

UNAM THE NATION'S UNIVERSITY



NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO

Dr. Enrique Luis Graue Wiechers
Rector

Dr. Leonardo Lomelí Vanegas
General Secretary

Ing. Leopoldo Silva Gutiérrez
Administrative Secretary

Dr. Alberto Ken Oyama Nakagawa
Institutional Development Secretary

Mtro. Javier de la Fuente Hernández
Community Outreach Secretary

Dr. Mónica González Contró
Legal Director

Néstor Martínez Cristo
Public Relations Director

Dr. Domingo Alberto Vital Díaz
Humanities Director

Dr. William Henry Lee Alardín
Scientific Research Director

Dr. Jorge Volpi Escalante
Cultural Promotion Director

Joaquín Díez-Canedo Flores
Director of Publication and Editorial Promotion

UNAM THE NATION'S
UNIVERSITY

Universidad Nacional Autónoma de México

[UNAM. Español]

UNAM : the nation's university / coordinator Francisco José Trigo Tavera ;
introduction Enrique Graue Wiechers. – First edition

336 páginas

ISBN 978-607-30-0174-8

1. Universidad Nacional Autónoma de México. I. Trigo Tavera, Francisco J., editor.
II. Graue Wiechers, Enrique, prologuista. III. Título.

LE7.M62.U34413 2018

LIBRUNAM 1981091

Translation Joshua Neuhouser
First edition: February 16, 2018

D.R. © 2018 UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO
Ciudad Universitaria
Delegación Coyoacán, 04510
Mexico City

ISBN: 978-607-30-0174-8

Reproduction in whole in part by any means
without the prior written authorization
of the rights holders is strictly prohibited.

This edition and its contents are the property
of the National Autonomous University of Mexico.

Printed in Mexico.

UNAM THE NATION'S UNIVERSITY

COORDINATOR

Francisco José Trigo Tavera



NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO





CONTENTS

11 INTRODUCTION

15 HISTORY

21 FUNCTIONS OF THE UNIVERSITY

22 TEACHING

24 RESEARCH

25 NATIONAL SYSTEM OF RESEARCHERS

26 CULTURAL PROMOTION

29 CHARACTERISTICS

30 GOVERNING STRUCTURE

32 PUBLIC

34 AUTONOMOUS

36 NATIONAL

39 TEACHING

42 ACADEMIC OFFERINGS

42 PREPARATORY SCHOOLS

46 UNDERGRADUATE EDUCATION

90 POSTGRADUATE EDUCATION

92 DISTANCE LEARNING

93 CONTINUING EDUCATION

94 COMMUNITY SERVICES

97 SCIENTIFIC RESEARCH

100 THE SCIENTIFIC RESEARCH SUBSYSTEM

102 NATIONAL SERVICES AND OTHER SERVICES

102 PUBLICATIONS

103 ACADEMICS

104 INSTITUTES AND CENTERS

148 EXPERIMENTAL CAPACITY

150 GEOGRAPHIC DISTRIBUTION OF UNAM LABORATORIES

161 UNIVERSITY PROGRAMS

164 THE SCIENCE POPULARIZATION DEPARTMENT

164 MUSEUMS



José Chávez Morado, *The Conquest of Energy*.

169 HUMANITIES AND SOCIAL SCIENCES RESEARCH

170 THE HUMANITIES SUBSYSTEM

170 INSTITUTES

186 CENTERS

194 UNITS

196 PROGRAMAS UNIVERSITARIOS

200 NATIONAL SERVICES

202 MUSEUMS

208 OUTREACH HOUSES

211 CULTURE

212 THE UNAM IN CULTURAL PROMOTION

216 VISUAL ARTS

218 FILM

222 DANCE

224 LITERATURE

226 MUSIC

228 PUBLICATIONS

230 THEATER

232 NETWORK OF ARTISTIC LABORATORIES

234 MEDIA

236 CULTUREUNAM
COMMUNITY PROGRAM

236 CULTURAL DOWNLOAD

238 GREAT TEACHERS UNAM

238 EXTRAORDINARY CHAIRS

241 SEMINARS

251 HISTORIC BUILDINGS

265 THE UNAM'S PRESENCE

266 ACROSS THE COUNTRY

268 IN THE WORLD

268 ACADEMIC COOPERATION AND
EXCHANGE

272 OUTREACH AND INNOVATION

272 STUDENT MOBILITY
AND PARTICIPATION IN
INTERNATIONAL NETWORKS

287 THE UNAM WE WANT

291 STATISTICS

325 ONLINE DIRECTORY



INTRODUCTION

WITH THIS INTRODUCTION, we invite the reader to explore the National Autonomous University of Mexico as it exists in 2017. The pages of this book describe the university's primary day-to-day activities.

What follows is, necessarily, a present-day account of the university, which has seen 466 years of continual academic efforts since its founding in 1551 as the Royal and Pontifical University of Mexico and a nearly three-century evolutionary process that led to its refounding as the National Autonomous University of Mexico at the beginning of the last century. Ever since, it has played a transformative role within the nation, serving as a cornerstone for the construction of our contemporary society.

Its classrooms and hallways have seen the passage of renowned academics, scientists, and thinkers who have helped forge our history through their respective disciplines. All three Mexican Nobel Laureates are former UNAM students: Alfonso García Robles (Nobel Peace Prize, 1982), Octavio Paz (Nobel Prize in Literature, 1990), and Mario Molina (Nobel Prize in Chemistry, 1995). But the list of professors and alumni who have changed the history of science, the arts, and the humanities—in our country and around the world—is too long to be listed here.

The National Autonomous University of Mexico is more than just the country's oldest and most prestigious university. In accordance with its origins, the UNAM has a deep commitment to public, secular, and autonomous education.

