

The Higher Education System in Mexico



National Report

May 2019

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Acronyms

ANUIES	Asociación Nacional de Universidades e Instituciones de Educación Superior de la República Mexicana, A.C.
ARWU	Ranking Académico de las Universidades del Mundo
CEE	Consejo de Evaluación Educativa
CENEVAL	Centro Nacional de Evaluación para la Educación Superior
CIEES	Comités Interinstitucionales para la Evaluación de la Educación Superior A.C.
CIIES	Comités Interinstitucionales de Instituciones de Educación Superior
CINE	Clasificación Internacional Normalizada de la Educación
CODEIC	Coordinación de Desarrollo Educativo e Innovación Curricular
CONACYT	Consejo Nacional de Ciencia y Tecnología
CONOCER	Consejo Nacional de Normalización y Certificación de Competencias Laborales
COPAES	Consejo para la Acreditación de la Educación Superior, A.C.
CPAE	Comisión de Pares Académicos Externos
DGAE	Dirección General de Administración Escolar
DGAIR	Dirección General de Acreditación, Incorporación y Revalidación
DGENAM	Dirección General de Educación Normal y Actualización del Magisterio
DGESPE	Dirección General de Educación Superior para Profesionales de la Educación
DGIRE	Dirección General de Incorporación y Revalidación de Estudios
DGOAE	Dirección General de Orientación y Atención Educativa
DGP	Dirección General de Profesiones
DIPES	Dirección de Instituciones Particulares de Educación Superior
DREOE	Dirección de Registros Escolares, Operación y Evaluación
EFTP	Educación y Formación Técnica y Profesional
FIMPES	Federación de Instituciones Mexicanas Particulares de Educación Superior
FONCA	Fondo Nacional para la Cultura y las Artes
FUNAM	Fundación UNAM
IES	Instituciones de Educación Superior
INEA	Instituto Nacional de Educación para los Adultos
ITESM	Instituto Tecnológico y de Estudios Superiores de Monterrey
PMI	Programa de Mejora Institucional
QS	<i>Quacquarelli Symonds</i>
RecoLATIN	<i>Credential Evaluation Centres and Recognition Procedures in Latin American Countries</i>
RVOE	Reconocimiento de Validez Oficial de Estudios del Tipo Superior
SACSCOC	<i>Southern Association of Colleges and School Commission on Colleges</i>
SADFI	Sistema de Acreditación a través del Desarrollo y Fortalecimiento Institucional
SEN	Sistema Educativo Nacional
SEP	Secretaría de Educación Pública
SES	Subsecretaría de Educación Superior
SIAE	Sistema Integral de Administración Escolar





SIRVOES	Sistema de Reconocimiento de Validez Oficial de Estudios del tipo Superior
SMA	Subdirección de Movilidad Académica
SNC	Sistema Nacional de Competencias
SNI	Sistema Nacional de Investigadores
SRE	Secretaría de Relaciones Exteriores
SUAyED	Sistemas Escolarizado y Universidad Abierta y Educación a Distancia
THE	<i>Times Higher Education</i>
TIC	Tecnologías de Información y Comunicación
UDEM	Universidad de Monterrey
UNAM	Universidad Nacional Autónoma de México
UNESCO	Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura



1. Introduction

Article 3 of the Political Constitution of the United States of Mexico¹ is founded on the human right of all children and young people to receive compulsory quality education. The National Education System (SEN - Sistema Educativo Nacional) includes the governmental and social institutions responsible for providing educational services and for preserving, transmitting, and enhancing Mexicans' culture. This system is composed of the following educational levels: pre-school, primary and secondary education -basic and compulsory in nature; upper secondary education, also compulsory; and higher education.

To guarantee this right, the Political Constitution obliges Mexicans to have their children or wards attend public or private schools to obtain basic and upper secondary education, pursuant to Article 31 of Mexico's Carta Magna. In 2013, the Mexican State was obliged to guarantee "the quality of compulsory education so that educational materials and methods, school organisation, educational infrastructure and the suitability of teachers and managers ensure that students succeed in learning as much as they can", pursuant to the amendment of Article 3 of the Political Constitution.

When proposing a comprehensive description of the Mexican educational system, both its complexity and the diversity of the United Mexican States themselves as well as the vast extension of their territory have to be borne in mind - the nation's ethnic and cultural heterogeneity with its many mountains and watercourses - which make this country among the most bio-diverse in the world. Consequently, the federal entities' agencies are endowed with competences at the local level - resulting in decentralisation of federal responsibilities at the educational level. This diversity also helps explain why it is so complicated to give a simple description of how the Mexican educational sector is organised.

To succeed in developing Mexican education, the various levels of schools have to be equipped with better infrastructure, equipment, technological development and innovative pedagogical frameworks. They also need a system of administration able to implement educational practices and appraise their effects on learning so as to improve academic results, i.e. provide what they need so that they can have playing fields, multipurpose classrooms, offices, areas for studying and for health, services, and water and sanitation. Learning levels, coverage, and equity are three major aspects of educational quality all addressed at the same time with the goal of permanently guaranteeing educational quality.

Accordingly, the Mexican government is aware that it is necessary to constantly improve the quality of education and that students have to have the fundamental tools and skills to understand and analyse texts, express themselves in writing, and think critically, reflectively, creatively and proactively - so that they are able to reason as active and involved citizens. If this is achieved, Mexico's progress will undoubtedly hasten the achievement of the development goals planned to boost the economy and strengthen the country's stability - not just to have a better nation but to collaborate in the prosperity of the international community.

In order to contribute to the efforts made internationally in favour of students who choose to expand academic horizons, the Ministry of Public Education (SEP - Secretaría de Educación Pública)², through the General Directorate of Accreditation, Incorporation and Validation (DGAIR - Dirección General de Acreditación, Incorporación y Revalidación)³, plays an active part in the RecoLATIN⁴ consortium, which has commissioned this national report.

This document gives a general description of the Mexican SEN and of the level of higher or tertiary education in particular. It is aimed at sharing the system for credits and for accrediting and recognising qualifications in Mexico with the credential evaluators and academic qualifications around the world. Two reputed higher education institutions collaborate in this joint effort: the Universidad Nacional Autónoma de México (UNAM [National Autonomous University of Mexico])⁵ and the Universidad de Monterrey (UEM



[University of Monterrey])6;they will contribute to the above discussion from their own perspectives in accordance with their respective positions in the public and private sector.

2. Overview of the education system

The current mission of the SEP is to create conditions that ensure that all Mexicans have access to quality education - at the level and in the conditions they need it and in the place where they require it. The vision is that by 2030 every Mexican will have modern, quality education through which he or she will be equipped with knowledge, capabilities, and values. The SEN educates citizens in the values of freedom, justice, dialogue and democracy, as well as providing them with the tools they need to integrate into productive life successfully. Education is the main component of the social enterprise as the best instrument for guaranteeing equity and access to a better quality of life for all, in addition to nurturing the human talent required for the competitiveness and development of our country.

2.1 Bodies governing and structuring the education sector

The SEP is part of the centralised public administration and of the departments of the Federal Executive Branch for studying, planning, and executing administrative business in educational matters - as can be seen in the following link of the official SEP site:

<https://www.gob.mx/sep/acciones-y-programas/organigrama-de-la-secretaria-de-educacion-publica?state=published>

In its turn, pursuant to Article 10 of the General Education⁷, the SEN in Mexico includes the education provided by the State, its decentralised agencies and the private institutions with authorisation or recognition of official validity of studies, that is to say:

- The educational authorities competent in their scope are federal if they depend on the federal executive, and local if they depend on the executives of the 32 states that compose the Mexican Republic.
- The educational institutions of the State and its decentralised agencies may be either federal or local.
- The private institutions with authorisation or recognition of official validity of studies can also be authorised or recognised by federal or local education authorities.
- The higher education institutions granted autonomy may be either federal or local.

2.2 Description of educational levels

Pursuant to Article 37 of the General Education Law, the SEN includes a propaedeutic sequence, which means that in order to be admitted to a higher level the level just below has to be accredited first.

Below is a description of the educational levels in the SEN.

2.2.1 Basic education

Kindergarten

Preschool education is compulsory for the population of 3 to 5 years of age and is divided into three levels.

The services offered at this level are general and indigenous education, and community courses.

General preschool education is a service offered by the SEP, state governments, and private institutions in rural and urban areas. The SEP directs the indigenous service; this service is provided for children of various ethnic groups and provided by teachers who know their languages.

At the preschool level, children acquire the apparently simple but fundamental notion that writing represents oral language and communicates ideas about objects, actions, and situations. The development of oral expression skills is an invaluable resource in all human activities and not only in schools. In addition, it is related to learning to read and write comprehensively - since from this stage the capacity to communicate is viewed as a whole.

Primary education

Primary education is compulsory, aimed at the population of 6 to 14 years, and **is divided into six levels**. The services offered at this level are general and indigenous education, and community courses.

Whatever its form, primary education is essential for going on to secondary education.

Pursuant to its powers under the General Law of Education, the SEP draws up the curricula and programmes for primary education. Their observance applies nationally and generally to all educational institutions whether public or private.

The subjects that are taught in primary school are intended to organise teaching and for learning the basics, so that students:

- Develop intellectual skills and habits that allow them to learn permanently and independently, as well as act effectively and with initiative in the practical issues of daily life, such as reading and writing, oral expression, search and selection of information, and the application of mathematics to reality.
- Acquire the fundamental knowledge to understand natural phenomena, particularly related to the preservation of health, the protection of the environment, and the rational use of natural resources, as well as providing an organised vision of the history and geography of Mexico.
- Receive an ethical education through knowledge of their rights and duties, and the practice of values in their personal lives, in their relationships with others and as members of the national community.
- Acquire an outlook that helps them to appreciate and enjoy the arts and physical and sporting exercise.

The basics are a fundamental means for students to attain the goals of comprehensive education. "Basics" does not mean a collection of minimal or fragmentary pieces of knowledge, but a combination of theory, facts, and skills that enables various forms of increasingly sophisticated knowledge to be acquired, organised and applied.

Primary school has to ensure children master reading and writing, and elementary mathematics, and that they are capable of selecting and using information. To the extent that these tasks are performed effectively it will be possible to see to other functions.

The official documents used to validate the certification process are:

- 1. School leaving certificate, or*
- 2. Evaluation Report or score report.*

Every two months, educational establishments, whether public or private, provide students and their parents or guardians with their partial grades and observations on their academic performance; the approval of the students' grades, the accreditation of their studies, and their regularisation are carried out pursuant to the SEP's rules.

Lower Secondary education

Lower Secondary education is compulsory, aimed at the population of 12 to 16 years of age, and is divided into three levels. The services provided at this level are general or technical education and distance learning; secondary education for workers or in the version for adults is offered to persons over 16 years of age. This level is propaedeutic, i.e. necessary for starting professional intermediate or higher intermediate studies.

The essential goal of the **Lower** secondary curriculum is to help raise the quality of the education of students' having finished primary education by strengthening the contents that meet the basic learning needs of the country's young people - needs that only school can satisfy.

The contents of this syllabus integrate the knowledge, skills, and values that allow students to continue their learning with a high degree of independence, inside or outside the school; they make it easier for them to join, productively and flexibly, the world of work; they help solve the practical demands of daily life and stimulate active and thoughtful participation in social organisations and in the political and cultural life of the nation.

The priorities of the **Lower** secondary school curriculum are:

- To ensure students deepen and practise their competences in the use of oral and written Spanish; to develop the ability to express ideas and opinions with precision and clarity; to understand, value and select reading material, in its various informative, practical and literary functions.
- To expand and consolidate mathematical knowledge and skills, the abilities to apply arithmetic, algebra and geometry in presenting and solving problems in everyday life, and to understand and organise quantitative information.
- To strengthen students' scientific training and overcome the learning problems that arise in this field. In the first year of high school, there is an Introduction to Physics and Chemistry course, intended to make it easier to move on from studying by areas in primary education to a discipline-centred approach in secondary school. In the second and third grades Physics, Chemistry, and Biology are studied separately as specific subjects
- To deepen and systematise students' education in History, Geography and Civics so that they acquire the elements for understanding the processes through which human cultures develop; to develop in learners a general vision of the contemporary world and of the growing interdependence between its parts; to foster their participation in social relations governed by the values of legality, respect for rights, personal responsibility, and the appreciation and defence of national sovereignty.
- To learn a foreign language (English or French) - particularly, the aspects most frequently used in communication.

The educational authority itself defines the curriculum in secretarial agreements in which it is laid down that it is to be applied nationally and generally in all public and private institutions.

The official documents used to validate the certification process are:

- 1. certificate of completion of studies, or*
- 2. Evaluation Report or score report.*

Adult education

In 1996 and 1997 both the experience in delivering educational services and analysis of the factors that cause adults to continue their studies or hindering them from doing so resulted in a review of the conceptual bases of adult education and a reform of its models and working structures.

The informal knowledge and experience men and women gather together throughout their lives have an essential role in this project. The model promotes the acquisition of basic academic skills and work capabilities to enable people to integrate the labour market more effectively.

Based on a flexible modular structure, adults can choose the educational route of their choice, according to their specific study objectives and their learning possibilities and requirements.

The development of secondary distance learning for adults is really striking - the need to get closer to the adult population's environment and educational requirements is a fundamental premise in its design. The programme considers innovative evaluation mechanisms, which will appraise previously acquired knowledge, as well as flexible accreditation systems that will allow people over 18 years of age to have access to the different grades or specific subjects at this level of education. Another form of flexibility that applies to these forms of education is the adjustments to the curriculum such as not including some areas - for example, physical education, technology, or art; however, in the level's basic areas the structure of the curriculum and syllabuses remains unchanged.

Regarding adult education, it is also the SEP that regulates the curriculum and syllabus through the National Institute of Education for Adults (INEA - Instituto Nacional de Educación para los Adultos)⁸; nevertheless, the offer is different - i.e. the curriculum is proposed in modules.

The official documents used to validate the certification process are:

- 1. certificate of completion of studies, or*
- 2. Evaluation Report or score report.*

2.2.2 Upper secondary education

Upper secondary education is taught after lower secondary education, comprises 2 to 3 years depending on its form - i.e. it can be completed in 6 semesters or three years or by modules - and is made up of three subsystems, which are configured differently depending on the objectives, school organisation, the curriculum, and the students' general preparation. **To enter upper secondary education, it is essential to have a lower secondary education certificate and sit an entrance exam - which most private and public schools apply. The subsystems are described below:**

a) Bachillerato General General High School

The goal of the Bachillerato General (General High School) is to prepare students to go on to higher education by providing the student with a comprehensive formative education consisting of a basic general

preparation that includes scientific, technical and humanistic knowledge, together with some research methodologies and language proficiency. The following are included in this subsystem:

- *Open high school* - which fosters directed self-learning and lets users study in the time and at the pace that suits them best; there are no time or sequential restrictions on studying the subjects making up the curriculum and students are provided with printed and audiovisual materials designed for independent study.
- *Intermediate distance education, which is completed by modules in 2 and a half years.*

The official document used to validate the certification process is:

1. *Certificado de estudios / certificate of studies*

b) Bachillerato tecnológico (Technological High School)

This subsystem is of a double nature because it offers students the choice between technical studies and integration into the world of work. It aims to give them command of a branch of technology, in addition to having the basics for the Bachillerato General High School. It also equips students to apply the scientific, cultural, and technical bases that he has been taught to solve problems in the workplace.

