magístra* (feminine form of *magíster*), but none of these alternatives are commonly used.

It is important to note that the word *título* (title) is not an essential part of the actual name of Colombian credentials. In fact, on the degree certificate, the title of *magíster* can be preceded by phrases like the following:

```
- título de... (title of...),
```

<sup>-</sup> diploma de... (diploma of...),

<sup>-</sup> grado de... (degree of...).

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

#### Conclusion

Colombian programs leading to the title of master of business administration (*magíster en administracíon de empresas/negocios*) are open to holders of all types of undergraduate degrees and typically represent 2 years of graduate studies. The title of *magíster* gives students access to further graduate studies and to employment at the appropriate level. Based on the above information and placement recommendations of other assessment resources, IQAS compares the title of *magíster en administracíon* (*de empresas/negocios*) to the completion of a Master of Business Administration (MBA) Degree.

# **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

### **Grading scale for higher education**

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade. Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• <u>Academic credits</u>: Academic work completed by students is measured according to the credit system introduced in 2003. One academic credit (*crédito académico*) is equal to 48 hours of academic work, consisting of 12 hours of lectures and 36 hours of independent study at the master's level. In other words, students are expected to follow up every hour of classroom

instruction with additional 3 hours of independent work. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from a master's program was 800, with 30% of the ULAs in research. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

# COLOMBIA (República de Colombia)

# Doctor (Doctor)

**Date Entered:** July 2008

**Category:** Advanced graduate degree program

Credential Actual Name: Credential English Name:

Doctor en xx Doctor in/of xx

Credential Alternate Actual Name(s): Credential Alternate English Name(s):

Doctorado en xxDoctorate in/of xxDoctor en IngenieríaDoctor in EngineeringDoctor en Ciencias MédicasDoctor in Medical SciencesDoctor en Ciencias de la EducaciónDoctor in Education Sciences

Doctor en Derecho Doctor of Law

Etc. Etc.

Time Period Credential Offered: Current

## **Issuing Body:**

Doctoral degree diplomas are issued by individual educational institutions, which have full authority over their format and content.

Doctoral degree programs are delivered exclusively by universities (*universidades*). In Spanish, the actual name of any higher education institution can include the words *corporación* (corporation), *fundación* (foundation), *escuela* (school), *colegio* or *colegio mayor* (college), *politécnico* (polytechnic), *unidad* (unit), or *instituto* (institute). Most universities will have the word *universidad* or *universitaria* in their name, but there are exceptions. The smaller organizational units that comprise a university are *faculdades* (faculties), *escuelas* (schools or colleges), and *departamentos* (departments).

## **Admission Requirements:**

The minimum admission requirement to doctoral programs is an undergraduate degree, normally in a related area of study. Theoretically, a master's degree is not a pre-requisite for entrance into doctoral programs, but the vast majority of applicants will have completed one. For those who enter a doctoral program immediately after their undergraduate studies, the program has a longer duration. Prospective students may also be required to pass an entrance examination administered by the faculty they are applying to.

# **Program Description:**

In Spanish, the actual name of a doctoral program is *doctorado* and it leads to the title of *doctor* (doctor), which is the highest educational award in the Colombian education system. By the mid-1980s, the only institution to offer doctoral degree programs in Colombia was the Pontificia Universidad Javeriana. According to the National System of Information of Higher Education (*Sistema Nacional de Información de Educación Superior*) or SNIES, currently there are about 100 doctoral programs offered by more than 20 Colombian institutions of higher education. Still, enrollment in graduate programs (*programas de postgrado/posgrado*) remains low in Colombia. In 2006, only 0.1% of all the students enrolled in postsecondary education were pursuing a doctoral degree. In terms of curriculum, doctoral programs require students to complete some coursework, but the main emphasis is on research. Most doctoral programs require 4-5 years of full-time study if taken immediately after an undergraduate degree or 2-3 years of full-time study if taken after a master's degree in a related field.

SNIES maintains a searchable <u>online database</u> of information about all registered higher education institutions and programs.

# **Provides Access to in the Home Country:**

• <u>Employment</u>

### **Placement Recommendations:**

**NOOSR** – National Office of Overseas Skills Recognition – Australia, "Country Education Profiles: Colombia." Online database (2008).

• No comparison given.

**UK-NARIC** – National Recognition Information Centre for the United Kingdom, "International Comparisons: Colombia." Online database (2008).

• *Doctor* – comparable to British Doctor of Philosophy (Ph.D.) Degree standard when awarded on the basis of independent research and completion of a thesis.

**IERF** – International Education Research Foundation, "The New Country Index: Making Sense of International Credentials." Vol. 1. (2004).

• *Doctor* (2 years of full-time study after a master's degree or 4 years of full-time study after an undergraduate degree) – comparable to a Doctor of Philosophy (Ph.D.) Degree.

**AACRAO** – American Association of Collegiate Registrars and Admissions Officers / Wellington, Stanley, "Colombia: A Study of the Educational System of Colombia and a Guide to the Academic Placement of Students from Colombia in Educational Institutions of the United States." (1984).