Those of us who are part of this institution can feel Mexico within us: we dream of an egalitarian, prosperous country, with the freedom to agree or disagree on how to make it better and more just. Without wanting to sound superior, the members of this community feel special. Indeed, belonging to the UNAM is a sign of commitment to Mexico—to the Mexico that those of us affiliated with the nation's university dream of and imagine.

The National Autonomous University of Mexico currently has 15 faculties, five multidisciplinary units, five national schools, 14 preparatory school campuses, 33 institutes, 15 research centers, and 120 undergraduate programs, as well as over 40,000 academics, nearly 350,000 students, and a presence in seven countries.

Thanks to our ever-changing study plans, the creation of new programs, and the development of innovative scientific and humanistic research programs, the UNAM is able to evolve and adapt to the challenges that face it.

This book is a testimony to the presence and the scope of the National Autonomous University of Mexico. Its pages reflect our commitment to Mexican society, our formation of free and responsible human capital, our challenges, and our achievements, which we periodically make public in publications like this one.

Dr. Enrique Graue Wiechers
Rector, National Autonomous
University of Mexico



HISTORY

THE PREDECESSOR OF THE NATIONAL Autonomous University of Mexico was the Royal and Pontifical University of Mexico, founded by royal decree in 1551. It had five faculties: Theology, Canon Law, Roman Law, Medicine, and Art, as well as several chairs. Over the course of the nineteenth century, the university was closed and reopened on several occasions due to periods of external upheaval, such as the War of Independence (which pitted liberals against conservatives), foreign invasions, and the rise of independent Mexico.

The university began to resemble the UNAM we know today in September 1910, when the country's secondary and higher education system was reorganized and the National University of Mexico founded, bringing together the "national schools" founded over the course of the nineteenth century: the National Preparatory School, the National School of Jurisprudence, the National School of Medicine, the National School of Engineers, the National School of Fine Arts, and the School of Higher Studies, created in April of that year.

STONE PLAQUE placed on September 22, 1919 on the façade of the building that housed the Royal and Pontifical University of Mexico. The plaque shows the first shield of the National University of

Mexico, which utilizes the image of the eagle and the serpent and the motto *Patriae scientiae que amor salus populi est* ("Patriotism and Love of Knowledge Are the Wealth of the People").



In July 1929, the university was granted autonomy by the federal government and became the National Autonomous University of Mexico (UNAM). Years later, in 1945, its current charter was issued. Its first article states:

The National Autonomous University of Mexico is a public corporation and a decentralized state agency with full legal powers whose purpose is to provide higher education for professionals, researchers, university professors, and technicians of use to society; to organize and undertake research, primarily that relevant to the nation's conditions and challenges; and to extend the benefits of culture as far as possible.

Over the course of the twentieth century, and in accordance with its three basic functions of teaching, research, and cultural promotion, the UNAM has contributed to the formation of Mexico's constitutive institutions. Its classrooms host an academic community that has nurtured the country with great thinkers, professionals, artists, and social leaders.

THE CENTRAL LIBRARY is one of the university's most emblematic buildings. In this photograph, we can appreciate the grassy plaza that surrounds the Rectory

Tower. This part of the university campus was declared a UNESCO World Heritage Site in 2007.



FUNCTIONS OF THE UNIVERSITY

TEACHING

SINCE THE UNIVERSITY'S INCEPTION, teaching has been a central part of the UNAM'S day-to-day activities. The university has made extraordinary contributions to this field. There were 349,539 matriculating students in the 2016-'17 school year, including 30,363 graduate students, 205,648 undergraduate students, and 113,528 preparatory students.

The academic staff encompasses 40,184 people, 12,292 of whom are full-time professors.

The university's teaching and research activities are carried out at 15 faculties, five multidisciplinary units, five national schools, 12 preparatory school campuses (nine as part of the National Preparatory School and five as part of the College of Sciences and Humanities), 33 institutes, 15 research centers, and 11 other university programs.

The UNAM's nationwide educational coverage is evident in the creation of the National School of Higher Studies - León and the National School of Higher Studies - Morelia, respectively founded in 2011 and 2012, among other initiatives.

IN THE INAUGURATION SPEECH he delivered on September 22, 1910, Justo Sierra said: "Interest in science and interest in the fatherland should be in the hearts of all Mexican students, creating the types of characters destined for

triumph, crowning the great work of popular education that the school and the family—that great school of experience—so marvelously consolidate when working together."



RESEARCH¹

RESEARCH IS AMONG the most important activities at the UNAM—in the humanities and the social sciences as well as in the hard sciences. Over the years, the university's research programs have grown ever-stronger, and new programs have been created to unite multiple disciplines in close collaboration with different academic communities, both domestic and foreign.

The UNAM is Mexico's premier research institution and the one that laid the groundwork for the country's current scientific research system. Its research is oriented towards addressing and solving diverse problems: social, economic, those focusing on sustainable innovation, and those contributing to the advancement of knowledge. For example, of the total number of scientific articles published by Mexican academics in 2016 (with January 2017 as the cutoff), 27.4% were authored by UNAM researchers, while 33.8% of the citations in Mexican research projects correspond to UNAM-affiliated researchers.²

DURING THE AWARDS CEREMONY for the General Lázaro Cárdenas del Río University Merit Medal, held on February 9, 2012, Ruy Pérez Tamayo stated that "the UNAM has always served as the critical conscience of the times and of all

time, as a dynamic storage facility and a factory that actively produces scientific and humanistic knowledge in all of its expressions, as well as a fertile, generous incubator for its effective circulation."

¹ Information provided by the Secretary of Statistical Generation and Analysis, part of the UNAM's Academic Secretariat.

² According to data from the IIMAS Laboratory Networks, based on WoS and Scopus, with data from 2016, using January 2017 as the cutoff. In terms of citations, this percentage is based on the total accumulated citations for Mexico and the UNAM from 2005 to 2016, based solely on WoS.