The official document used to validate the certification process is:

1. Certificado de estudios Study certificate certificate of studies
2. Título profesional / Professional degree

This programme allows university studies to be continued once the corresponding certificate of studies has been obtained - even without having obtained the qualification.

c) Professional training in terminal mode

It is taught as a course that offers the training to be a qualified technician in various specialities. Its purpose is to prepare human resources in middle management to perform duties such as supervision, checking, and evaluation of production processes. The school leaver obtains a qualification as a professional technician, a technical professional, or basic technician depending on the institution and type of programme he has studied.

The services are provided in all the federal establishments in the country and the offer is planned based on surveys of academic and labour demand at the regional and national levels.

The official document used to validate the certification process is:

1. *Certificado de estudios / certificate of studies*
2. *Título profesional / Professional degree*

This type of study is completed in 6 semesters and has no continuity with higher education studies.

2.2.3 Higher education

The primary functions of higher education are to train people in the different fields of science, technology, teaching, and research and, also, to extend the benefits of education and culture to society as a whole for the purpose of making the entire nation progress.

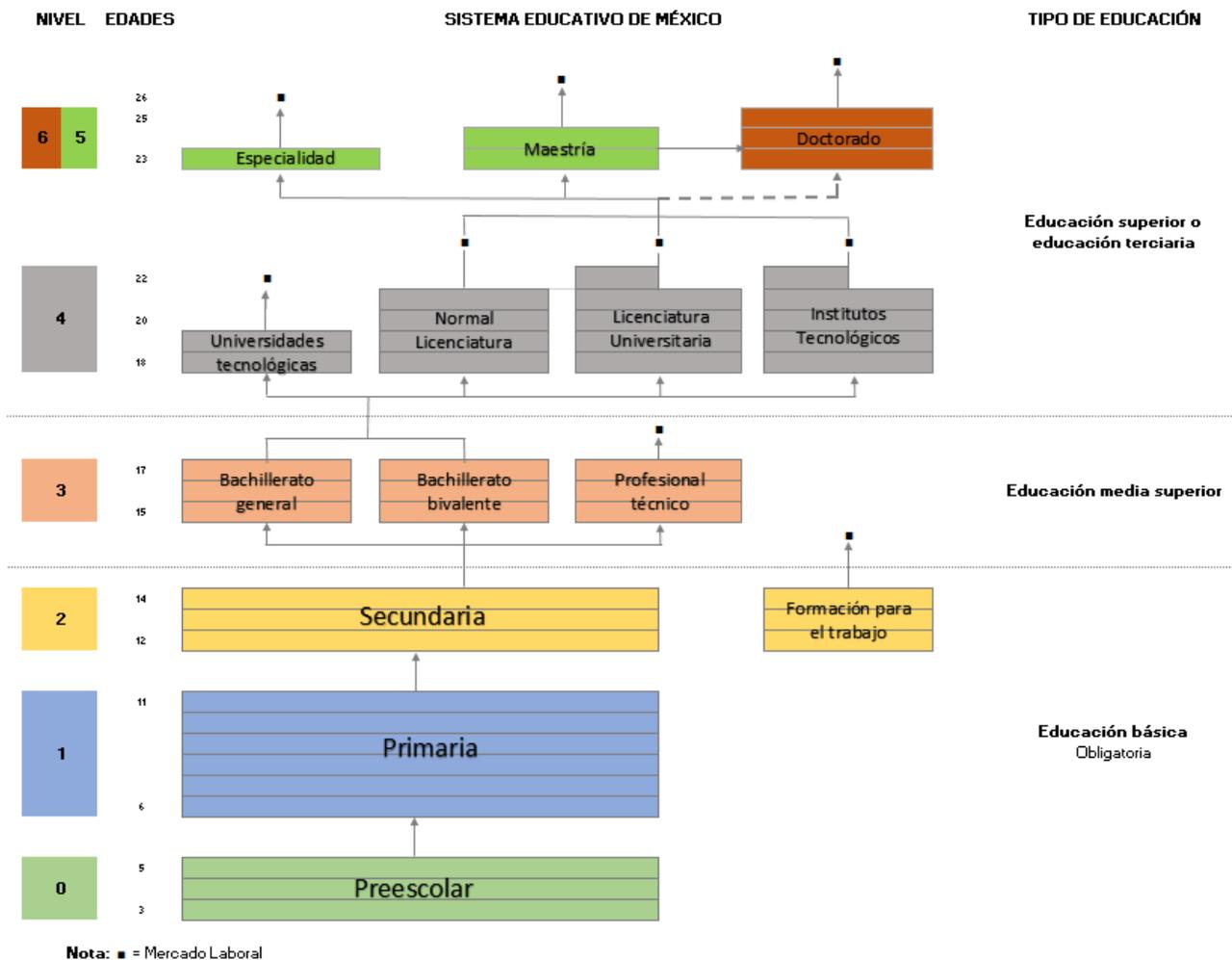
The educational authorities competent to certify studies valid throughout the Mexican territory are the federal education authority, the local educational authorities, and decentralised and devolved organisations, as well as the institutions granted autonomy - as mentioned in 2.1 of this document.

In Mexico, higher education is made up of four types of institutions: universities, technological institutes, teacher training institutes, and technological universities. **It includes the levels of técnico superior universitario or profesional asociado, licenciatura, especialidad, maestría degree and doctorado, as shown by the breakdown below:**

- I. Técnico Superior Universitario or Profesional Asociado, **which leads to a title (título)**
- II. licenciatura, **which leads to a title (título);**
- III. Posgrado Graduate degree: is the educational option after degree and includes the following levels:
 - a) especialidad, which leads to a diploma;
 - b) maestría, which leads to obtaining the corresponding degree (grado);
 - c) doctorado, which leads to obtaining the corresponding degree (grado).

In section 3, the subject of higher education will be addressed in greater detail.

2.3 Diagram of the education system



3. Higher Education or Tertiary Education (higher university and non-university)

Pursuant to Article 3 of the Law for the Coordination of Higher Education⁹, higher education is taught after the Bachillerato or its equivalent; it covers teacher-training, technological, and university education and includes short professional courses and studies aimed at obtaining a title of licenciatura, especialidad maestría and doctorado, as well as refresher and specialisation courses.

Tertiary education in Mexico includes two fields:

- *Non-university* - the courses are pre-degree level such as the University Advanced Technician and the Associate Professional aimed at training professionals with technical knowledge; the courses last two or three years. The institutions are authorised to confer professional technical degrees. In turn, these studies may have continuity to complete the degree level.
- *University* - they are responsible for professional training, scientific research, and linking university and society together. The institutions are authorised to confer professional qualifications and academic degrees.

The duration of the studies varies between the institutions; in general the students study for four or five years for the degree level. Some institutions have organised their courses in quarters, four-month terms, semesters, or years.

There is no universal form of academic organisation, but the most common types are schools and faculties and institutes which sometimes can combine several courses split into areas of knowledge.

The type of course probably influences the forms of evaluation used, in some cases the choice is made to have periodic appraisals over the school year (quarterly, four-monthly, half-yearly, or yearly) and in others only one assessment is carried out at the end of the cycle - sometimes combining partial grades with final grades.

Pursuant to Article 37 of the General Education Law, the SEN includes a propaedeutic sequence, which means that in order to be admitted to a subsequent level the level just below has to be accredited first.

Accordingly, in order to be admitted to the following level of higher education it is essential to have the Bachillerato for a Técnico Superior Universitario or profesional asociado degree.

3.1 Types of tertiary education

As already mentioned, higher education is taught in four types of institutions: universities, technological institutes, teacher training institutes, and technological universities, and includes the levels of técnico superior universitario or profesional asociado, licenciatura, especialidad, maestría y doctorado degrees.

These are described below:

Vocational/academic education

- I. Técnico Superior Universitario: the educational option after the Bachillerato and prior to the licenciatura, fundamentally with a practical slant, in which extensive specialised, technical and theoretical knowledge is generated in a specific field of work or study - which leads to obtaining a professional qualification.

This level can be accredited as part of the curriculum of a licenciatura.

The approximate duration is two to three years.

- II. licenciatura: the educational option after the Bachillerato, in which advanced knowledge is acquired in a field of work or study requiring a critical understanding of theories and principles - and which leads to obtaining a professional qualification.

The approximate duration is four to five years and includes a minimum of 300 credits.

- III. Posgrado : the educational option after the degree, in which the knowledge in a specific field is deepened as far as the forefront or cutting-edge of a field of work or particular study.

The approximate duration is from one to four years and it includes the following levels:

- a) especialidad, which comprises a minimum of 45 credits after the degree and leads to obtaining a diploma; the Medical specialities should comprise more than 150 credits.
- b) maestría, which includes a minimum of 75 credits after the Licenciado or 30 after the speciality and leads to obtaining the corresponding degree;

c) doctorado, which comprises a minimum of 150 credits after the degree or 105 after the speciality or 75 after the Maestria degree, and leads to the corresponding degree.

It being understood that one hour of learning comprises 0.0625 credits.

Postgraduate studies are intended to deepen knowledge in a specific field and are defined as follows:

a) especialidad:

It is aimed at training individuals already able to study and to deal with specific problems in a particular area of a profession; students learn the knowledge and skills of a basic discipline, or the ways of working specific to a particular profession.

A licenciado degree or equivalent is the minimum academic requirement, its curriculum comprises a minimum of 45 credits, and it leads to a diploma.

b) maestría:

It is aimed at training individuals already formed to take part in analysing, adapting, and putting into practice the advances in a specific area of a profession or discipline.

A degree is the minimum academic requirement, its curriculum comprises a minimum of 75 credits after the degree, and 30 credits after the speciality, and it leads to obtaining an academic degree.

c) doctorado:

It is aimed at training individuals already formed for teaching and research, with mastery of particular themes in an area. Its graduates are able to generate new knowledge independently, or to apply knowledge in an original and innovative way.

A degree is the minimum academic requirement, its curriculum comprises a minimum of 150 credits after the degree, 105 credits after the speciality, and 75 credits after the master's, leading to an academic degree.

Technological Education

The technological education institutions were established to offer young people an alternative access to higher education more directly linked to the labour market and regional development, and with the purpose of offering students a comprehensive theoretical-practical training that empowers and trains individuals to face the challenges of national development.

To a large extent, the growth of technological education enrolment in recent years can be attributed to the creation of technological institutes and a new programme in these institutions that lasts three years - two years of common trunk and one of specialisation. This alternative favours a quick entry into the labour market and allows the graduates to continue studying.

The technological universities are state government decentralised public bodies that offer courses with two-year programmes to obtain the degree of Advanced University Technician.

3.2 Teacher training (Teacher Training and Higher Teacher Training Institute)

Teacher Training Education

Before 1984 admission to teacher training education required the presentation of the academic certificate proving completion of secondary education studies. In the classrooms nowadays, basic education is still taught by teachers qualified in this way.

Higher Teacher Training Education

Since 1984, when teacher training education became degree level and this subsystem was integrated into higher education, the main objective of teacher training institutes has been to train teachers for the levels and forms of basic education. In Mexico, Licenciado degrees are offered in pre-school, primary, secondary, special education and physical education, and with various postgraduate options. **The duration of the studies is 8 semesters completed in 4 years. Admission to these courses requires a Bachillerato.**

The teacher training institutes of the SEP, of state governments, private institutes, and the Universidad Pedagógica Nacional (National Pedagogical University) participate in providing these services.

The curricula and syllabuses corresponding to teacher training education are operated through the General Directorate of Normal Education and Teacher Training Update (DGENAM - Dirección General de Educación Normal y Actualización del Magisterio)¹⁰ and are authorised and supervised by the General Directorate of Higher Education for Professional Education (DGESPE- Dirección General de Educación Superior para Profesionales de la Educación)¹¹.

3.3 Fees, financing and scholarships

Pursuant to Article 41, Section XII, of the Internal Regulation of the SEP, the DGAIR is empowered to establish general guidelines according to which private institutions with authorisation or recognition of the official validity of studies authorised by the SEP must provide scholarships, which will be delivered in line with an inclusion and equity policy; likewise, it is the institute's responsibility to monitor compliance with the said guidelines.

Under these conditions, in order to guarantee inclusion in the national education system, Secretarial Agreement 17/11/17¹³ pursuant to which the processes and procedures relating to the recognition of the official validity of higher studies are specified, provides in chapter II entitled "Granting of Scholarships", Article 49 that *"... the scholarships shall be granted pursuant to the provisions of this Chapter and the academic regulations of the Institution. The Federal Educational Authority shall refrain from intervening and participating in the procedure for the selection and granting of scholarships"*.

Article 50 provides as follows: *"The Private Institution must grant a minimum of scholarships, equivalent to five percent of the total number of students enrolled in curricula recognised to be officially valid, which shall be distributed by educational level and may not be granted or renewed on condition of receiving any credit, tax, service, or activity by the beneficiary of the scholarship. The scholarships shall consist of exemption from total or partial payment of the registration and tuition fees established by the Private Institution. The scholarships that the Private Institute grants its workers and their relatives and those of the Institution's owners shall not be included in the percentage referred to in this Article"*.

3.3.1 UNAM

The Universidad Nacional Autónoma de México (National Autonomous University of Mexico) is a public education institution, which obtains most of its financing through the subsidy of the Federal Government of the country and the rest from its own sources of income: financial products, extraordinary income, income from education services, among other heads.

Admission to higher education at the UNAM is through two options:

- *Regulated pass - a notification issued by the General Directorate of School Administration (DGAE - Dirección General de Administración Escolar) three times a year (January, April and September) for the students who are already studying for a degree at the UNAM which they will complete in the current semester, to register with the option of choosing up to two university courses to continue their undergraduate studies at the UNAM, in accordance with the specifications in the notification.*

The characteristics of the eligible options are:

- *1st option: area, course, system and campus.*
- *2nd option: area, course and system (in this option it is only possible to select courses with low demand).*
- *Selection exam - for young people wishing to enter higher education and who come from a higher education institution that does not belong to the UNAM; the entrance is through a competitive examination. The competitive examination is held three times a year (January, April and September); the requirements to enter the UNAM being:*
 - *To have completed the Bachillerato with a minimum average of 7.0.*
 - *To obtain a sufficient number of correct answers in the Selection Exam.*
 - *In addition - for admission to the distance learning system of the Scholarised System and Open University and Distance Education (SUAYED - Sistemas Escolarizado y Universidad Abierta y Educación a Distancia) - to take and pass the Propaedeutical Training Program.*

It should be pointed out that both options are valid for foreign students - so long as they meet the requirements in the respective notifications.