• *Doctor* – comparable to an earned doctorate in the same field in the U.S.

**CEFAHQ** – Centre d'expertise sur les formations acquises hors du Québec, "Tableau comparatif des diplômes colombiens." (2007).

• No comparison given.

### **IQAS Recommendations:**

The title of *Doctor* (doctor) generally compares to the completion of a Doctor of Philosophy (Ph.D.) Degree with a focus in xx.

## **IQAS Rationale:**

• <u>Length of program</u>: Typically 8-10 semesters of full-time study if taken immediately after an undergraduate degree or 4-6 semesters of full-time study if taken after a master's degree in a related field. Some programs may have a slightly different duration.

The duration of a program can be expressed in academic credits as well. Given the great autonomy Colombia's institutions of higher education enjoy, it is not uncommon for a specific program to have different durations and credit requirements at different institutions. Also, the duration of programs and number of credits can change from year to year. The most up-to-date information can be obtained directly from the institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

- <u>Language of instruction</u>: Spanish. (In the course of their studies, doctoral students are often required to pass an exam proving reading comprehension in a foreign language.)
- <u>Curriculum</u>: Doctoral students are usually required to complete some coursework, but the main emphasis is on research (*investigación*). Many graduate courses tend to have the format of seminars (*seminarios*) rather than lectures. Once students have completed their courses and prepared a research proposal, they are usually required to pass a candidacy exam (*examen comprehensivo / examen de cualificación*). The preparation and defense of a doctoral dissertation (*disertación doctoral*) or thesis (*tesis*) that represents an original contribution to the student's field of study mark the final stage of doctoral studies. Some programs may require students to publish some of their research in professional journals and/or participate in an academic exchange with a university abroad prior to being awarded the degree.
- Exit credential: Upon completion of the program, students are awarded the title of *doctor* (doctor) in a specific field.

Prior to the 1980s, some universities would grant the title of *doctor* upon completion of some undergraduate degree programs, especially in law, medicine, and dentistry. Currently, the degree of *doctor* is strictly a graduate-level title.

It is important to note that the word título (title) is not an essential part of the actual name of

Colombian credentials. In fact, on the degree certificate, the title of *doctor* can be preceded by phrases like the following:

```
título de... (title of...),
diploma de... (diploma of...),
grado de... (degree of...).
```

In terms of documentation, graduates receive a diploma, usually accompanied by a graduation record and a transcript, issued by the institution where they completed their education.

#### Conclusion

Colombian doctoral programs (*doctorados*) typically represent 4-5 years of full-time graduate studies. Admission to the program is based on either an undergraduate degree (in which case the program will last 4-5 years) or a master's degree (in which case the program will last 2-3 years). The title of *doctor* is the highest academic award in Colombia, and it gives students access to employment at the appropriate level. Based on the above information and placement recommendations of other assessment resources, IQAS compares a Colombian title of *doctor* to the completion of a Doctor of Philosophy (Ph.D.) Degree with a focus in xx.

## **Grading:**

• <u>Grading scale</u>: The grading scale for all types of higher education has been relatively standardized and universally implemented by all types of Colombian postsecondary institutions for several decades.

### Grading scale for higher education

Numerical grade	Description	IQAS comparison
4.60 – 5.00	Excellent; maximum grade	91% – 100%
4.00 – 4.59	Very good	79% – 90%
3.50 – 3.99	Good	66% – 78%
3.00 – 3.49	Sufficient; minimum pass	50% - 65%
0.00 - 2.99	Failing grade	Fail

To pass a course, students must obtain a minimum average of 3.00. Otherwise, they are required to take a make-up examination (*examen de habilitación*), which will be indicated on their academic transcript.

Only a few institutions choose to use a different evaluation method. For instance, Universidad Católica de Colombia uses a 10-point scale, with 6 as the lowest passing grade.

Universidad Pedagógica Nacional uses a 50-point scale, with 30 as the lowest passing grade.

• Academic credits: Academic work completed by students is measured according to the credit system introduced in 2003. One academic credit (crédito académico) is equal to 48 hours of academic work, consisting of lectures and independent study. For doctoral programs, the exact distribution of hours is determined by the nature of each program. It is not uncommon for a specific program to have different credit requirements at different institutions. All exit credentials have equal academic value regardless of the actual program duration or number of credits.

In the years 1980-2003, postsecondary programs were measured in units of academic work (*unidades de labor académico*) or ULAs. One ULA represented 1 hour of class time, supplemented by 2 hours of practical application and 3 hours of independent work under direct supervision. The total number of ULAs required for graduation from a doctoral program was 800, with 40% of the ULAs in research. Even though the ULA system was made obligatory in 1980, Colombian institutions were slow to implement it and many continued to use credit hours and number of years of study to describe programs.

### **Comments:**

For more information on higher education in Colombia, including sample documentation, please refer to the *International Education Guide: Republic of Colombia*.