NATIONAL SYSTEM OF RESEARCHERS

The National System of Researchers (SNI, its Spanish-language acronym) was created by the federal government to recognize domestic scientific research and establish clear rules for academic work. In 2016, 4,598 full-time UNAM academics were members of the SNI, or 35% of the university's full-time professors. The UNAM represents 17% of the total number of academics registered in the SNI.



CULTURAL PROMOTION

EVER SINCE ITS INAUGURATION IN 1910, the National Autonomous University of Mexico has played a key role in enriching Mexico's cultural life. Its contributions include not just the preservation, enhancement, and promotion of a rich historical and artistic heritage that reflects our identity and diversity, but also the support for and advancement of new artistic trends and concepts on both the national and international level. Many of the country's most renowned twentieth- and twenty-first-century artists—whether in the fields of theater, the visual arts, literature, or film—have been affiliated with the UNAM.

THE UNIVERSITY IS AN EXAMPLE of the cultural supply-and-demand relationship in two senses: we must differentiate between the cultural consumption of the UNAM and the cultural consumption in the UNAM. Its community utilizes the

cultural resources on offer; that is, the goods, services, and activities that constitute an exceptional cultural supply. In turn, the university is a means of cultural production, administering its own cultural heritage and facilities.



CHARACTERISTICS

GOVERNING STRUCTURE

IN ITS CHARTER, the university's highest regulatory law, the UNAM is defined as "a public corporation and a decentralized state agency with full legal powers," which the government has granted for its own autonomous governance.

The UNAM's authorities are the Governing Board; the University Council; the Rector; the Board of Trustees; the directors of faculties, schools and institutes; and the technical boards of the schools and faculties of the scientific research and humanities departments.

The Governing Board, which is composed of 15 distinguished individuals known for their achievements in different fields of knowledge and for their interest in university affairs, is designated by the University Council (and, on specific occasions, by the Board itself). Its responsibilities include appointing the rector, as well as the members of the Board of Trustees and the directors of faculties, schools, and institutes.

The University Council is the authority responsible for issuing regulations and general norms aimed at improving the organization and technical, academic, and administrative functioning of the UNAM. Administered by the rector, this entity was expanded in 2011 to include all sectors of the university community and to improve the participation of those already represented. It currently comprises 305 councilmembers who represent professors; graduate and undergraduate students; researchers and technicians at research institutes and centers;

EVER SINCE THE FIRST university by-laws, approved in 1934 under the regulations of the 1933 Charter, the University Council has been the highest representative body for the entire

university community. The UNAM contains deliberative bodies and personal agencies for regulation and decision-making; the former have legislative, deliberative, and consulting functions.

academics at distance learning centers and university departments; representatives of the administrative staff; and directors of schools, faculties, and institutes.

The rector is legally responsible for the university. His or her primary role is to ensure that the decisions made by the Governing Board and the University Council are properly executed, as well as to oversee the general functioning of the university on non-specialized matters.

The Board of Trustees consists of three distinguished individuals who are appointed for an indefinite term and do not receive any remuneration. They are in charge of administering the university's assets, drawing up the budget, and sending it to the University Council for approval. The Board of Trustees names the treasurer, comptroller, and internal auditor, and is also in charge of managing the university's asset expansion.

The directors of faculties, schools, and institutes are named by the Governing Board from shortlists drawn up by the rector after the relevant department conducts a broad candidate search. The Technical or Internal Council of each department presides over this process, representing it before the University Council. They are responsible for ensuring compliance with the by-laws and agreements that regulate the university's structure and operations.

The Technical Councils are consultative bodies. At faculties and schools, they consist of one professor representing each specialty taught, as well as two student representatives. There are two technical councils representing institutes, centers, and other university programs: the Scientific Research Technical Council and the Humanities Technical Council, which are made up of the coordinator, the institute directors, and representatives of the academic staff.



PUBLIC

THE EDUCATIONAL ROLE OF THE UNIVERSITY is as a public good that must be protected, supported, and strengthened by society and the state. It is primarily at public universities where the right to a high-quality education, accessible to all Mexicans, is fulfilled.

Public universities are based on the principles of non-discrimination, inclusion, equality of opportunity, accessibility, pluralism, secularism, and transparency, while remaining free of cost.

As a public institution, the UNAM is an important part of the social system. It fulfills an essential function in instilling university students with a critical, proactive conscience; in promoting social mobility; and in honoring the right to an education and the struggle for equality and justice. The goals of higher education and the university itself become meaningful and relevant when their ties with society are strong and indissoluble.

At public universities, different systems of values, beliefs, and ideologies interact with each other, as befits a pluralistic and authentically democratic society. These are inclusive spaces where individuals can reaffirm their sense of social belonging—safe from rejection or exclusion for their ethnic or regional identity, language, culture, religion, social class, sexual preference, or gender.

By fulfilling its instructional, research, and cultural functions, the UNAM plays an important role in strengthening the collective values that sustain democracy as established by the Mexican Constitution, which defines it “not only as a legal structure and a political system, but also as a system of life founded on the continuous economic, social, and cultural betterment of the people.”

YOUNG STUDENTS listening to a speech under the mural *The People to the University, the University to the People*,

created by David Alfaro Siqueiros in 1952 and located on the south wall of the Rectory.



AUTONOMY

THE NATIONAL UNIVERSITY is a place for teaching and learning, for advancing knowledge and sharing the fruits borne there — but it is also a place for cultivating, communicating, and practicing social values essential to the responsible application of academic freedom.

The work of the academic community is based on free expression and the exchange of ideas, the sovereign exercise of criticism, and the rejection of all dogmatism. These freedoms arise from its mission to discover, communicate, conserve, and enhance knowledge, as well as to guarantee the creative and emancipated implementation of reason and the spirit.

Exercising the freedom to research, teach, and learn allows the university to work within the plurality of ideas and the harmony among proposals that distinguishes and characterizes its community. The freedom to teach and the freedom to research are values inherent to its academic labors, as are the search for knowledge, truth, beauty, equality, and justice.