On the other hand, the UNAM offers foreign students the opportunity to develop academic activities in its facilities, through student mobility:

- *As an exchange student, under a collaboration agreement current between both institutions that sets out the exemption from fees.*
- *As a visiting student, by covering the dues in force at the time of application.*

Scholarships

The University offers a wide variety of financial support for students, funded from different sources. Below are some support programmes for degree and postgraduate levels:

- *Maintenance*
- *Excelencia Bécalos*
- *High Academic Requirement Programme*
- *Academic Enhancement Programme for Degree Studies*
- *Academic enhancement Programme for Female Students*
- *University PREPA-SIs*
- *Scholarships for Graduation High Performance Graduates*
- *Postgraduate - CONACYT*

Additionally, there are organisations dedicated to finding funds to grant support and financing to UNAM students and academics. The most representative organisation is Fundación UNAM (FUNAM), created in 1993 as an initiative of the then rector of the University, José Sarukhán. FUNAM is a civil association



independent of the UNAM, whose objective is to support the university community. In addition to educational assistance, FUNAM has health programmes, such as the brigades in marginalised communities or nutritional support for low-income students, and sponsors research, promotion of culture, and learning foreign languages among other kinds of assistance.

The Foundation obtains its operating resources through alliances and donations from private initiatives and society in general - the latter through the Asociados FUNAM programme.

3.3.2 UDEM

As a private institution the Universidad de Monterrey abides by the obligations regarding the granting and administration of scholarships pursuant to Chapter II, Articles 49 to 58 of Agreement 17/11/17. The Federal Educational Authority shall refrain from intervening and participating in the procedure for the selection and granting of scholarships". The scholarships are allocated pursuant to the agreement and academic regulations of the institution, which has the power to grant scholarships or financial support in line with its internal policies.

Private institutions define their registration and tuition fees.

These institutions do not obtain subsidies from the Mexican government.

3.4 Research policies (CONACYT)

The Consejo Nacional de Ciencia y Tecnología (CONACYT - National Council of Science and Technology)¹⁵, formulates and finances scholarship and general support programmes for forming scientific and technological human capital in its diverse forms; it also collects together the information for scholarship programmes by other national institutions, international organisations, and foreign governments in order to optimise resources in this area and to set up coordination schemes - according to the notifications issued for this purpose.

Additionally, policies are adopted to implement the programmes that promote the promotion, training, development, and joining together of high-level human resources in the country, meeting local and regional priorities through the instruments established in the Science and Technology Law¹⁶.

CONACYT has the most important Postgraduate Scholarship Programme in Mexico, and has been active for over 40 years; it is known and recognised both nationally and internationally. The programme gives the population the opportunity to carry out high-level studies in academic institutions of excellence - both at home and abroad.

Through the Programme's different forms, scholarships are granted for postgraduate studies at the master's and doctoral level - in addition to supporting technical and academic specialities. Its mission is also to promote the continuous improvement and quality assurance of national postgraduate education - to help strengthen and expand the country's scientific, technological, social, humanistic and innovation capacities.

4. Diplomas, qualifications, and degrees

Pursuant to Article 60 of the General Education Law, the institutions of the SEN shall issue certificates and award certificates, diplomas, qualifications, or academic degrees to persons who have completed studies in accordance with the requirements in the corresponding curricula and syllabuses, which shall be valid throughout the Mexican Republic.

The diplomas awarded by higher education institutions in Mexico, as in other parts of the world, have the clear objective of defining the skills acquired by the student upon completion of a curriculum - in terms of level and area of knowledge.

Regarding private institutions, Chapter III "Information and documentation" of Secretarial Agreement 17/11/17, in Article 60, provides that the Private Institutions are obliged to ensure that the physical and electronic formats the institution uses to issue certificates, diplomas, qualifications, or degrees comply with the provisions of Annexes 6 and 7 of the above Agreement.

4.1 Academic courses

As will be described in the section on "Institutions of higher education", the syllabuses and curricula are fully registered in the Official Validity Recognition System for Higher Education Studies (SIRVES - Sistema de Reconocimiento de Validez Oficial de Estudios del Tipo Superior)¹⁷. The system has two lists - divided between the current curricula and syllabuses and the curricula and syllabuses that have been withdrawn.

There is another division between the recognitions of official validity of studies by the Directorate of Private Institutions of Higher Education (DIPES - Dirección de Instituciones Particulares de Educación Superior) attached to the DGAIR (federal) and those that have been granted by the educational authorities of the federal entities of the Mexican Republic (local or state).

4.1.1 UNAM

Given its autonomous nature, the UNAM offers a wide and varied educational range at degree level comprising 125 courses; 41 postgraduate programmes with 92 master's and doctoral programmes; and 42 specialisation programmes with 258 orientations, in the areas of Physical-Mathematical Sciences and Engineering; Biological, Chemical and Health Sciences; Social Sciences and Humanities and Arts. It has 31 academic centres, located in the 32 states of the country.

On the Academic Offer website¹⁸ the information can be consulted under the headings academic index, academic entities, and area of knowledge.

According to the General Regulations of University¹⁹ of the UNAM it is established that:

Undergraduate studies are the first level of higher education offered by the University. In order to follow them, it is necessary to have covered the curriculum and obtained the corresponding certificate at the Bachillerato level and comply with the provisions of the General Registration Regulations. These studies are intended to provide students with knowledge, skills and working methods, as well as developing attitudes and skills related to the exercise of a profession.

- The general objectives of the training offered by the University to its students at the level of undergraduate studies are: To train professionals in a comprehensive and up-to-date manner, so that they possess a critical, solid, disciplinary and interdisciplinary vision in the various fields of knowledge, and particularly in the emerging ones;
- To train academically and professionally competent professionals, in such a way that they can meet the requirements of society;
- To equip them to help solve problems linked to fields of knowledge in various disciplines;
- To promote their scientific, humanistic, artistic and ethical training for professional development, which allows them to be inserted into society, and
- To offer them various training options that allow them to enter the occupational structure and acquire the knowledge to continue with postgraduate studies.

The purpose of *professional technical studies* is to train the student in general and technical knowledge specific to a degree programme so that they can start productive work within a short time. The completion of the credits for these studies will be recognised by the qualification of professional technician. This training is optional and does not prevent students from continuing their undergraduate studies.

To enrol in professional technical studies requires being accepted into the degree curriculum on which they depend. Undergraduate curricula may include one or more professional technical programmes, depending on their characteristics and objectives, and they will have the number of credits established in the curriculum of the degree on which they depend, without their being equal to or greater than those required for undergraduate studies. The duration of the professional technical studies will be two to three years, in accordance with what is established in the curriculum.

The *postgraduate studies* are carried out after the conclusion of the undergraduate studies. Their purpose is to train high level professionals, academics, and researchers in various disciplinary and interdisciplinary approaches.

For those who complete their studies and meet all the requirements established in the curricula for university initiation, Bachillerato, specialized technical level, professional technical level, degree, and postgraduate, the University will confer, respectively:

- The certificado de iniciación universitaria;
- The certificate of Bachillerato;
- The diploma title of Técnico especializado;
- The title of Técnico Profesional;
- The licenciatura or professional qualification;
- The Degrees of especialista, maestro or doctor
- The qualifications and degrees obtained through the study agreements shared with other higher education institutions and related bodies for simultaneous or joint degrees, or simultaneous or joint graduation.

The title of Técnico Profesional will be awarded to students who have completed one hundred percent of the credits and satisfy the other requirements indicated in the curriculum concerned.

The licenciatura degree or professional qualification will be awarded when all the subjects or modules of the respective curricula have been accredited and satisfactorily completed with any of the qualification options approved by the technical council or corresponding academic committee, pursuant to the General Examination Rules and other applicable regulations. In addition, the candidate must fulfil his social service obligations pursuant to the Regulatory Law of Article 5 of the Constitution and its regulations, to the General Regulations for the University's Social Service and to the specific regulation which, concerning the issue, the technical council or the corresponding academic committee adopts.

See the following link for access to the degree options required by each of the academic entities of the UNAM: <https://tramites.dgae.unam.mx/tit2998/opcionplantel.php?prime=1>.

In the case of the option for qualification through postgraduate studies it is necessary to enrol for a specialisation, master's, or doctorate taught by the UNAM, and obtain the accreditation of the subjects or academic activities in the postgraduate curriculum in accordance with the criteria and general conditions the technical council has defined for each postgraduate programme.

The specialisation or master's degrees will be granted once all the credits of the corresponding curriculum have been covered and one of the graduation options authorised by the respective collegiate bodies has been approved pursuant to the University Legislation.

The doctor's degree will be awarded to the student who has completed his entire work programme, had his candidacy accepted, and sat the examination in which he will defend a doctoral thesis - and who in addition meets the requirements and provisions of the General Regulations for Postgraduate Studies.

The simultaneous or joint qualifications and degrees will be obtained in accordance with the requirements established in the shared curricula that have these forms of qualification or degree, as well as with what the corresponding regulations prescribe. The qualification or degree:

- a) Simultaneous, when a qualification or degree is issued by either of the participating institutions, or
- b) Joint, when a single qualification or degree is issued by the University and the participating higher education institutions.

The qualification or degree must indicate that it corresponds to a form of shared studies.

4.1.2 UDEM

As mentioned in 3.3.2, in its capacity as a private institution, the UDEM respects the obligations to which it will have to adhere pursuant to Agreement 17/11/17. Accordingly, this institution distinguishes itself in its nature from the institutions not subject to the regulations of the SEP as educational authority. That is to say, provision of educational services by a private institution may be performed through the following types of study:

- a) On the premises
- b) Off the premises
- c) Mixed

The characteristics and requirements of the forms of education are the following:

- a) *On the premises* - characterised by the teaching-learning process occurring mainly in the facilities - and where applicable in special areas in the private institutions - with students and academic staff in the same place at the same time. In this form, the number of hours under an academic's direction must correspond at least to what is indicated below, depending on the educational level:
 - Técnico superior universitario o profesional asociado, 1,440 hours.
 - Licenciatura licenciatura, 2,400 hours.
 - especialidad, 180 hours.
 - maestría, 300 hours.
 - Doctorado, 600 hours.
- b) *Off the premises* - characterised by the teaching-learning process occurring through an educational technology platform or electronic medium, or through autonomous learning processes and with didactic supports. The learning activities must reflect the educational technology platform used or identify resources suggested for autonomous learning processes. In this form the number of hours directed by an academic are at most equal to 40% of those indicated for on the premises.

- c) *Mixed* - characterised as a model that provides flexibility by combining the strategies, methods, and resources of on and off the premises. In this form the number of hours under the guidance of an academic is equal to at least 40% of that indicated for on the premises.

Currently all private institutions are developing mixed form study programmes; these programmes are promoted as schedules of two or three days per week during the four-month or half-yearly cycle; there are models in which they teach and give credit for one subject per month, with attendance on Saturdays for tutorial with the teacher - they are also called semi-academic programmes. Mixed or semi-academic plans and programmes have operating requirements that give them basic features of which the following are the most evident:

- The teachers do not give classes, only tutorials.
- A constructivist didactic method is used as the project method.
- The teacher is a guide or coach who guides and supports the construction of the knowledge project that takes place outside the classroom.
- The teacher's work is centred on planning the project and the didactic supports the student is going to need during the course to complete it (texts, pages to consult, extra-mural activities, requirements of substance and form the project has to meet, etc.).
- To design the assessment based on the project, generally through its presentation and subsequent placement in a blog or any technological medium that lets the project or its executive version be consulted as evidence of learning and of meeting the requirement for quality and transparency. Consequently, this does away with the memory-testing exams (questionnaires) used in classic academic programmes and enables the student to demonstrate the knowledge and professional skills he has acquired which are indicated in his graduation profile.
- The work of the teacher focuses on planning the activities that the student must complete to construct the knowledge or develop the skill that is specified as a competence to achieve. The teacher does not prepare exhibition material, but presents the project model, defines and establishes the substance and form requirements to be met, and indicates the activities chosen to achieve it.
- Attendance is not prescribed by a regulation, however, to be able to complete a stage in the project the progression of the tuition the student will receive from his *coach* is important - by bringing it closer to the professional field in which results are what counts

The change in teacher, class, evaluation, and educational activities paradigm will be decisive for working on skills, and distinguishing the differences between the teacher's role in an academic, mixed, or semi-academic study programme will be fundamental. These differences have nothing to do with the time-frame of the classes.

4.2 System of academic credits at national level

Currently, pursuant to Article 12, Section IX of the General Education Law, the DG AIR is working in coordination with various areas of the SEP, in the National Credit System and the Mexican Qualifications Framework.

Pursuant to Article 10 of Agreement 17/11/17, the following criteria must be met:

1. *Técnico superior universitario o profesional asociado*: the curriculum will be aimed at developing skills and capabilities relating to a specific professional activity, which will be expressed in working holidays or through equivalent technological environments or scenarios. The curriculum's proposals must have a minimum of 180 credits.

II. *Licenciado*: the curriculum will be aimed at developing knowledge, attitudes, aptitudes, abilities, and work methods for practising a profession. The curriculum's proposals must have a minimum of 300 credits.

III. *Posgrado*: the curriculum will be aimed at deepening knowledge of a specific field of training.

a) especialidad to the training of individuals qualified to study and treat specific problems in a particular area of a profession.

As prior qualification a Licenciado degree will be required or having covered all the credits for the degree - in the latter case, only when it is taken as a qualification option. The curriculum proposals must have a minimum of 45 credits.

b) maestría - aimed at training individuals already qualified to participate in analysing, adapting, and putting into practice the advances in a specific area of a profession or discipline.

If the curriculum proposed is oriented towards research, it must present the corresponding research programme describing the objectives to be achieved and the lines of research, as well as the description of the methodology to be used.

As prior qualification a Licenciado degree will be required or having covered all the credits for the degree - in the latter case, only when it is taken as a qualification option. The curriculum proposals must have a minimum of 75 credits since the degree, or 30 credits since the speciality.

c) doctorado - directed at training individuals qualified for teaching and research, with mastery of particular topics in an area and capable of applying knowledge in an original and innovative way.

The corresponding research programme must be presented describing the objectives to be achieved and the lines of research, as well as the description of the methodology to be used.

As prior qualification a a Licenciado degree will be required, or having covered all the credits for the degree - in the latter case, only when it is taken as a qualification option. The curriculum proposals must have a minimum of 150 credits since the degree, 105 credits since the speciality, or 75 credits since the master's degree.

It is worth pointing out that Article 11 of the above secretarial agreement provides that for each actual hour of learning activity - whether under a teacher's direction or independently - 0.0625 credits will be allocated. This allocation does not depend on the calendar structure used and is based on the actual academic load in working hours.

4.2.1. UNAM

In the General Regulations of Technical and Professional Studies of the UNAM it is established that the credit is the unit of value or score of a subject or module, which is computed as follows:

- In activities requiring study or additional work by the student, one hour of semester-week class corresponds to two (2) credits.
- In activities that do not require study or additional work by the student, one hour of semester-week class corresponds to one (1) credit.

The value in credits of clinical activities and practices for learning music and the plastic arts will be computed globally according to their importance in the curriculum, and at the discretion of the respective technical councils and the University Council. The academic semester will have the duration indicated in the institution's calendar.

Credits for courses lasting less than one semester will be computed in proportion to their duration. Credits are always expressed in whole numbers.

4.2.2. UDEM

The UDEM works pursuant to Secretarial Agreement 17/11/17. In each curriculum subject, the actual hours of learning activity are defined under a teacher's direction and the independent hours during the particular academic cycle (annual, semi-annual, four-monthly, etc.).