Autonomy poses a prerogative that, in turn, implies many different rights and obligations for the UNAM: self-governance, defining its own purpose, administering its assets, determining its plans and programs, setting the terms of its relationships with its employees, functioning as a space for intellectual independence that foments the free examination and discussion of ideas, taking interest in the issues concerning Mexican society, transparently investing its resources, and acting in the service of all Mexican citizens.

THE JAVIER BARROS SIERRA AUDITORIUM in the Faculty of Engineering. In his text “University Crisis and Reform,” published in 1994, Marcos Kaplan wrote: “In its role of intellectual and moral emancipation,

the university reaffirms itself as a space for liberty, humanism, and universalism in two parallel dimensions: academic autonomy and freedom.”

University autonomy is the basic principle that allows us to possess, maintain, and negotiate the differences and potential disagreements arising between universities and the government. This autonomy has allowed the institution to remain independent of government agencies, political parties, religious creeds, and other organizations that promote individual or group interests. Only in this way can the university fulfill its lofty social responsibilities while preserving its secular and public nature.



NATIONAL

THE UNAM HAS BEEN a national institution since its founding. The 1910 charter of the National University states that “the National University of Mexico is hereby constituted with faculty members whose goal will be to carry out the work of educating the nation.” Its national vocation accompanied the development of the country as a whole, and it carries out its labors in accordance with this scope and perspective.

The national character of the UNAM and its formative mission are in harmony with the provisions of Article Three of the Mexican Constitution:

It shall be national insofar as—without hostility or exclusiveness—it shall achieve the comprehension of our problems, the utilization of our resources, the defense of our political independence, the assurance of our economic independence, and the continuity and growth of our culture.

The UNAM campuses located beyond the Mexico City Metropolitan Area endeavor to expand the university’s activities, allowing for academic exchanges and increasing its field of action as compelled by national development. As a national institution, the university’s future expansion and diversification options are broad and diverse enough to encompass the vision and creativity of its students and academics, as well as its commitment and responsibility to the country as a whole.

The UNAM currently has a presence in every state in the country, contributing to their growth and development in accordance with the social and educational needs of the regions in which it offers academic services.

THE NATIONAL ASTRONOMICAL OBSERVATORY in Sierra de San Pedro Mártir, Baja California. The 1933 Charter, known as the Bassols Law, which entered into force on October 21 of that year, stripped

the university of its national character. On November 27 of the same year, the University Council approved a memorandum on the legal nature of the university that defined its vocation as national.

The university houses the National Library and the National Newspaper Archive. It is also home to many other strategic services, such as the National Seismological Service, the National Oceanographic Network, the National Astronomical Observatory, the National Herbarium, and the monitoring of the Popocatepetl volcano. The university also conducts oceanographic expeditions on the ships *El Puma* and *Justo Sierra* and contains 19 scientific collections.



TEACHING

THE UNAM TRAINS ETHICAL, politically aware professionals: human beings who are sensitive, autonomous, critical, creative, committed to their community, and capable of enriching and providing continuity to that community's cultural traditions.

We must spotlight two major efforts to expand education in our country: first, increased enrollment over the last eight years, amounting to nearly 40,000 students; and second, the creation of two new schools, the National School of Higher Studies - León and the National School of Higher Studies - Morelia. Such expansion initiatives are unequalled in the past 35 years.

RECTORY TOWER. This 16-floor, 59-meter-high building was designed by the architects Mario Pani Darqui, Enrique del Moral, and Salvador Ortega Flores. This building has served as the

university's legal address and place of governance since its inauguration in 1952. The first rector was Joaquín Eguía Lis; Enrique Graue Wiechers is the 34th.



unam

ACADEMIC OFFERINGS

PREPARATORY SCHOOLS

THE UNAM'S PREPARATORY SCHOOLS comprise two systems: the National Preparatory School and the College of Sciences and Humanities. Both systems grant a high school diploma after three years. At the National Preparatory School, Campus #2 offers students the option of starting early, at the middle school level, and then allows them to study for six years at UNAM facilities. In the 2016-'17 school year, 2,390 students were enrolled in this program.

THE NATIONAL PREPARATORY SCHOOL

The National Preparatory School was founded on December 2, 1867, following a decree issued by then-president Benito Juárez García, who named Dr. Gabino Barreda as its first principal. Classes started on February 3, 1868 in the facilities of the old San Ildefonso College. The National Preparatory School initially promoted scientific education within the war-focused context of Mexico at the time and broke with prevailing educational dogma. Ever since, this school has effectively played its role, offering comprehensive education and becoming a model for secondary education at the national level. In 2017, 150 years after its founding, it has an enrollment of 52,895 students.

THERE ARE NINE campuses of the National Preparatory School in Mexico City: 1) Gabino Barreda, 2) Erasmo Castellanos Quinto, 3) Justo Sierra, 4) Vidal Castañeda y Nájera, 5) José Vasconcelos, 6) Antonio Caso,

7) Ezequiel A. Chávez, 8) Miguel E. Schulz, and 9) Pedro de Alba. The shield of the Preparatory School bears the motto ascribed to it by Gabino Barreda: "Love, Order, and Progress."



THE COLLEGE OF SCIENCES AND HUMANITIES

This Institution was created in 1971 with the goal of serving as a permanent engine of educational innovation and national development, seeking to develop critically minded students who learn how to learn, to do, and to be. Its educational model places students at the center of the learning process and helps teach them to seek, critique, and systematize knowledge independently, with an instructional focus on the student's own productive activity. The National College of Sciences and Humanities has 58,788 students and five campuses in the Mexico City Metropolitan Area.

Other educational and government institutions across Mexico have expanded this program through agreements with the UNAM; these institutions are then directly responsible for issuing the corresponding diplomas. Such agreements exist in Mexico City, Mexico State, Guanajuato, Hidalgo, Oaxaca, Puebla, Querétaro, and Zacatecas.

THE COLLEGE OF SCIENCES AND HUMANITIES SYSTEM was designed by Rector Pablo González Casanova; Guillermo Soberón and Rubén Bonifaz Nuño, the coordinators of the sciences and humanities departments; Ricardo Guerra Lejada, Juan Manuel

Lozano, José F. Herrán, and Víctor Flores Olea, the directors of the Faculties of Philosophy and Letters, Sciences, Chemistry, and Political and Social Sciences; and Moisés Hurtado G., director of the National Preparatory School.



UNDERGRADUATE EDUCATION

Undergraduate education lies at the heart of the UNAM's academic activities. Of the entire student body, 59.2% are enrolled in the institution's 120 bachelor's programs.

The academic contents of the BA programs are constantly updated in accordance with scientific and technological advances across disciplines, guaranteeing that their curricular contents remain current.

The undergraduate universe encompasses the sciences, the humanities, and the arts. The educational offerings at this level include time-honored degrees such as law, medicine, architecture, and engineering, as well as recently created programs at the vanguard of knowledge and contemporary society: anthropology, territorial development, applied mathematics, music, and artistic technology, to name a few.

IN HIS SPEECH inaugurating the current UNAM campus on March 22, 1954, Nabor Carrillo said: "We have come to occupy these new facilities [at University City] with the understanding that a university

does not achieve greatness because of its age, its buildings, or even its laboratories and libraries—which are indeed important for a university—but, rather, because of the efforts and quality [of its community]."



THE FACULTY OF ARCHITECTURE

The UNAM's Faculty of Architecture has its origins in New Spain's Royal Academy of San Carlos, founded in 1785. Its present-day objective is to train informed and responsible professionals who are committed to their society.

The country's best architects, many of them internationally renowned, have graduated from the Faculty of Architecture. This department offers an education based on the diverse and inclusive criteria that characterize the community of students, professors, and researchers participating in the faculty's four BA programs (Architecture, Industrial Design, Urbanism, and Landscape Architecture), as well as the MA and Ph.D. programs in Architecture and Urbanism, the MA in Industrial Design, and the Architecture Specialization Program.

The Faculty of Architecture is dedicated to society, the environment, education, and culture, viewing architecture as a catalyst of national identity and an essential tool for building the future.

REPLICA OF THE DORYPHOROS (Spear-Bearer) of Polykleitos in the cafeteria at the Faculty of Architecture. The original work, created by a Greek sculptor from the fifth century B.C., is considered a model of proper human proportions

and the system of proportions in general: the head is one-seventh the size of the total height. The earliest extant copy of this piece can be found in the Naples National Archaeological Museum.



THE FACULTY OF ARTS AND DESIGN

The Faculty of Arts and Design offers three bachelor's degrees: Visual Arts, Design and Visual Communication, and Art and Design, all in the campuses at Xochimilco and Taxco, Guerrero. The MA and Ph.D. programs are taught at the Academy of San Carlos and the Postgraduate Unit in University City; these programs include master's degrees in Visual Arts, Design and Visual Communication, Arts Education and Design, and Documentary Film, and the Ph.D. is in Arts and Design.

The Academy of San Carlos hosts the Department of Research, Promotion, and Collections, where an archive containing over 70,000 pieces of immense historical and artistic value are studied, classified, and preserved. This archive includes paintings, sculptures, stamps, photographs, coins, and books.

THE INSTRUCTION OF DRAWING and painting with life models is among the traditions that the Faculty of Arts and Design inherited from the San Carlos Royal Academy of the Three Noble Arts—the first art school in the Americas, founded in 1781—which taught painting, sculpture, and architecture.

THE UPPER EAST CORRIDOR of the Academy of San Carlos. Ever since the time of Manuel Tolsá, the academy's patio has been adorned with plaster replicas of the most famous classical sculptures from museums in Spain and Italy. Carlos Lazo was the last to contribute to this collection.



THE FACULTY OF SCIENCES

The Faculty of Sciences was founded in 1938, with predecessors that included the National School of Higher Studies and the National School of Mathematical Physics. With a current enrollment of nearly 10,000 students, it is the most important training ground for scientists and scientific professionals in the country. It teaches offers programs in three fields—biology, physics, and mathematics—in nine BA programs: Actuarial Science, Biology, Computer Science, Earth Science, Physics, Biomedical Physics, Sustainable Management of Coastal Areas, Mathematics, and Applied Mathematics. Its graduates are renowned for their rigorous critical and analytical backgrounds.

With a presence in University City (Mexico City), Juriquilla, Querétaro, and Sisal (Yucatán), the Faculty of Sciences has a specialization program and 11 postgraduate programs in the fields of Mathematical Physics and Engineering, Chemical Biology and Health, and the Arts and Humanities. Besides its instructional offerings, the faculty has a laboratory with state-of-the-art infrastructure and collaborates with other institutions of higher learning, research centers, and health institutes, both domestically and internationally. It has important scientific education programs for schoolteachers and professors, continuing education programs for professionals, and science popularization courses. Since its inception, the Faculty of Sciences has trained professors, researchers, and professionals who are committed to development and social welfare.

THE FACULTY OF POLITICAL AND SOCIAL SCIENCES

The National School of Political and Social Sciences was created in 1951 and reorganized as a faculty in 1968. Over the subsequent 66 years, it has pursued the mission of educating professionals, specialists, teachers, doctors, and researchers according to high academic standards—training them to critically and objectively analyze contemporary historical-social processes and assist in developing proposed solutions to national and global problems—in connection with the disciplines it teaches: Anthropology, Political Science and Public Administration, Communication Sciences, International Relations, and Sociology.

Currently, the faculty's Specialization Program in Political and Social Sciences trains specialists in Political Analysis, Communication and Political Campaigns, Negotiation and Political and Social Conflict Management, Public Opinion, and Public Safety.