The hours under the a teacher's direction equals the number of total hours of learning activities that will be taught by an academic over the academic cycle, which must be in accordance with the nature of the subject or unit of learning, the form of education, and the actual number of weeks of class. This allocation must be in terms of full hours of sixty minutes.

The number of total hours of learning activities that the student will complete independently will be in accordance with the nature of the subject or unit of learning and the form of education proposed.

The sum of the total number of hours multiplied by the factor 0.0625 gives the number of credits for the subject.

4.3 Grading scales

In the SEN, the most common numerical grading scale is measured from 5 to 10, considering 6 to be the minimum passing grade and 10 the maximum, pursuant to Article 8 of Agreement 696, which establishes General Standards for Evaluation, Accreditation, Promotion, and Certification in Basic Education, published in the Official Gazette (Diario Oficial) of the Federation on 20 September 2013.

It should be noted that some private institutions belonging to the SEN, both at the upper secondary level and at the higher level, consider the minimum passing grade to be 7 and the maximum grade to be 10.

4.3.1 UNAM

The passing grade will be given for each course, test, or exam, through numbers 6, 7, 8, 9, and 10. The minimum grade to accredit a subject will be 6 (six). When a student fails to show sufficient knowledge and aptitudes in the subject, this will be expressed in the corresponding documents by marking 5 (five), which means: fail.

In the case that the student does not attend the exam for the subject, NP will be written, which means: not present.

UNAM, Mexico			
5/10 scale		Alphanumeric grading ¹	
10	Pass	10	MB (Muy bien [Very Good])
9			
8		8	B (Bien [Good])
7-6		6	S (Sufficient)
5	Fail	Lacks numerical equivalence	NA (No acreditada [Fail])
NP	Not presented		

¹ http://www.dgire.unam.mx/contenido_wp/wp-content/uploads/2016/06/ManualdeDisposiciones-01junio2016.pdf
<https://www.dgae-siae.unam.mx/acerca/normatividad.html#leg-4>



4.3. UDEM

The grade scales of higher education in Mexico are based on a scale of 10 points. For internal processes, some institutions retain grades based on 100 points. The minimum grade to pass in a subject varies from 6 to 7. Below is a descriptive table, with comparison with the United States system.

Comparison of scales base 10 (100) with minimum pass of 7 (70) and 6 (60)					
Minimum pass 7 (70)	Approximate equivalent in the US	Description			Minimum pass 6 (60)
10 (100)	A+	Excellent	E	<i>Excellent</i>	10 (100)
9 (90)	A	Very good	MB (Muy Bien)	<i>Very good</i>	9 (90)
8 (80)	B	Good	B (Bien)	<i>Good</i>	8 (80)
*	B-				7.5 (75)
*	C+	Regular	R	<i>Average</i>	7 (70)
7 (70)	C	Sufficient	S	<i>Sufficient</i>	6 (60)
6 (60)	F	Fail	NA	<i>Not passing</i>	5 (50)
9-10	A			<i>Very good</i>	10 9-10
8-8.9	B			<i>Good</i>	8 7.5-8.9
7-7.9	C			<i>Sufficient</i>	6 6-7.4
6	F			<i>Not passing</i>	5 0-5.9

5. Higher education institutions

In Mexico, education is provided by the State, its decentralised agencies, and private institutions with authorisation or recognition of official validity of studies, which are part of the SEN - the above pursuant to Article 10 of the General Education Law.

Depending on their legal regimes, higher education institutions can be constituted in autonomous public universities, state public universities, institutions dependent on the State, private institutions recognised by the SEP, state governments or decentralised state agencies; the universities granted autonomy by the Congress of the Union or the congresses of the states are decentralised organisms of the State.

The institutions dependent on the State are centralised or devolved. Their authorities are appointed by the Federal Executive Branch or by the Executive Branch of the corresponding state. In general, the federal government also exercises control over the form of administration and curricula and syllabuses; the federal government's institutions mostly depend on the SEP.

In general terms, autonomy implies that the university has the right to designate its authorities and to organise itself as it sees fit in order to issue its rules and regulations pursuant to its own organic law. The autonomous university enjoys academic freedom and appoints its academic staff; it issues certificates,

degrees and titles; it validates studies in other national and foreign establishments; pursuant to its own regulations, it recognises or incorporates Bachillerato or licenciatura studies taught in private institutions; it freely manages its assets and determines its budget.

In 1910, during the presidency of Porfirio Díaz Mori, Mexican higher and higher secondary education were reorganised and reinvigorated with the inauguration of the Universidad Nacional de México, bringing together national schools founded throughout the nineteenth century. In 1929 the University acquired its status of autonomy, granted by President Emilio Portes Gil, becoming the National Autonomous University of Mexico (UNAM - Universidad Nacional Autónoma de México) and authorisation was given to construct the Ciudad Universitaria.

The income of autonomous public universities comes, to a large extent, from the federal government and state governments.

In addition to the institutions offering higher education as already described, there are others attached to various public sector agencies that provide specialised studies in areas such as military, naval, agricultural, health and foreign relations.

5.1 Private higher education institutions recognised by the SEP

The private higher education institutions recognised by the SEP can be found on the page of the Official Validity Recognition System for Higher Education Studies (SIRVOES - Sistema de Reconocimiento de Validez Oficial de Estudios del Tipo Superior)¹⁷. This system collects the curricula and syllabuses together. The case of the Monterrey Institute of Technology and Higher Education (ITESM - Instituto Tecnológico y de Estudios Superiores de Monterrey) is worth mentioning, which provides curricula and syllabuses granted Recognition of Official Validity of Higher Education Studies (RVOE -Reconocimiento de Validez Oficial de Estudios del Tipo Superior) throughout the country supported by the Presidential Decree of 24 July 1952²⁰, as well as Agreement 3438 issued by the Secretary of Public Education on 28 February 1974 and published in the Official Gazette of the Federation on March 5 of the same year. Their curricula and syllabuses, despite being recognised, do not appear in the lists that the DGAIR assembles.

To consult the institutions that are part of the SEN, please use the following links:

- <http://www.sep.gob.mx/es/sep1/SIRVOES>

The first one refers to the SIRVOES that collects the Recognitions of Official Validity of Studies of Superior Type (RVOES - Reconocimientos de Validez Oficial de Estudios del Tipo Superior) which the SEP accords to curricula and syllabuses taught by private higher education institutions.

- <https://www.ses.sep.gob.mx/instituciones.html>

The above link is the website of the Under-Secretariat of Higher Education (SES - Subsecretaría de Educación Superior), in which the list of public higher education institutions²¹ is to be found. In it we can find federal public universities, state public universities, state public universities with solidarity support, technological institutes, technological universities, polytechnic universities, the Universidad Pedagógica Nacional, the Universidad Abierta y a Distancia de México, intercultural universities, public research centres, public teacher training institutes, and other public institutions.

Concerning university autonomy, it should be pointed out that it originates in a formal legislative act by the Congress of the Union or by the congresses of the states. It is a legal attribute the law grants decentralised organisations, based on the principle that public universities have the faculty and responsibility of governing themselves.

Based on this principle, by their nature, and to fulfil their aims of educating, researching, and extending culture, to decide the structure and form of their governance, to determine the orientation and content of their curricula and syllabuses and research, to set the conditions for the recruitment, promotion, and permanence of its academic staff, and to manage their assets, the autonomous universities must adopt an autonomous form of organisation, i.e. without being attached to any of the Branches of the Constitution and independent of the political parties.

As can be seen, university autonomy represents the utmost and ultimate form of State administrative organisation (taking university autonomy further would turn it into another sovereign State) and has as its framework and only limit the respect of and compliance with Article 3 of the Political Constitution of the United Mexican States, i.e. the self-government of the universities constitutes the fundamental core of university autonomy. This is based on an autonomous legislative body that allows them to endow themselves with a structure of governance to meet their aims of educating, researching, and extending culture, guided by the principles of academic freedom and free examination and discussion of ideas.

5.2 Accreditation and quality assurance at the federal level

Through the publication of Secretarial Agreement 17/11/17 by which the transactions and procedures relating to recognising the official validity of tertiary studies are established, the SEP created and implemented the Programme of Institutional Improvement (PMI - Programa de Mejora Institucional) conducted by the Directorate of Academic Records, Operation and Evaluation (DREOE - Dirección de Registros Escolares, Operación y Evaluación) attached to the DGAIR that encourages permanent institutional improvement by promoting educational quality assurance and enhancement, and providing the benefits of administrative simplification to private higher education institutions with federal RVOE.

This mechanism allows:

- The institutional accreditation options to be expanded by taking curricula and syllabuses, evaluation of results and monitoring of graduates into consideration.
- Groups (1, 2, and 3) to be set up to consider the diversity of institutions and the commitment of each of them to quality in conformity to their educational standards.
- The benefits of administrative simplification to be established in conformity to the commitment of the institutions to educational quality assurance.
- The external accreditation and evaluation bodies to be created, through which educational institutions will obtain the accreditations to belong to one of the three established groups.
- A Committee responsible for selecting external accreditation and evaluation bodies to be set up, confirmed by the Under-Secretariat of Planning, Evaluation and Coordination, in conjunction with the Under-Secretariat of Higher Education and the General Director of the National Council of Science and Technology - which allows an objective selection of the institutions recognised to perform the said activity.

On the other hand, it should be noted that the institutional diversity of the private higher education sector has been a consequence of the regulations that govern it. **To offer vocational education the private higher education institutions in Mexico need an official recognition that can be applied for in two ways:**

- a) By requesting the SEP or the Ministry of Education of the federal entities to issue an RVOE. It implies that for each academic programme (undergraduate or postgraduate studies) a recognition of official validity of studies has to be requested, in which the conditions that the institutions must comply with in order to request such recognition are indicated, particularly - facilities (common spaces, laboratories, furniture, library), teacher training and recruitment, and curricular and

syllabuses. However, it is worth noting that the criteria for granting such recognition may be applied through discretionary procedures when it comes to setting conditions that institutions in this category must comply with.

Incorporation in a public or autonomous university. In this case -

Once the private higher education institutions comply with either of these procedures, they may then give higher education courses, which will be recognised.

In order to accredit the quality of the curricula the education authority has recognised, public or private corporations have emerged as accreditation agencies with which the Secretariat has agreed evaluation mechanisms that allow private institutions to request that the courses they teach be evaluated and certified. Some of these agencies are described below:

*Consejo para la Acreditación de la Educación Superior, A.C. (COPAES - Higher Education Accreditation Council)*²²

It is a non-profit civil association, whose mission is to contribute to the assurance of the quality of the academic programmes offered in public and private institutions in Mexico through the formal recognition of the accreditation organisations that show their processes and results are suitable, of quality, and reliable, based on the Guidelines and on the General Framework for the Processes of Accreditation of Higher Level Academic Programmes established by the said Council. This Council has 30 recognised accrediting agencies.

The aims of accreditation by the COPAES are to recognise the quality of academic programmes publicly, to foster a continuous improvement culture, and for the institutions to attain national and international quality parameters. To participate in this process the application is made by academic programme, that is, for each, licenciatura, especialización, maestría or doctorado.

*Asociación Nacional de Universidades e Instituciones de Educación Superior de la República Mexicana, A.C. (ANUIES - National Association of Universities and Institutions of Higher Education of the Mexican Republic,)*²³

It is a non-governmental organisation bringing together the main public and private Mexican institutions, among whose main objectives stand out the development of research on higher education, training teachers at this level, producing educational innovations for the improvement of higher education, publishing the *Revista de la Educación Superior*, promoting the quality of the institutions that it groups together, carrying out strategic studies allowing decision-making for higher education, supporting inter-institutional exchanges, and establishing agreements with foreign institutions and with the productive sector of the country.

It is clear that the purpose of the ANUIES is not just to certify private higher education institutions; however, it has a wide experience in this respect, since it has already participated in the foundation of organisations that have the purpose of improving the quality of the institutions of higher education, such as the National Evaluation Commission, the Inter-institutional Committees for the Evaluation of Higher Education, the National Evaluation Centre for Higher Education, as well as the Teacher Certification Programme for the Higher Secondary Level.

To apply for admission, it is necessary for the public or private institution to offer teaching, develop research, disseminate culture, have registered at least one thousand undergraduate students or one hundred postgraduate students, and have graduates with a degree or postgraduates who have obtained the degree. That is to say, from the moment that any institution of higher education is interested in belonging to the ANUIES it has to meet conditions essential for being considered for the process of diagnostic assessment.

*Federación de Instituciones Mexicanas Particulares de Educación Superior (FIMPES - Federation of Private Mexican Higher Education Institutions)*²⁴

In addition to the above, there is also an institutional accreditor which is a grouping of individual Mexican institutions with the purpose of improving communication and collaboration between one another and with the other educational institutions in the country while respecting one another's particular purposes, so that its members are more able to fulfil their responsibility of serving the nation. The principles of accreditation can be found in the document entitled "Sistema de Acreditación a través del Desarrollo y Fortalecimiento Institucional (SADFI - System of Accreditation through Development and Institutional Strengthening)" in its version III, which is composed of 20 capacity criteria and 19 effectiveness criteria.

The types of findings FIMPES issues are presented in the following table:

<p style="text-align: center;">Accredited <i>smooth</i> and <i>plain</i></p> <p>It supposes at least the fulfillment of 80% of the criteria of capacity and effectiveness. In accordance with the 40/60 weighting, in addition to compliance with criterion 5.2</p>	<p style="text-align: center;">Accredited</p> <p>Assumes at least the fulfillment of 80% of the criteria of capacity and effectiveness, in accordance with the weighting of 40/60,</p>
<p style="text-align: center;">Accredited <i>conditioned</i></p> <p>It supposes the fulfillment, in terms of the weighting of 40/60, of at least 75% of the criteria of capacity and effectiveness, but less than 80% of them.</p>	<p style="text-align: center;">Not accredited</p> <p>In case the Institution complies with less than 75% of the capacity and effectiveness criteria, in accordance with the 40/60 weighting.</p>

Tipo de opiniones

The plain and smooth accreditation is the maximum FIMPES Accreditation level, which confers a status of recognition for the SEP as a quality institution, "Registro de Excelencia Académica (Academic Excellence Registry)". This accreditation is recognised nationally and internationally, favouring the institution's identification for mobility projects, exchanges, scholarships, financing, and above all improvements in educational models and processes.

5.3 Institutional level accreditation and quality management

At the institutional and internal level, it is necessary to detail what procedures are followed by the universities participating in the Consortium, in conformity to the following:

5.3.1. UNAM

On 4 June 2012, during the administration of Dr. José Narro Robles, the Educational Evaluation Council (CEE - Consejo de Evaluación Educativa) of the UNAM was created. This collegiate body is chaired by the Rector and its purpose is to promote, in the UNAM, the analysis and application of *evidence-based knowledge and experiments relating to measuring and evaluating educational processes*. In the CEE the staffs of the three Bachillerato sub-systems are represented - the faculties, the schools, and the University's postgraduate programmes.

Among its main objectives are promoting good educational evaluation practices in the institution, favouring the use of the results of the evaluations conducted in the academic entities so as to raise the quality of the educational actions in the University's lecture rooms and, in particular, contributing to developing the educational evaluation capacity of the academic entities.