The faculty also hosts the Postgraduate Program in Political and Social Sciences, which offers master's degrees in Political and Social Studies, Government and Public Affairs, Communication, International Relations, and Social Demography, as well as a master's in Mexican-American Affairs and a doctorate in Political and Social Sciences, which includes five disciplinary concentrations (Public Administration, Communication Science, Political Science, International Relations, and Sociology).

The Faculty of Political and Social Sciences also participates in the Postgraduate Program in Latin American Studies (offering both master's and doctoral degrees), the Postgraduate Program in Social Work (with specializations in Interventions with Youth, Interventions with Women, Interventions with Seniors, and an MA and Ph.D. in Social Work), and the Master's in Teaching (in the field of Social Sciences).

The faculty also hosts the Adolfo Pérez Esquivel Extraordinary Chair, the Fernando Solana Chair, the Extraordinary Chair in Human Trafficking, and the UNESCO Chair in Human Rights (UNAM-Mexico).

THE FACULTY OF ACCOUNTING AND ADMINISTRATION

The Faculty of Accounting and Administration is among the UNAM's longest-running academic programs, dating back to the university's 1929 charter, when it was called the Faculty of Trade and Administration. Over the past 30 years, besides educating accountants and managers, it has also taught computer science at the highest academic level, responding to the changes in Mexican life and organizational needs. Its graduates are distinguished by their clear sense of ethical responsibility.

The faculty is part of the Postgraduate Program in Administration Sciences, which offers master's degrees in Administration, Finance, Auditing, Business Administration, and Administrative Computer Science, as well as a doctorate in Administration Sciences.

Responding to the contemporary demands of the job market, the faculty has revolutionized its teaching/learning processes through its program of business and organizational courses, classes taught in English, and the use of case studies.

The faculty currently leads 16 research projects and participating in two larger projects at the regional (Latin American) level.

The faculty is presently implementing two important strategies aimed at educating well-rounded individuals with a sense of social responsibility, broad evaluative criteria, and critical thinking. It therefore considers participation in cultural, athletic, and social activities an essential element of education—and even a necessary requirement for graduation.

THE ARCHITECT JOSÉ HANHAUSEN designed the building that was the longest in the Americas at the time, with a 312.5-meter-long main building that housed part of the Faculty of Philosophy

and Letters and the schools of Jurisprudence, Economics, and Political and Social Sciences. The Humanities wing was inaugurated in 1954 and the corridor area currently belongs to the Faculty of Law.

THE FACULTY OF LAW

Ever since The Royal and Pontifical University of Mexico was founded in 1551, the study and practice of law has been an important part of the country's academic life. The Faculty of Law is one of the longest-established and most important academic bodies in Mexico's higher education system; the actions of its members played a key role in constituting the UNAM itself and securing its autonomy. Constituted as a faculty in 1951, this academic entity has become an essential source of legal research and study in Mexico, and its graduates maintain a major presence in the country's public and private institutions.

The faculty offers a bachelor's degree in Law, with both traditional and distance learning options available. Its postgraduate programs include a specialization program with 23 different subjects, three master's degrees (Law, Constitutional Law, and Criminal Law), and a doctorate in Law.



THE FACULTY OF ECONOMICS

With a history now spanning over 80 years and established as a faculty in 1976, the Faculty of Economics has trained generations of professionals in this discipline. Its graduates, besides playing an important role in its professional implementation, have also proposed and executed policies designed to address and resolve a variety of problems facing the country. The research conducted at this faculty and its professors' academic work have been published in important domestic and Latin American magazines such as *Investigación Económica*, *Economía Informa*, *Economía UNAM*, *Revista de Economía Mexicana*, and the *Anuario UNAM*, as well as in a wide range of books and specialized documents. The faculty also organizes countless seminars, forums, colloquiums, and roundtables presenting and discussing different perspectives on the discipline, as well as on the economic situation at the national and international levels. In addition, it circulates information and opinions through radio and television shows and articles written by its academics.

The Faculty of Economics offers a bachelor's degree in Economics, with traditional and distance learning options available, as well as nine postgraduate specialties and a master's and doctorate in Economics.

THE NATIONAL SCHOOL OF ECONOMICS was founded in 1935. It occupied a variety of different buildings until it found a stable home in 1938 at Cuba 82. Thanks to the quantity of donations it received, the Faculty

of Economics building was among the first to be finished in University City. In addition to its historic façade, it boasts the Enrique González Aparicio Library, the country's first library specializing in economics.



THE FACULTY OF PHILOSOPHY AND LETTERS

Heir to a tradition dating back to the Royal and Pontifical University of Mexico in the sixteenth century—a tradition that was revitalized with the founding of the National School of Higher Studies in 1910—the Faculty of Philosophy and Letters, as it has been known since 1924, has been distinguished throughout its history by its humanistic vocation. It offers 15 bachelor's degrees: Library Science and Information Studies, Intercultural Development and Management, Latin American Studies, Philosophy, Geography, History, Hispanic Languages and Literatures, Modern Languages and Literatures (German, French, English, Italian, and Portuguese), Classical Literature, Dramatic Literature and Theater, and Pedagogy. Philosophy, Geography, History, Hispanic Literature, English Literature, Pedagogy, and Library Science and Information Studies are also offered as distance learning programs.

The faculty has 14 postgraduate programs: Anthropology, Library Science and Information Studies, Bioethics, Latin American Studies, Mesoamerican Studies, Philosophy, Philosophy of Science, Geography, History, Art History, Literature, Linguistics, and Pedagogy and Teaching.

THE BUILDING that houses the Faculty of Philosophy and Letters, designed by the architects Enrique de la Mora, Ernesto Landa, and Manuel de la Colina, is part of the Corridor of the Humanities. A second group of four buildings was then incorporated around the Cherry Garden and the Justo Sierra Auditorium, the largest in University City. The ten-story Tower of the Humanities, designed by Mario Pani and Teodoro González de León, was added later.

THE SAMUEL RAMOS LIBRARY, part of the Faculty of Philosophy and Letters, is regularly used by the students of the faculty's 15 BA programs.



THE FACULTY OF ENGINEERING

This Faculty's Predecessor, the Royal Mining Seminary, was founded in 1792, making it the continent's first scientific research institute and the oldest institution dedicated to the instruction of engineering in the Americas. During its 225 years of history, it has promoted advances in applied research and fostered the country's technological development.

The faculty currently offers bachelor's degrees in Civil Engineering, Mining and Metallurgy, Electronics and Electrical Engineering, Computation, Telecommunications, Geophysics, Geology, Geomatics, Industrial Engineering, Mechanical Engineering, Mechatronics, Biomedical Systems, and Petroleum Engineering. The faculty also offers master's and doctoral degrees in Engineering, as well as an Engineering Specialization Program.

THE ARCHITECTS Francisco J. Serrano, Luis MacGregor, and Fernando Pineda designed what is now the Faculty of Engineering, which comprises three clearly differentiated buildings, two of them united by an emblematic concrete

bridge. The facility expansions undertaken due to the growth of the student body and the rise of new branches of engineering have only enhanced the splendor of the original design.



THE FACULTY OF MEDICINE

Since January 1579, when the first chair of medicine was established at the Royal and Pontifical University of Mexico, the Faculty of Medicine has aimed its efforts toward upholding high levels of academic excellence for the benefit of its students. It offers bachelor's degrees in Surgery, Basic Biomedical Research, Physical Therapy, Forensic Science, and Neuroscience. The Faculty of Medicine also maintains important links with society through the clinical services offered by the PET-Cyclotron Unit, the Sleep Disorders Clinic, the Cardiac Electrophysiology Unit, the HIV/AIDS Clinic for Children, the Preventative Care Clinic for Travelers, the Dermatological Oncology Clinic, and the Center for Surgical Teaching and Training.

A large number of its 3,960 academics are members of the National Academy of Medicine, the Mexican Academy of Sciences, and the Mexican Academy of Surgery. Another 186 are members of the National System of Researchers.

REAR VIEW of the Faculty of Medicine, showing the Raoul Fournier Auditorium. The original building, designed by Roberto Álvarez Espinosa, Pedro Ramírez Vázquez, Ramón Torres, and Héctor Velázquez, included an elegant array of volumes and ramps.

THE CENTER FOR TEACHING and Medical Certification at the Faculty of Medicine includes the most advanced medical training technology in the country.



THE FACULTY OF VETERINARY MEDICINE AND ZOOTECHNICS

This Faculty is the oldest school of veterinary medicine in the Americas, comprising seven centers for teaching and research in Mexico City, Mexico State, Querétaro, Morelos, and Veracruz, as well as four veterinary hospitals.

At the postgraduate level, the faculty offers a master's degree in Veterinary Medicine and Zootechnics, as well as a master's and a doctorate in Animal Health and Reproduction Sciences, which fall under the National Postgraduate Quality Program (PNPC) of the National Science and Technology Council. The faculty also offers 12 on-campus specialization programs and four distance learning specialization programs; the former have been part of the PNPC since 2013. The Veterinary Medicine and Zootechnics Internship Program began during the 2015 academic year and covers the following fields of knowledge: Anatomic-Pathology, Dogs and Cats, Clinical Pathology, Equestrian Medicine, Wildlife Medicine, and Clinical Ethology.

The study plan for the BA in Veterinary Medicine and Zootechnics has been accredited since 1999 by the National Council of Veterinary Medicine and Zootechnics Education, A.C., and by the American Veterinary Medical Association since 2011, making it the only Spanish-language faculty to have obtained the latter accreditation.

THE NATIONAL SCHOOL of Veterinary Medicine was incorporated into the university in 1929 and became the Faculty of Veterinary Medicine and Zootechnics in 1969.

THE FACILITIES of the Faculty of Veterinary Medicine and Zootechnics have been remodeled in accordance with the development of new teaching techniques, communication technologies, and services.



THE FACULTY OF MUSIC

The Faculty of Music was founded on August 7, 1929, the year the university attained its autonomy. The university has endowed it with the mission of training highly professional and socially committed performers, composers, music teachers, and music researchers; generating new knowledge; conserving the musical heritage of the nation and the world; and promoting a culture of peace and respect for human rights, cultural diversity, and gender equality, both locally and globally.

Originally founded as a faculty, it operated as the National School of Music for over 80 years, until efforts undertaken by its academics restored its status as the Faculty of Music through an agreement with the University Council, signed on December 5, 2014.

The faculty is currently located in southern Mexico City and its educational services include musical instruction at four levels:

- The Introduction to Music Cycle, aimed at elementary and middle school students.
- The Preparatory Cycle for high school students with an interest in music.
- Five BAs in Music programs and one BA in Ethnomusicology.
- A postgraduate program with master's and doctoral degrees in Music.

THE FACULTY OF MUSIC is considered Mexico's best in terms of musical education and research. Its facilities include practice rooms, laboratories, recording studios, and concert halls,

as well as the Cuicamatini Library, which specializes in musical information (books, magazines, sheet music, dissertations, and audiovisual materials).

Besides teaching music, the faculty promotes creative research into the artistic possibilities of technology through its Musical Technology and Electroacoustic Music Laboratory, which supports its pedagogical processes.

The faculty has participated in the implementation of the Theater and Acting program, led by the University Theatrical Center, as well as in the creation of the Music and Artistic Technology program offered by the National School of Higher Studies - Morelia.



THE FACULTY OF DENTISTRY

The Faculty of Dentistry offers the Dental Surgery program, which, according to the current academic structure, allows students to specialize either as Oral Hygienists or as Dental Laboratory Technicians. The program currently has an enrollment of over 3,300 students.