On the other hand, the need to strengthen academic university life, to contribute to the more vigorous educational development of our institution, the impetus for innovation as a distinctive sign of our time, the challenge of consolidating higher secondary and higher advanced education, and the recognition of the maturity of our community life, motivated the creation in 2015 of the Coordination of Educational Development and Curricular Innovation (CODEIC - Coordinación de Desarrollo Educativo e Innovación Curricular).

The CODEIC has the mission of being a body that supports and contributes, promotes and stimulates, and which is linked to intense university work in all its levels and areas of knowledge. Through joint exploration, it aspires to promote the development and consolidation of new methods, models, processes and resources - which update and make viable new scenarios for curricular development - evaluation, and the use of information and communication technologies "ICT", and learning and knowledge technologies "LKT", among other developments and contemporary innovations.

The accompaniment and projection of teaching, learning, and university education are central components of its mission, as well as all those that allow an open and dynamic link with higher secondary education, higher education, and education in general to be maintained in Mexico and the world.

On the CODEIC website in the accreditation section both the accredited courses and those going through the accreditation process can be seen. The information available allows information to be obtained about the level of studies, accrediting body, and validity.

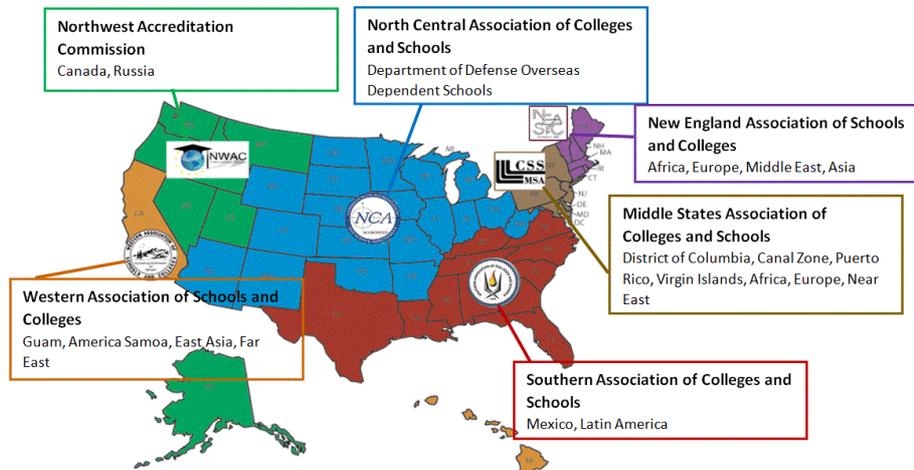
According to the information presented in the Statistical Abstract of the UNAM 2017, 87% of the degrees offered by the UNAM were accredited or in the process of being accredited by some of the national bodies responsible for these procedures²⁵. The academic programmes regularly take charge of processing these accreditations in order to assure the quality of their study programmes.

Regarding the postgraduate level, in the same year 85% of the programmes taught at the UNAM were part of the CONACYT's National Register of Quality Postgraduates Degrees²⁶ - which represents a recognition of the quality of the postgraduate programmes offered at the UNAM.

5.3.2. UDEM

As defined in section 5.2 and considering the nature of the UDEM as a private higher education institution, the regulation of institutional quality comes under the following criteria:

The curricula are accredited by certifying agencies called Inter-institutional Committees of Higher Education Institutions, A.C. (CIEES - Comités Interinstitucionales de Instituciones de Educación Superior), or by the Council for the Accreditation of Higher Education A.C. (COPAES - Consejo para la Acreditación de la Educación Superior). Some private institutions in Mexico also have international institutional accreditations, particularly from the United States, such as those shown in the following table:



The most common international accreditation in Mexico is granted by the *Southern Association of Colleges and Schools Commission on Colleges* (SACSCOC)²⁷. There are the Accreditation Principles that provide the basis for assessing the effectiveness and quality of the institutions. It consists of principles that include: 16 *core requirements*, 72 *comprehensive standards*, and 11 *federal requirements*.

There are also engineering programmes accreditations (ABET), or business programmes (AACSB), among others.

The Inter-institutional Committees for the Evaluation of Higher Education A.C. (CIEES)²⁸ are nine collegiate bodies, made up of distinguished academics from the highest level of HEIs throughout the country. It is an organisation that was established from 1991. The CIEES were created, first, as a dependent programme of the National Association of Universities and Institutions of Higher Education (ANUIES - Asociación Nacional de Universidades e Instituciones de Educación Superior) and, as of 2009, it was constituted as an organism independent of the ANUIES with the legal form of a civil (non-profit) association. In general terms, the CIEES recognise:

- *Level 1* is a good quality, consolidated programme meeting all - or almost all - the requirements established in the frames of reference and which is considered, in the judgement of the members of the External Academic Peers Committee (CPAE - Comisión de Pares Académicos Externos) and of the members of the respective committee, a good programme.
These programmes are recognised by the SEP for the registration statistics enrolled in good quality programmes. The CIEES only use the term accreditation to grant recognition to the institutional functions (not to the institution) and to the academic programmes of the teacher training institutions.
- *Level 2* is accorded to programmes with deficiencies in aspects that are considered fundamental for their proper operation.

Within the private institutions, complete departments exist responsible for evaluating the quality of the curriculum and teachers, the courses, the training of teachers performing evaluations and audits to assure the quality of the educational processes and services each institution offers.

6. National qualifications framework - Mexico

Mexico does not have a National Global Qualifications Framework. The grades of Technical and Vocational Education and Training (EFTP - Educación y Formación Técnica y Profesional) are based on the National



Skills System (SNC - Sistema Nacional de Competencias), which is supervised by the National Council for Standardization and Certification of Labour Skills (CONOCER - Consejo Nacional de Normalización y Certificación de Competencias Laborales)²⁹. The CONOCER is the only institution in Mexico that grants official certificates of professional competence. The specific skills standards for each sector are set by the Skills Management Commissions, composed of people accredited by CONOCER to act as representative bodies in a particular industry. Pursuant to Article 12, Section IX of the General Education Law, the DGAIR, in coordination with various areas of the SEP, is working on the final details of the Mexican National Qualifications Framework, which stems from the proposal made in 2014 by the General Directorate, which was not published in the Official Gazette of the Federation although the Global Inventory of National and Regional Qualifications Frameworks took this proposal to include it in this database of the world's qualifications frameworks.

The agreements reached with the establishment of the above framework will contribute to academic mobility and facilitate studies recognition processes that will contribute to inclusion and insertion within the SEN.

Unofficial preliminary chart of the Mexican Qualifications Framework

8	8	Higher Education or Tertiary Education	Doctorado			Professional Certification	Training for work	National System of Competencies	Competency Standard Level V
7	7B		Maestria						
	7A		Especialidad	General	Medical				
6	6		Licenciatura						
5	5	Higher Secondary Education	Short Cycle of Higher Education	Senior university technician and/or profesional asociado		Professional Certification	Training for work	National System of Competencies	Competency Standard Level IV
4	4		High School with technological training						
3	3B		High School or equivalent with technical or technical professional training						
	3A		High School with elementary training for work						
	3	High School and Equivalent levels							
2	2	Basic Education	Lower Secondary						
1	1		Primary						
	0B		Preschool						
0	0A	Initial Education							
ISCED	NQF	School Sector					Training for work sector and certification of competences		

*ISCED- International Standard Classification of Education

*NQF- National Qualifications Framework

Source: DG AIR - SEP



7. Recognition of qualifications and diplomas

7.1 Recognition of qualifications

Mexico has signed various agreements³⁰ with countries of the American and European continents, in order to establish agreements favouring academic mobility and insertion for those interested in continuing their studies or exercising them in another nation; these instruments have been used in an attempt to regulate the mutual recognition of studies, qualifications, diplomas, and academic degrees that are officially valid in the education system of each of the issuing countries through the corresponding official organisms.

In this respect, Agreement 02/04/17³¹ - amending the previous 286 - which lays down the guidelines that determine the rules and general criteria that are to govern the validation of studies abroad and equivalence of studies, as well as the procedures through which knowledge corresponding to educational levels or school grades acquired through self-teaching, work experience, or based on the certification of the training for work scheme - published in the Official Gazette of the Federation of 18 April 2017, provides in its second title, chapter II, for the validation of studies conducted outside the SEN and which are proved in certificates, diplomas, records, academic qualifications or degrees, so long as they are comparable with studies carried out under the criteria established in this educational system.

The amendment to Agreement 286 relaxed the requirements for the recognition of foreign titles, including: the elimination of legalisation or apostille; official translation is not mandatory, only free translation is required; the percentage of equivalent studies is reduced (from 75% to only 40%). This amendment was promoted by the Executive Branch in anticipation of the massive repatriation of nationals owing to the immigration measures of the US government.

The process of recognising foreign degrees in Mexico is the responsibility of the federal and local educational authorities, in whole or in part, which can authorise the educational institutions depending on them to grant findings validating studies, provided the studies are partial. Thus, the DGAIR, pursuant to guide-line 15 bis of the agreement referred to in the preceding paragraph, authorised the UDEM and other HEIs to issue partial validation and equivalence of studies findings regarding the curricula and syllabuses they teach within the SEN, thereby favouring academic mobility in the national territory³².

The aim of total validation is to assure academic continuity and professional practice, after registration of the corresponding qualification with the General Directorate of Professions (DGP - Dirección General de Profesiones)³³.

The studies validation process, in the particular case of the Sub-Directorate of Academic Mobility (SMA - Subdirección de Movilidad Académica) of the DGAIR, which begins with an application at the counter, formalises the procedure and is submitted to analysis during which it undergoes scrutiny by academic peers, who will issue a positive or negative finding. Otherwise, the applicant is asked to present a statement and formally express his decision: this is because it is possible to either opt for a second evaluation by academic peers, or submit to a general knowledge examination by the National Evaluation Centre for Higher Education (CENEVAL - Centro Nacional de Evaluación para la Educación Superior)³⁴.

Generally, if there is a precedent for validation, the applicant obtains a positive response quasi-automatically. In the event that the user has omitted any document in compiling his file, he will be served with a notice of omission or request for further particulars, to which he must respond; should he fail to give a formal response to these official notifications, his application will then be dismissed or held to be expired or terminated, pursuant to the above Secretarial Agreement 02/04/17 and the Federal Law of Administrative Procedure³⁵.

To expedite the validation process, the global HEIs' rankings are considered. The most commonly used are the *Quacquarelli Symonds (QS)*³⁶, a British company specialising in education and studies abroad, the *Times Higher Education*³⁷(THE); and the Academic Ranking of World Universities³⁸ (ARWU) compiled by a group of specialists from Shanghai Jiao Tong University.

To make the procedures for validating studies simpler, reviews have been considered not only by the educational authorities but also by delegated authorities, pursuant to the regulations that govern education and the validation of studies. Thus, there are various criteria focused on establishing wider parameters making it quicker and easier to resolve cases of recognition of studies abroad, such as:

- The international recognition of the educational institution of origin. Lists of foreign institutions will be included which, owing to the quality and prestige of their curricula and syllabuses, are recognised through scales issued by specialised international organisations.
- Curricula and syllabuses for which the educational authorities have previously granted validations and which constitute a duly documented precedent, identical in duration, denomination, and institutional provenance.
- Previously cited, worldwide rankings of higher education institutions.
- International scholarships, granted by institutions such as the National Fund for Culture and the Arts (FONCA - Fondo Nacional para la Cultura y las Artes), the National Council of Science and Technology (CONACYT -Consejo Nacional de Ciencia y Tecnología), the Ministry of Foreign Affairs (SRE - Secretaría de Relaciones Exteriores), or embassies.
- Participation in the National System of Researchers (SNI - Sistema Nacional de Investigadores) of CONACYT.
- Having an academic opinion of any recognised educational institution within the SEN, which is equivalent to 40% or more of the programme taught.

All the above favours the validation of the studies, provided that the requirements indicated in Agreement 02/04/17 are complied with.

7.1.1 UNAM

In the UNAM, the unit responsible for administering these matters is the Directorate General for the Incorporation and Revalidation of Studies (DGIRE - Dirección General de Incorporación y Revalidación de Estudios)³⁹. The purpose of the equivalence of Qualifications and Degrees is to determine whether higher-level studies outside the SEN are academically sufficient, which allows professionals to be integrated as researchers or teachers in the UNAM or to be authorised to give classes in schools of the Incorporated System.

To apply to the foreign qualifications recognition service it is necessary to have:

- Birth certificate (original and copy).
- Certificate of studies or its equivalent at University Degree and Postgraduate level (original and copy).
 - Qualification and / or licenciatura and posgrado (original and copy).
- If a foreigner, valid immigration document issued by the National Immigration Institute of the Ministry of the Interior of Mexico (original and copy).
- Updated CV.

- Payment receipt, equivalent to at least 5 days' wages current in Mexico City, by way of application for degree equivalence (key 74) and, where applicable, payment receipt, equivalent to at least 5 days' wages current in Mexico City, by way of degree equivalence (key 31).

The above documents must have the following characteristics:

- Not have deletions or amendments of any kind.
- In the documents the name of the person concerned must be the same as that appearing on the birth certificate.
- Have an original handwritten signature and seal.

The documents issued in another country (personal and academic), must be duly legalised or with apostille and, if applicable, with the translation made by authorised official expert in Mexico (Diplomatic Representations accredited in Mexico, Embassies or Consulates of Mexico and Centres of Foreign Languages of the UNAM):

- The certificates of study, qualifications, and diplomas and the birth certificate issued in countries that are part of the Hague Convention must have an apostille of the country of origin.
- Certificates of study, qualifications, and diplomas and the birth certificate issued in countries that are not part of the Hague Convention must be legalised by the Ministry of Foreign Affairs of the corresponding country, as well as the Mexican Consulate accredited in the country of origin.

Regarding the procedure, the previous documentation must be presented in the Validation Section of the Validation and Academic Support Sub-Directorate and submit the application for Equivalence of Qualification or Degree. A fee must be paid in order to continue with the application.

The according of the degree equivalence will be conditional on the Validation and Qualifications and Degrees Commission of the H. University Council of the UNAM holding a meeting and issuing the corresponding agreement, which will be communicated by telephone or by electronic mail so that the user can collect it at the DGIRE. In the event that the qualification equivalence is favourable, payment must be made for Qualification Equivalence.

Subsequently, in the Validation Section, a copy of the DGIRE response document will be delivered, with attached the original of the agreement issued by the Validation and Qualifications and Degrees of the H. University Council of the UNAM.

7.1.2 UDEM

The UDEM, as a private institution, complies with the obligations under Agreement 02/04/17 which lays down the guidelines that determine the standards and general criteria governing the validation of studies made abroad and the equivalence of studies.

7.2 Fake diplomas

The problem of the falsification of qualifications and diplomas in today's world is difficult to eradicate. Concerted efforts between diverse actors and awareness of their local and international existence are necessary.

The commitment of the countries that offer educational services is, on the one hand, to set up mechanisms to guarantee the quality of the educational offer from abroad as concerns the receiving countries, and on the other, as concerns the issuing countries, to ensure ethical behaviour and offer programmes that meet the expectations of those who acquire them.

The situation that arises in the framework of fake diplomas is a reality in our country, because any individual with access to the Internet can see the proliferation of businesses, mostly foreign, promising to supply a qualification or degree without complications - making the procedure no more than a payment for a service.

The Department of Registration of Educational Institutions of the General Professions Directorate of the SEP has registered the detection of approximately eight thousand five hundred educational institutions that have issued fake documentation ranging from secondary school academic certificates and Bachillerato to birth certificates and professional qualifications.

The falsification of documentation is provided for in chapter IV of the Federal Criminal Code⁴⁰, which imposes a penalty of four to eight years in prison in the case of public documents, and from six months to five years in the case of private documents, pursuant to Article 243. Likewise, it punishes the usurpation of public or professional functions with one to six years, pursuant to Article 250 of the same legislation.

8. Certificates and diplomas

A certificate or a diploma is the official document that confers a degree gained by completing the course based on a curriculum and syllabus within an educational institution, as stated at section 4.

8.1 Security features

Following on from the features mentioned in section 7.1, the concern to implement and maintain security instruments for academic qualifications entails constant monitoring of the mechanisms developed to detect fake diplomas, while being aware that document falsification exists in our country. Among these potentially falsifiable documents there are obviously the qualifications and diplomas that concern us. The following describes what measures are taken in Mexico, both at the federal level and at that of public and private institutions.

8.1.1 At the national level

- Through the publication of Agreement 17/11/17, since 2018 the SEP has adopted the use of Information and Communication Technologies (ICTs) for authentication processes for academic documents. An example of this is the use of an electronic signature for authentication, through computer systems enabling digital academic documents to be generated and issued.

The security features the electronic certificate employs consist of (see Electronic Certificate Format Annex):

- Logos: SEP and IPES.
- General data: Information on the IPES, campus, student's name.
- List of subjects: According to the curriculum approved by the SEP.
- Overall average.
- Signature of the IPES: Advanced Electronic Signature of the person authorised by the educational institution, previously registered with the SEP.
- Signature of the SEP: Advanced Electronic Signature of the SEP public servant authorised to sign electronic academic documents.
- Seal and single folio of the SEP: Ensuring the reception and registration of the document. Single folio assignment based on technological standards.
- QR Code: Quick response code to obtain general information from the document and validation links.

Anexo 7. Formato Electrónico de Certificado.

Logotipo Autoridad Educativa Federal	Logotipo Institución Educativa				
Datos Generales Nombre de la Institución Campus de la Institución Nombre del alumno					
Lista de Asignaturas					
<table border="1" style="width: 100%; height: 80px; border-collapse: collapse;"> <tr><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr> </table>					
Promedio General					
<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr><td style="width: 100%;"></td></tr> </table>					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;"> Firma IPES e.firma del responsable académico. </td> </tr> <tr> <td style="padding: 2px;"> Firma Autoridad Educativa Federal e.firma DGAIR. </td> </tr> <tr> <td style="padding: 2px; font-size: small;"> Sello Autoridad Educativa Federal Asignación de la recepción y registro del documento XML. Asignación de folio único basado en estándares tecnológicos. </td> </tr> </table>	Firma IPES e.firma del responsable académico.	Firma Autoridad Educativa Federal e.firma DGAIR.	Sello Autoridad Educativa Federal Asignación de la recepción y registro del documento XML. Asignación de folio único basado en estándares tecnológicos.	
Firma IPES e.firma del responsable académico.					
Firma Autoridad Educativa Federal e.firma DGAIR.					
Sello Autoridad Educativa Federal Asignación de la recepción y registro del documento XML. Asignación de folio único basado en estándares tecnológicos.					

Likewise, in the case of the electronic diploma standard, the SEP promoted electronic generation of diploma registration, while defining the standards for its development in the following link:
http://dof.gob.mx/nota_detalle.php?codigo=5519300&fecha=13/04/2018

As for certificates still issued in physical form, they have the following security mechanisms (see Annex Model of total or partial certificate):

- Logo of the institution: IPES with RVOE.
- Certificate number: Assigned by the IPES.
- General data: Information on the IPES and student's name.
- Photograph of the student.
- List of subjects: According to the curriculum approved by the SEP.
- IPES official's name, position, and autographed signature.
- SEP official's name, position, and autographed signature.

- Seal of the SEP.

Modelo de certificado total o parcial

FORMATO 4

CERTIFICADO No. _____

(NOMBRE DE LA INSTITUCION)

(Logotipo
de la Institución)

HACE CONSTAR QUE _____
(Nombre(s), Apellido Paterno y Materno)

CURSO Y ACREDITO _____
(Nombre del plan de estudios como aparece en el ejemplar registrado)

CON RECONOCIMIENTO DE VALIDEZ OFICIAL DE ESTUDIOS DE LA SECRETARIA DE
EDUCACION PUBLICA, SEGUN ACUERDO No. _____ DE FECHA _____
Y CLAVE DE REGISTRO DEL PLAN DE ESTUDIOS _____

CERTIFICADO DE ESTUDIOS TOTALES (O PARCIALES)

	CLAVE	NOMBRE DE LA ASIGNATURA	CICLO EN QUE SE CURSO	CALIFICACION		OBSERVACIONES
				NUMERO	LETRA	
FOTOGRAFIA DEL ALUMNO						
FIRMA DEL ALUMNO						

EL PRESENTE CERTIFICADO TOTAL (O PARCIAL) AMPARA _____ ASIGNATURAS. LA ESCALA DE CALIFICACIONES ES DE 5 A 10 Y LA MINIMA APROBATORIA ES DE _____ LUGAR Y FECHA DE EXPEDICION _____

NOMBRE, CARGO Y FIRMA
DEL FUNCIONARIO DE LA INSTITUCION
REGISTRADO ANTE LA
AUTORIDAD EDUCATIVA

NOMBRE, CARGO Y FIRMA DEL SERVIDOR
PUBLICO RESPONSABLE DE LA
AUTENTICACION DEL DOCUMENTO

The security mechanisms employed by the physically issued degrees, qualifications, and degrees consist of (see Model, front and back, for qualification, diploma, or degree annex):

Front:

- Logo or shield of the IPES.
- Photograph of the student.
- General data: Information on the IPES, name of the student, qualification granted and date of completion of studies.
- Place and date of issue.
- Name, position and autographed signature of the rector or director of the IPES.





Back:

- General issue data.
- Qualification registration data in the Proceedings of the IPES: Date and registration number.
- Name, title and autograph signature of the IPES: Previously registered by the SEP.
- Seal of the IPES.
- Qualification registration data in the SEP.
- Name, position, and autographed signature of the SEP official carrying out the authentication.
- Seal of the authority of the SEP.



(LOGOTIPO O ESCUDO DE LA INSTITUCION)

FOTOGRAFIA
DEL ALUMNO

OTORGA A _____
(Nombre(s), Apellido Paterno y Materno)
EL TITULO, DIPLOMA O EL GRADO DE

(Nombre de la licenciatura o del posgrado, como aparece en el plan de estudios registrado)

FIRMA DEL
ALUMNO

CON RECONOCIMIENTO DE VALIDEZ OFICIAL DE ESTUDIOS DE LA SECRETARIA DE
EDUCACION PUBLICA, SEGUN ACUERDO No. _____ DE FECHA
_____, EN ATENCION A QUE TERMINO LOS ESTUDIOS
CORRESPONDIENTES EL DIA ____ DE ____ DE _____.

(Entidad Federativa) a ____ de _____ de ____

EL RECTOR O DIRECTOR DE
LA INSTITUCION

(Nombre y firma)

Modelo de título, diploma o grado. Reverso

FORMATO 5

EL PRESENTE TÍTULO, DIPLOMA O GRADO FUE EXPEDIDO EN FAVOR DE

(Nombre(s), Apellido Paterno y Materno)

QUIEN CURSO LOS ESTUDIOS DE _____

(Nombre de la licenciatura o del posgrado, como aparece en el plan de estudios registrado)

Y APROBO CONFORME _____

(Señalar la opción de titulación respectiva)

EL DÍA _____ DE _____ DE _____

QUEDO REGISTRADO EN EL LIBRO No. _____ FOJA No. _____

(LUGAR Y FECHA DE REGISTRO EN LA INSTITUCION)

NOMBRE, CARGO Y FIRMA
DEL FUNCIONARIO DE LA INSTITUCION
REGISTRADO ANTE LA
AUTORIDAD EDUCATIVA

SE AUTENTICA CON FUNDAMENTO EN EL ARTICULO 18
DE LA LEY PARA LA COORDINACION DE LA EDUCACION
SUPERIOR Y SE REGISTRA EN LA FOJA No. _____ DEL
LIBRO No. _____

México, D.F., _____ de _____ de _____

NOMBRE, CARGO Y FIRMA DEL SERVIDOR PUBLICO
RESPONSABLE DE LA AUTENTICACION DEL
DOCUMENTO



8.1.2 UNAM

For its graduates who have completed its curriculum and completed a qualifying or graduation process, the UNAM issues and confers the qualification or degree that officially endorses their studies so that they can pursue their professional career or go on to postgraduate studies. This document is signed by the university authorities with powers to do so, i.e. the Rector and the Secretary General in turn, as well as the General Director of School Administration.

There are three types of materials of which these qualifications or degrees are made: (i) goat skin parchment; (ii) imitation parchment cardboard; and (iii) security paper; each of these is protected by security measures that guarantee they are exclusive to the UNAM, stop them from being forged, and are confidential.

It is important to point out that the issuing of these documents is a part of the processes certified with the ISO 9001:2015 Standard that is valid until June 2021. The Standard guarantees a production process that includes the particular measures contained in each of the types of materials in which the above documents are issued.

Among its functions the DGAE, and specifically the Directorate of Certification and Documentary Control, deals with the applications for validating documents issued by the UNAM which UNAM students or graduates present to public, private, national or foreign institutions. For the above, it is necessary to make the application to the head of the Directorate of Certification and Documentary Control, at amercado@dgae.unam.mx, attaching:

- Official application duly signed,
- Copy of the document for which validation is required,
- Letter of consent of the document holder for the validation to be carried out and the corresponding information provided.

8.1.3 UDEM

At UDEM, the documents issued for the certification of studies, examination records, as well as qualifications and degrees are made of paper. The specifications are:

- Headed paper with institutional design
- Official shield printed in black ink
- Internal security template
- Visible consecutive folio printing

The specifications of the stationery used for certificates of total and partial studies are:

- Official shield printed in black ink
- Internal security template
- Holographic strip with visible consecutive sheet

The specifications for the stationery used for qualifications, degrees, and diplomas are:

- Official cardstock (grammage 216), dimensions 29 cm by 40 cm, printed front and back
- Official shield printed in gold *hot-stamping*(high definition)
- High security in different texts on the front and back

These formats will be signed by the directors and staff of School Services who have been registered for this purpose. Additionally, above the signatures ink or embossed stamps will be used showing the shield of the institution; they are located above the signatures.

8.2 Examples of qualifications and diplomas of I



Professional qualification with federal RVOE (front)



El presente título fue expedido en favor de [REDACTED]
[REDACTED] quién cursó los estudios de Licenciatura en
Administración de Empresas y aprobó conforme Titulación directa
el día 13 de diciembre de 2016.

Quedó registrado en el Libro No. 2016 Foja No. 8.

CERTIFICACIÓN DE ANTECEDENTES ACADÉMICOS

A continuación se certifican los estudios de:

Nombre: [REDACTED]
Título: Licenciatura en Administración de Empresas
CURP: [REDACTED]

Estudios de Bachillerato:

Institución: Universidad de Monterrey
Período: 2009 - 2012
Entidad Federativa: Nuevo León

Estudios de Licenciatura:

Institución: Universidad de Monterrey
Licenciatura: Licenciatura en Administración de Empresas
Período: 2012 - 2016
Entidad Federativa: Nuevo León
Examen Profesional: No exigible

Cumplió con el Servicio Social, conforme al artículo 55 de la Ley
Reglamentaria del Artículo 5º. Constitucional, relativo al ejercicio de las
profesiones del Distrito Federal y al Artículo 85 del Reglamento de la
Ley Reglamentaria del Artículo 5º. Constitucional.

San Pedro Garza García, N.L. a 14 de diciembre de 2016

CERTIFICÓ

[REDACTED]
Directora de Escolar



17014

Documento válido en los Estados Unidos Mexicanos y no requiere trámite alguno de legalización

Professional qualification with federal RVOE (back)





UNIVERSIDAD DE MONTERREY

otorga a

[Redacted]

El Título de

Licenciado en Derecho

En atención a que cursó y aprobó todos los estudios requeridos conforme a los planes y programas autorizados por la Secretaría de Educación del Estado de Nuevo León y registrados en la Dirección General de Profesiones de la Secretaría de Educación Pública, cumplió con los requisitos que establecen los reglamentos de esta institución, según constancias que existen en nuestros archivos.

San Pedro Garza García, N. L. a 01 de junio de 2016.

Firma del alumno

[Redacted]

[Redacted]

Rector

*El C. Gobernador Constitucional del
Estado de Nuevo León*



**GOBIERNO DEL ESTADO
DE NUEVO LEÓN
PODER EJECUTIVO**

Expede y legaliza el presente Título con fundamento en los artículos 85 fracción XIX de la Constitución Política del Estado, 28 y 1ª de la Ley de Educación para el Estado y artículo 8 de la Ley de Profesiones del Estado de Nuevo León.

Professional qualification with state RVOE (front)



La Dirección de Acreditación, Certificación y Control Escolar de la Subsecretaría de Educación Media Superior y Superior de la Secretaría de Educación, con fundamento en la fracción VIII del artículo 26 de la Ley Orgánica de la Administración Pública para el Estado y en el artículo 51 fracciones XIV y XVI del Reglamento Interior de la Secretaría de Educación, certifica que en la fecha de expedición de este título el C. [REDACTED] es Rector de la Universidad de Monterrey, según consta en los archivos de esta Secretaría, el mismo que fue registrado con el No. 743 en la foja 7 del libro 7. Doy fe.

Se hace constar que según obran en nuestros archivos fue Registrado con el no. 998 folio no. 2 libro no. 1 del Registro de Actas y Títulos Profesionales.

Monterrey, N.L., a 9 de Septiembre de 2016

Va Bo.
 Representante del Área



GOBIERNO DEL ESTADO DE
 NUEVO LEÓN
 SECRETARÍA DE EDUCACIÓN
 SUBSECRETARÍA DE EDUCACIÓN
 MEDIA SUPERIOR Y SUPERIOR
 DIRECCIÓN DE Acreditación,
 Certificación y Control Escolar
 MONTERREY, MÉXICO

Director(a) de Escolar
 Universidad de Monterrey

Con Reconocimiento de Validez Oficial de Estudios otorgado el 8 de julio de 1969 por el H. Gobierno del Estado de Nuevo León.
 Clave de institución ante D.G.P.: 190003
 Clave de carrera ante D.G.P.: 612301

CERTIFICACIÓN DE ANTECEDENTES ACADÉMICOS

A continuación se certifican los estudios de:

Nombre: [REDACTED]
 Título: Licenciado en Derecho
 CURP: [REDACTED]

Estudios de Bachillerato:

Institución: Universidad de Monterrey
 Periodo: 1991 - 1992
 Entidad Federativa: Nuevo León

Estudios de Licenciatura:

Institución: Universidad de Monterrey
 Licenciatura: Licenciatura en Derecho
 Periodo: 1992 - 1996
 Entidad Federativa: Nuevo León
 Examen Profesional: 31 de mayo de 2016

Legalización Número 20522

El C. Secretario General de Gobierno del Estado de Nuevo León, en uso de las facultades que le confiere el artículo 20 fracción XXIV de la Ley Orgánica de la Administración Pública para el Estado, certifica que la firma y sello que anteceden corresponden al C. [REDACTED] quien en la fecha de registro del presente título, funge como Director de Acreditación, Certificación y Control Escolar de la Secretaría de Educación del Estado, según constancias que obran en esta Secretaría.- Doy fe.

Monterrey, N.L., a 24 de Noviembre de 2016



GOBIERNO DEL ESTADO
 DE NUEVO LEÓN
 SECRETARÍA GENERAL

Cumplió con el Servicio Social, conforme al artículo 55 de la Ley Reglamentaria del Artículo 5º. Constitucional, relativo al ejercicio de las profesiones en el Distrito Federal y al Artículo 85 del Reglamento de la Ley Reglamentaria del Artículo 5º. Constitucional.

San Pedro Garza García, N.L. a 01 de julio de 2016

CERTIFICÓ

[REDACTED]
 Director(a) de Escolar



Este estudio está reconocido según el artículo 55 de la Ley Reglamentaria del Artículo 5º. Constitucional, relativo al ejercicio de las profesiones en el Distrito Federal y al Artículo 85 del Reglamento de la Ley Reglamentaria del Artículo 5º. Constitucional.

16445

Professional qualification with state RVOE (back)





UNIVERSIDAD DE MONTERREY

CERTIFICADO No. A/29340

Hace constar que [REDACTED] matriculó [REDACTED] cursó y acreditó Licenciatura en Administración de Empresas con Reconocimiento de Validez Oficial de Estudios de la Secretaría de Educación Pública, según Acuerdo No. 20090909 de fecha 08 de junio de 2010 y clave de registro del plan de estudios 2010.

CERTIFICADO DE ESTUDIOS TOTALES

CLAVE	NOMBRE DE LA ASIGNATURA	CICLO QUE SE CURSÓ	CALIFICACIÓN		OBSERVACIONES
			NÚMERO	LETRA	
AD1005	Fundamentos Administrativos	2013-1	8.7	Ocho Punto Siete	Ordinario
AD1400	Mercadotecnia	2013-1	8	Ocho	Ordinario
CO1000	Introducción a las Finanzas	2013-1	8.5	Ocho Punto Cinco	Ordinario
CO1011	Costos para la Toma de Decisiones	2013-1	8.8	Ocho Punto Ocho	Ordinario
DE1125	Ambiente Legal de Negocios	2013-1	7.7	Siete Punto Siete	Ordinario
EC1031	Macroeconomía	2013-1	7.5	Siete Punto Cinco	Ordinario
FM1100	Interpretación de Información Estadística	2013-1	7.6	Siete Punto Seis	Ordinario
HU1005	Pensamiento Social de la Iglesia	2013-1	9.8	Nueve Punto Ocho	Ordinario
HU1010	Competencias Globales	2013-1	9	Nueve	Ordinario
HU1015	Contextos Internacionales Comparados	2013-1	9.4	Nueve Punto Cuatro	Ordinario
CO1020	Fundamentos Cuantitativos en Finanzas	2013-2	8.1	Ocho Punto Uno	Ordinario
CO1025	Análisis Financiero	2013-2	9.2	Nueve Punto Dos	Ordinario
EC1011	Microeconomía	2013-2	7.5	Siete Punto Cinco	Ordinario
FM1115	Estadística	2013-2	8	Ocho	Ordinario
ID1500	Escritos Académicos	2013-2	9.4	Nueve Punto Cuatro	Ordinario
SC1020	Herramientas Tecnológicas para la Productividad	2013-2	9.6	Nueve Punto Seis	Ordinario
AD1200	Liderazgo en las Organizaciones	2014-1	9.5	Nueve Punto Cinco	Ordinario
AD1600	Turismo	2014-1	9.1	Nueve Punto Uno	Ordinario
AD2055	Emprendedurismo Social	2014-1	8.9	Ocho Punto Nueve	Ordinario
AD2417	Investigación de Mercados	2014-1	8.2	Ocho Punto Dos	Ordinario
EC2441	Pronóstico de Negocios	2014-1	8.6	Ocho Punto Seis	Ordinario
FM1015	Cálculo Diferencial e Integral	2014-1	7.8	Siete Punto Ocho	Ordinario
AD2015	Plan de Negocios	2014-2	8.2	Ocho Punto Dos	Ordinario
AD2200	Liderazgo y Cambio Organizacional	2014-2	9.6	Nueve Punto Seis	Ordinario
CO2051	Estructura Financiera y Costo del Capital	2014-2	7.4	Siete Punto Cuatro	Ordinario
CO2065	Evaluación Financiera de Proyectos de Inversión	2014-2	9.8	Nueve Punto Ocho	Ordinario
IN2440	Programación Lineal Aplicada a la Administración	2014-2	9.5	Nueve Punto Cinco	Ordinario
AD2010	Administración de Nuevas y Pequeñas Empresas	2015-1	8.8	Ocho Punto Ocho	Ordinario
AD2070	Planeación Estratégica	2015-1	10	Diez	Ordinario
CI1100	Comunicación Efectiva	2015-1	8.9	Ocho Punto Nueve	Ordinario
DE1120	Legislación Laboral	2015-1	8.9	Ocho Punto Nueve	Ordinario
IN1000	Calidad, Productividad y Competitividad	2015-1	8.7	Ocho Punto Siete	Ordinario
IN1300	Procesos de Manufactura y Materiales	2015-1	8.8	Ocho Punto Ocho	Ordinario
AD1205	Administración del Capital Humano	2015-2	7.7	Siete Punto Siete	Ordinario
AD3400	Administración de Ventas	2015-2	8.8	Ocho Punto Ocho	Ordinario
AD3450	Estrategias Integradas de Comunicación de Mercadotecnia	2015-2	9.6	Nueve Punto Seis	Ordinario
IN2410	Administración de Operaciones	2015-2	9	Nueve	Ordinario
SC2740	Tecnologías de Información para Negocios	2016-1	9.1	Nueve Punto Uno	Ordinario

Firma del Alumno

Continúa al reverso

Este documento es válido en los Estados Unidos Mexicanos y no requiere trámites adicionales de legalización.

Certificate with federal RVOE (front)



CLAVE	NOMBRE DE LA ASIGNATURA	CICLO QUE SE CURSO	CALIFICACIÓN		OBSERVACIONES
			NÚMERO	LETRA	
AD2005	Estructura Organizacional	2016-1	9.9	Nueve Punto Nueve	Ordinario
AD2065	Negocios Electrónicos	2016-1	9.9	Nueve Punto Nueve	Ordinario
AD2600	Mercadotecnia de Servicios Turísticos	2016-1	9.2	Nueve Punto Dos	Ordinario
AD4001	Programa de Estancia Profesional en Administración	2016-1	9	Nueve	Ordinario
CO1035	Financiamiento y Administración de Riesgos en PYMES	2016-1	9.9	Nueve Punto Nueve	Ordinario
IN2420	Administración de Proyectos	2016-1	9.3	Nueve Punto Tres	Ordinario
AD2215	Desarrollo del Capital Humano	2016-2	9.4	Nueve Punto Cuatro	Ordinario
AD3005	Dirección y Comportamiento Organizacional	2016-2	9.4	Nueve Punto Cuatro	Ordinario
AD3060	Sistemas de Información para la Administración de Empresas	2016-2	8.8	Ocho Punto Ocho	Ordinario
AD3211	Administración de la Compensación I	2016-2	8.9	Ocho Punto Nueve	Ordinario
AD4010	Programa de Evaluación Final de Administración I	2016-2	9.8	Nueve Punto Ocho	Ordinario
EC2240	Ambiente de Negocios Internacionales	2016-2	9.4	Nueve Punto Cuatro	Ordinario
EC3075	Seminario Integrador de Negocios	2016-V	9.9	Nueve Punto Nueve	Ordinario
AD2212	Atracción del Capital Humano	2017-1	8.9	Ocho Punto Nueve	Ordinario
AD3045	Control Organizacional	2017-1	9.1	Nueve Punto Uno	Ordinario
AD4020	Programa de Evaluación Final de Administración II	2017-1	9.1	Nueve Punto Uno	Ordinario
CO3015	Sistema de Evaluación de Desempeño	2017-1	9.4	Nueve Punto Cuatro	Ordinario
IN2431	Métodos Cuantitativos para la Toma de Decisiones en los Negocios	2017-1	8.1	Ocho Punto Uno	Ordinario
			Clave de institución ante D.G.P.		190003
			Clave de carrera ante D.G.P.		621303
			Promedio general		8.9

El presente certificado total ampara 56 asignaturas. La escala de calificaciones es de 5 a 10 y la mínima aprobatoria es de 7.

San Pedro Garza García, Nuevo León a los nueve días de diciembre de 2016.

Subdirección de Control Escolar



16 ENE 2017





UNIVERSIDAD DE MONTERREY

Con Reconocimiento de Validez Oficial de Estudios, de fecha
 8 de julio de 1969, otorgado por el Gobierno del Estado de Nuevo León.

La que suscribe, Directora de Escolar

CERTIFICA

Que según consta en los archivos [redacted] Matricula Número [redacted]
 CURP [redacted] cursó y aprobó las siguientes asignaturas que cubren
 íntegramente el plan de estudios de Licenciado en Derecho con las calificaciones que a
 continuación se expresan.

CERT.No.
 A / 569

No.	ASIGNATURA	CRED.	CALIF.	No.	ASIGNATURA	CRED.	CALIF.
1	Diciembre. 1992			49	Amparo	4	10.0
2	Introducción al Estudio del Derecho	5	9.0	50	Derecho Comparado	2	9.0
3	Derecho Civil I (Personas)	5	9.0	51	Derecho Fiscal II	4	9.0
4	Historia I Grecia	3	10.0	52	Seminario Optativo	6	10.0
5	Metodología Jurídica I	6	7.0	53	Seminario Tesis I	6	AC
5	Terminología Jurídica Francesa I	4	10.0	54	Derecho Fiscal Comparado Optativa	6	9.0
6	Mayo. 1993			55	México Actual	6	10.0
6	Sociología General	3	10.0		Diciembre. 1996		
7	Derecho Penal I	5	10.0	56	Seminario Amparo	6	7.0
8	Derecho Civil II (Bienes)	5	10.0	57	Derecho Internacional Público	3	9.0
9	Derecho Civil (Sucesiones)	3	9.0	58	Seminario Derecho Fiscal	6	7.0
10	Historia II Roma	3	10.0	59	Seminario Tesis II (Redacción)	8	8.0
11	Metodología Jurídica II	6	9.0	60	Régimen Legal del Comercio Exterior	4	10.0
12	Diciembre. 1993			61	Derecho Ecológico	6	10.0
12	Derecho Penal II	5	10.0	62	Seguridad Nacional Optativa	6	8.0
13	Teoría Política	3	9.0	*****	*****	*****	*****
14	Direcciones del Pensamiento Jurídico	3	9.0				
15	Derecho Agrario	2	10.0				
16	Historia III	3	10.0				
17	Seminario Derecho Civil I	6	10.0				
18	Terminología Jurídica Francesa II	4	10.0				
19	Mayo. 1994						
19	Derecho Civil IV (Obligaciones)	5	10.0				
20	Derecho Constitucional I	5	10.0				
21	Derecho Procesal I	5	10.0				
22	Seminario Derecho Civil II	6	9.0				
23	Teoría Económica I	3	9.0				
24	Raíces del México Actual I	6	10.0				
25	Diciembre. 1994						
25	Administración General	3	9.0				
26	Contabilidad Financiera	3	9.0				
27	Derecho Civil V (Contratos)	5	10.0				
28	Derecho Constitucional II	5	9.0				
29	Derecho Procesal II	5	9.0				
30	Terminología Jurídica Inglesa I	3	10.0				
31	Seminario de Derecho Constitucional	6	8.0				
32	Raíces del México Actual II	6	10.0				
33	Mayo. 1995						
33	Derecho Administrativo I	5	10.0				
34	Derecho Mercantil I	5	8.0				
35	Terminología Jurídica Inglesa II	3	9.0				
36	Seminario de Derecho Procesal	6	10.0				
37	Derecho del Trabajo	4	9.0				
38	Derecho Internacional Privado	3	9.0				
39	Optativa I	3	8.0				
40	Teoría Económica II	3	7.0				
41	Diciembre. 1995						
41	Derecho Administrativo II	4	10.0				
42	Derecho Mercantil II	4	7.0				
43	Seminario Derecho Mercantil	6	10.0				
44	Derecho Fiscal I	4	8.0				
45	Derecho del Trabajo II	4	9.0				
46	Filosofía del Derecho	4	8.0				
47	Seminario Derecho Administrativo	6	10.0				
48	Seminario Derecho del Trabajo	6	9.0				
48	Mayo. 1996						

Clave de institución ante D.G.P. 190003 Clave de carrera ante D.G.P. 612301

Escala de calificaciones del 0 al 10, mínima aprobatoria es 7 (SIETE)

Promedio General: 9.16

A petición del interesado y para los fines y usos legales que haya lugar, se extiende la presente que ampara 62 (sesenta y dos) asignaturas en San Pedro Garza García, Nuevo León a los veintisiete días del mes de mayo de dos mil dieciséis.

ATENTAMENTE

[redacted]
 DIRECTORA DE ESCOLAR

2846

Certificate with state RVOE (front)



UNIVERSIDAD DE MONTERREY
 DIRECCIÓN ESCOLAR

Registrado el día 27 de Mayo del 2016
 En la página 7 del libro No. 201621 con el número 569

[Redacted]

COORDINACIÓN DE CONTROL ESCOLAR



LEGALIZACIÓN No. 2016ES03953

La Secretaría de Educación del Estado de N. L. a través de la Subsecretaría de Educación Media Superior y Superior, la Dirección de Acreditación, Certificación y Control Escolar en el uso de las facultades que le confiere el Art. 26 de la Ley Orgánica de la Administración Pública del Estado y Art. 51 del Reglamento Interior de la Secretaría de Educación, certifica y da fe que

LA C. [Redacted] ES DIRECTOR(A) ESCOLAR DE UNIVERSIDAD DE MONTERREY CON RECONOCIMIENTO DE VALIDEZ OFICIAL DE ESTUDIOS EN LA CIUDAD Y FECHA QUE SE INDICA.

Suya(s) las firma(s) y auténtico el sello con el que se legaliza, el presente documento para los efectos a que haya lugar además de verificar el correspondiente plan de estudios, se certifica lo anterior dado por legalizada la legitimidad de este documento. En la ciudad de Monterrey, N. L. a los CUATRO días del Mes de AGOSTO de DOS MIL DIECISEIS

ATENAMENTE

[Redacted]

DIRECTOR DE ACREDITACIÓN, CERTIFICACIÓN Y CONTROL ESCOLAR

ELABORÓ [Redacted] REVISÓ [Redacted]




GOBIERNO DEL ESTADO DE NUEVO LEÓN
 SECRETARÍA DE EDUCACIÓN
 SUBSECRETARÍA DE EDUCACIÓN MEDIA-SUPERIOR Y SUPERIOR
 DIRECCIÓN DE ACREDITACIÓN, CERTIFICACIÓN Y CONTROL ESCOLAR
 MONTERREY, MÉXICO

Av. I. Morones Prieto 4500 Pte. 66238. San Pedro Garza García, N. L., México
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GOBIERNO DEL ESTADO DE NUEVO LEÓN
 SECRETARÍA GENERAL
 UNIDAD DE LEGALIZACIONES

LEGALIZACIÓN No. 14942

EL C. TITULAR DE LA UNIDAD DE LEGALIZACIONES DE LA SECRETARÍA GENERAL DE GOBIERNO DEL ESTADO DE NUEVO LEÓN, con fundamento en los artículos 15, 18 fracción I, 20 fracción XXIV de la Ley Orgánica de la Administración Pública para el Estado, 1, 2 fracción II, 5 fracción IV punto 6 inciso d), 44 y demás relativos del Reglamento Interior de la Secretaría General de Gobierno, certifica y da fe que la(s) firma(s) que calza(n) el presente documento corresponde(n) a(l) (los) C. [Redacted]

que es en la fecha [Redacted] DIRECTOR DE ACREDITACIÓN, CERTIFICACIÓN Y CONTROL ESCOLAR DE LA SECRETARÍA DE EDUCACIÓN EN EL ESTADO

y de que el (los) sello (s) que en el mismo aparece (n) impreso (s) es (son) el (los) auténtico(s) y el (los) debidamente registrado (s)

Para los efectos a que haya lugar, se certifica lo anterior, quedando legalizada la autenticidad de la (s) expresada (s) firma (s) y sello (s).

Monterrey, N.L., a 14 de Septiembre del año 2016

[Redacted]

GOBIERNO DEL ESTADO DE NUEVO LEÓN
 SECRETARÍA GENERAL
 UNIDAD DE LEGALIZACIONES

ESTA UNIDAD NO ASUME RESPONSABILIDAD ALGUNA POR EL CONTENIDO DEL DOCUMENTO QUE SE LEGALIZA

No. Servicio:11088 mirt

Certificate with state RVOE (back)



9. Glossary

Academic credits transfer.- In academic control systems, credit banks, or academic documents accrediting the teaching followed by each person, the assignment of all or part of the academic credits obtained in official courses previously taken or in processes validating formal, non-formal and informal learning. The transfer of credits implies, for example, that the learning registered with an educational institution, based on a specific curriculum or syllabus, is taken to another curriculum or syllabus even of a different nature or area but with some similar contents, followed in the same or in a different institution, in such a way that the student does not have to study knowledge again he already has.

Accreditation.- Action and effect of demonstrating that the corresponding learning has been acquired at an education level, grade level, subject, credit or other learning unit, according to school control standards, curricula and syllabuses, or other applicable instruments.

Accumulation of credits.- Process through which it is possible to collect credits derived from different forms of learning until achieving what is required to obtain one or more specific qualifications.

Apostille.- Simplified method of legalisation of documents in order to verify their authenticity in the international sphere.

Aptitude.- Quality, sufficiency, or suitability to perform one or more tasks or to practise a job.

Capability.- Ability to apply knowledge and use know-how to complete tasks and solve problems. They are described as cognitive (based on using logical, intuitive, and creative thinking) and practical (based on manual dexterity and the use of methods, materials, tools, and instruments).

Certification.- Issuance of an official document that registers the qualification and the validation or accreditation of learning, and that can be issued as a certificate, record, diploma, qualification, or academic degree.

Comparable studies.- Studies which, without being identical or necessarily similar to those taught in the SEN, allow the student following them to continue with subsequent studies in the said system or practise a particular activity, the individual concerned having acquired learning that in its practical effects is not substantially different from that taught in the system of the SEN.

Correlation table.- Document that compares between subjects, educational levels, school grades or any other learning unit existing within the SEN.

Credit.- Assigns a value to a specific amount of training or of acquired or academic knowledge, usually a training unit that has been assessed or a module in a training programme, but it is possible to allocate credits, for example, for learning results or achievements, for certifications acquired in other education systems amounting to validation findings, to certifications of a vocational nature, such as those for training for and in work, or those referred to in the National Skills System.

Credits allocation.- Process by which a value is given to the learning acquired in formal educational processes, or to non-formal and informal learning that has been validated based on an evaluation or other educational process.

Decentralised bodies.- These are the entities created by law or decree of the Congress of the Union or by decree of the Federal Executive, with their own corporation status and assets, whatever the legal structure they adopt.

Devolved body.- These are administrative bodies that are hierarchically subordinate to the State Secretariats and that have specific powers to decide on the matter and within the territorial scope determined in each case - pursuant to the legal provisions applicable.

Educational quality assurance.- Systematic review of educational programmes to ensure that they maintain adequate academic, teaching, and infrastructure standards.

Equivalence.- Administrative act through which the educational authority declares courses studied within the SEN to be comparable to one another.

Evaluation.- The evaluation of a training or learning course consists in comparing it with set standards, criteria, or curricular contents, effected by a teacher, expert or a group of experts following established procedures.

Formal learning.- Activity associated with educational centres that are part of the SEN. Formal learning stems from an organised and structured programme of instruction; from the learner's perspective it is intentional. Formal learning is generally recognised by a qualification or an officially recognised certificate. There are not only academic studies within the processes of formal learning, but also those that are taught in non-academic or mixed modes, including distance education options, open education models and other officially recognised educational options.
Federal educational authority.- SEP of the Federal Government.

Giving account.- Explicit presentation, normally in writing, of the results obtained by an institution or programme.

Informal learning.- It occurs outside any form of organised education or training. It is often associated with "experience" or "unintentional learning" and occurs throughout life without the person who is learning necessarily being aware of the knowledge or capabilities he is acquiring. Informal learning is derived from everyday activities, be they work, family or leisure. It is not organised or structured in terms of objectives, dedicated time, or learning supports and does not result directly in an official certification, however, its validation - from processes such as the evaluation of portfolios or acquired knowledge - can lead to such certification.

In-service training.- Training that updates with new knowledge, skills or abilities, as well as, where appropriate, the specialisation of those developing a productive activity demanded in the market, through some skilled occupation or some trade.

Knowledge.- Result of the assimilation of information through learning; stock of facts, principles, theories and practices related to a specific field of work or study, which may be theoretical or factual.

Labour skill standard or norm.- It is a document that establishes the criteria and serves as a reference to evaluate and certify a person's labour competency, and which will describe - in terms of results - the entirety of their knowledge, abilities, skills, and attitudes.

Learning.- Cumulative process by which a person gradually assimilates increasingly complex and abstract elements (concepts, categories, patterns or behaviour models) and acquires capabilities and competences.

Learning result.- Expression of what a person knows, understands and is capable on completing a learning process.

Lifelong learning.- Learning activity in which attitudes, aptitudes, knowledge, abilities or skills are acquired or perfected throughout life for personal, civic, social or labour purposes. Thus, it includes the entire spectrum of possible learning - formal, non-formal, or informal - together with elements such as active citizenship, personal fulfilment, or social inclusion and aspects related to profession, trade, or employment.

Local Education Authority.- State education secretariats or bodies responsible for education in the federal entities (in the case of Mexico City to the Federal Administration of Educational Services of Mexico City dependent on the Secretariat).

Non-formal learning.- It takes place when a person follows a structured training programme that does not lead to an official certification and that can be taken within educational centres, businesses, associations, or organizations that are not necessarily part of the SEN. However, processes such as the evaluation of portfolios or acquired knowledge may allow this type of learning to be validated

Period of Study.- Duration of partial studies completed or total studies required to obtain a certain qualification.

Qualification.- It is the formal result of a process of accreditation or validation of learning. It is obtained when an authority, institution or competent body establishes that a specific person has acquired knowledge, capabilities or competences of a broad type up to the standards specified in the norms for a skill, curricula and syllabuses, academic control standards, or other regulatory instruments. The learning can be confirmed by evaluation or by completion of a course. A qualification is usually expressed in an official certification that may consist of a record, certificate, diploma, qualification, or academic degree. In Mexico, the term grade (calificación) is also commonly used (especially in the certification processes run by CONOCER).

Qualifications Framework.- This is an instrument that is part of a system of qualifications and which makes it possible to develop and classify qualifications according to a series of criteria over levels of learning attainment. These series of criteria may be implicit in the qualification descriptors or explicitly defined by a set of level descriptors. Qualifications frameworks can cover all levels and training paths or be limited to a particular sector. Some frameworks may have more designed elements and a more rigid structure than others; some rest on a legal basis while others simply reflect the consensus reached among social actors. All qualifications frameworks, however, provide a basis for improving the quality, accessibility, interrelation and public or professional recognition of qualifications, whether within a country or internationally. For the purposes of these standards, the Qualifications Framework that will be taken into account is that being developed by the DG AIR pursuant to the legislation and regulations applicable, in order to make each qualification within the SEN easier to understand and to organise the certifications it issues. This Qualifications Framework would be supported by the International Standard Classification of Education (ISCED), authorised by the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO). This classification, approved by UNESCO at the 36th session of its General Conference, held in Paris, France, in November 2011, can be consulted on the website: <http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>

Qualification system.- This covers all the mechanisms a country uses to recognise training or learning. They include the means to design and operate national or regional qualification policies, institutional arrangements, quality assurance processes, evaluation and certification processes, recognition and transfer of knowledge and other mechanisms that link the educational/training environment with the labour market and civil society.

Quality accrediting agency or accrediting body.- Public or private entity, external to educational institutions, dedicated to the evaluation and, where appropriate, accreditation, certification, recognition, or backing, of a public nature, of these institutions and their programmes.

Recognition of learning or recognition of acquired knowledge.- Equivalent to the process of recording learning achievements - whatever the type and whatever the environment. This process, which is usually carried out after certification, aims to reflect in a visible way the knowledge, skills and broad competences that a person possesses, so that they can combine or expand them - and make the most of them.

Record, certificate, diploma, qualification, or academic degree.- Official documents that register a qualification and the accreditation or validation of learning in a given educational level or service. Among other purposes, records may also be issued to validate partial or specific units of learning.

Skill.- Ability to use attitudes, aptitudes, knowledge, skills and personal, social, and methodological capabilities in work or study situations and for professional and personal development. Skills can be described in terms of responsibility and autonomy.

Subject.- Each of the areas of study in which a curriculum is structured, although it is possible for an area of study to include several subjects.

Substantial difference.- Criterion of study equivalence consisting in that the validation will be granted, so long as there is no major and really significant obstacle to its legitimacy. Such as, for example, that the studies carried out by one person are not enough to continue subsequent studies in the SEN successfully, since the minimum learning that would make it possible has not been achieved. This principle implies that: (a) Not every difference of curricular contents, duration of learning periods or denomination of subjects or curricula, should be considered to be substantial; (b) The existence of a substantial difference does not necessarily make denying validation obligatory, but it may be grounds for its inadmissibility, and (c) The difference has to be substantial in relation to the function and purpose with which a degree or educational level is associated, and not in relation to the detail of content, learning periods, or subject titles that are part of the qualification.

Studies completed within the SEN.- Studies carried out in educational institutions of the Mexican State (federation, federal entities, and municipalities), in their decentralised organisations and in private institutions with authorisation or recognition of their courses' official validity.

Studies followed outside the SEN.- Studies carried out in educational institutions of the Mexican State (federation, federal entities, and municipalities), in their decentralised organisations and in private institutions with authorisation or recognition of their courses' official validity.

Validation.- Official resolution issued by a competent educational authority, which grants official validity to studies taken outside the SEN, so long as they are comparable to those studied within it. The validation may be granted by educational levels, by school grades, academic credits, by subjects or other learning units.

Validation or recognition of acquired knowledge.- Mechanism by which the educational authority, through authorised or recognised evaluations (examinations, review of portfolios or analysis of other evidence), officially accredits and recognises knowledge, abilities or skills previously acquired in learning processes - whether non-formal, informal, or even formal courses followed outside the SEN - which correspond to a certain educational level, grade level or learning unit.

Vocational training.- Training resulting from the inclination or disposition of a person for any profession, industry, commerce, or trade. For these standards' purposes, the maintenance - as well as the updating and specialisation for certain forms of study or training - is included in the vocational and in-service education.

10. Links and references

1	http://www.diputados.gob.mx/LeyesBiblio/pdf/1_270818.pdf
2	https://www.gob.mx/sep
3	https://www.sep.gob.mx/wb/sep1/sep1_Direccion_General_de_Acreditacion#
4	http://www.recolatin.eu/
5	https://www.unam.mx/
6	http://www.udem.edu.mx/Esp/Paginas/default.aspx
7	https://www.sep.gob.mx/work/models/sep1/Resource/558c2c24-0b12-4676-ad90-8ab78086b184/ley_general_educacion.pdf
8	https://www.gob.mx/inea/
9	http://www.diputados.gob.mx/LeyesBiblio/pdf/182.pdf https://www.sep.gob.mx/work/models/sep1/Resource/558c2c24-0b12-4676-ad90-8ab78086b184/ley_coord_educ_superior.pdf
10	https://www2.sepdf.gob.mx/info_dgenam/index.html
11	https://www.dgespe.sep.gob.mx/
12	http://www.sep.gob.mx/work/models/sep1/Resource/5f29a659-4363-41d8-b7d2-f5886b9057c0/risepe.pdf
13	http://www.sep.gob.mx/work/models/sep1/Resource/15215/1/images/a17_11_17.pdf
14	http://www.dgoserver.unam.mx/portaldgose/becas/index.html
15	https://www.conacyt.gob.mx/
16	http://www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf
17	https://www.sep.gob.mx/es/sep1/SIRVOES
18	http://oferta.unam.mx/
19	https://consejo.unam.mx/static/documents/reglamentos/reglamento_general_de_estudios_universitarios.pdf
20	http://sitios.itesm.mx/va/planes_de_estudio/documentos/Reconocimiento_de_validez_Oficial_de_Estudios.pdf
21	https://www.ses.sep.gob.mx/instituciones.html
22	https://www.copaes.org/acreditacion.php
23	http://www.anuies.mx/
24	https://www.fimpes.org.mx/
25	http://www.codeic.unam.mx/index.php/carreras-acreditadas/
26	http://svrtmp.main.conacyt.mx/ConsultasPNPC/inicio.php
27	www.sacscoc.org
28	https://www.ciees.edu.mx/
29	https://conocer.gob.mx/
30	https://aplicaciones.sre.gob.mx/tratados/consulta_nva.php
31	http://www.sep.gob.mx/work/models/sep1/Resource/38735731-9155-46a2-9584-369e119dc079/a02_04_17.pdf
32	https://www.sep.gob.mx/es/sep1/instituciones_autorizadas
33	https://www.sep.gob.mx/wb/sep1/sep1_Direccion_General_de_Profesiones
34	http://www.ceneval.edu.mx/
35	http://dof.gob.mx/nota_detalle.php?codigo=4724573&fecha=04/08/1994
36	https://www.topuniversities.com/university-rankings/world-university-rankings/2019 https://www.topuniversities.com/university-rankings/latin-american-university-rankings/2018
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