The faculty oversees community dental health programs in over 20 states across Mexico. It has nine clinics open to the public on the outskirts of Mexico City, as well as in the faculty's undergraduate and postgraduate facilities; it also provides specialized Oral and Maxillofacial Surgery and Maxillofacial Prosthetics in its extramural programs. During the 2015-'16 academic year, 360,000 procedures were carried out on over 94,000 patients.

In its Postgraduate Studies and Research Division, the faculty operates 11 laboratories, maintaining 46 lines of research in 2015 and producing 57 scientific articles. It also obtained financing for 18 projects and established alliances with 35 institutions.

The Faculty of Dentistry Research Laboratory Quality Management System has been certified by the Regulation and Certification Institute, A.C., ISO 9001-2008, in five of its laboratories.

The faculty has 36 master's-level students and 35 doctoral students. The faculty is constantly engaged in research projects; 20 of its professors are members of the National System of Researchers. It has 11 specialties and close to 400 students.

THE FACULTY OF DENTISTRY BUILDING in University City was planned by the architects Jesús Aguilar Moreno, Silvia A. Margáin, and Carlos Reygadas Prieto. It has facilities for dental services,

diagnostic clinics, exodontics, and radiodontics, and it has provided dental services to the university community in particular and the Mexican population in general ever since it was founded.



THE FACULTY OF PSYCHOLOGY

This Faculty was established in 1973, though the first study plan dates back to 1937. It currently yields Mexico's highest number of bachelor's, master's, and doctoral graduates in Psychology and many of its academics belong to the National System of Researchers. It offers a BA in Psychology with both on-campus and distance learning options, as well as concentrations in Cognitive and Behavioral Sciences, Cultural and Psychosocial Processes, Clinical and Health Psychology, Psychobiology and Neuroscience, Educational Psychology, and Organizational Psychology.

THE FACULTY OF CHEMISTRY

This Faculty was the first chemistry school in the country. Founded a hundred years ago, its activities focus equally on teaching, research, and ties with the private sector. Its five programs— Chemical Engineering, Chemical Metallurgy, Chemistry, Food Chemistry, and Pharmaceutical Chemistry—have been certified by the Council for the Accreditation of Higher Education.

The faculty offers master's and doctoral degrees in Chemical Sciences; Biochemical Sciences; Engineering; Science and Engineering of Materials; Medical, Dental, and Health Sciences; Ocean Sciences; and Limnology, in addition to MAs in Industrial Management, Business Administration, and Teaching. Most of these programs are covered by the National Program of Postgraduate Quality at the National Council of Science and Technology. A specialization in Clinical Biochemistry is also offered.

BUILDING A of the Faculty of Psychology, which has four centers dedicated to education and psychological services for the university community and the population at large.

IN THIS VIEW of Building A at the Faculty of Chemistry, we can see the pipes emerging from the laboratory security hoods, which inspired the building's nickname: "the ship."



THE FACULTY OF HIGHER STUDIES – ACATLÁN

Founded in 1975 as the National School of Professional Studies in the municipality of Naucalpan, Mexico State, it acquired the status of a Faculty of Higher Studies in 2004 in acknowledgement of its academic consolidation. It offers 21 bachelor's programs: Actuary Science, Architecture, Political Science and Public Administration, Communication, Law, Graphic Design, Economics, Teaching English as a Foreign Language, Philosophy, History, Civil Engineering, Hispanic Languages and Literature, Applied Mathematics and Computer Science, International Relations, and Sociology. As for distance learning, it offers Law, International Relations, and five programs in Teaching a Foreign Language (German, Spanish, French, English, and Italian).

The faculty's postgraduate programs include Art and Design, Economics, Law, Political and Social Sciences, Art History, Engineering, Pedagogy, and Urbanism, as well as a master's in Teaching in the fields of Spanish, Philosophy, French, History, English, and Mathematics. It also offers specializations in Construction Costs, Public Finance Institutions, Quality Systems, and Geotechnics. Its language center, which has an average enrollment of 30,000 students, is among most important in the country, teaching 21 languages, including Otomi (Hñähñu), Maya, and Nahuatl.

THE FACULTY OF HIGHER STUDIES -
Acatlán has a 30-hectare campus with 30 buildings, areas focused on research and teaching (classrooms, workshops, and laboratories) and auditoriums, as well as

Information and Documentation Centers, the Language Center, the Technological Development Center, the Conference Center, and the Acatlán Cultural Center.



THE FACULTY OF HIGHER STUDIES – ARAGÓN

Inaugurated in 1976 as the National School of Professional Studies, this faculty is located in the municipality of Nezahualcóyotl, to the northeast of Mexico City. It is one of the UNAM's newest multidisciplinary facilities, having been made an official faculty in 2005. It allows the area's residents to access a wide range of cultural and academic activities and extends psychopedagogical support to children with learning disabilities, among other services that benefit the community. The faculty offers 15 bachelor's programs on campus with certified study plans: Architecture, Communication and Journalism, Law, Industrial Design, Economics, Civil Engineering, Industrial Engineering, Electrical Engineering, Electronics, Computer Engineering, Mechanical Engineering, Pedagogy, Agricultural Development Planning, International Relations, and Sociology. In the distance learning format, it offers degrees in Law, Economics, and International Relations; the first of these has a certified study plan at the time of this writing and the others are in the process of certification.

The faculty's postgraduate programs include Architecture, Law, Economics, Engineering, and Pedagogy, as well as specializations in Law and Bridges. Its language center teaches eight languages: German, French, English, Italian, Japanese, Latin (comprehension only), Portuguese, and Russian.

THE INFRASTRUCTURE OF THE FACULTY of Higher Studies - Aragón includes 60,541 m² of built space, including 269 classrooms, 64 laboratories, and 12 workshops. One of the symbols that identifies the Aragón campus is the

sculpture of nine grey and orange towers, 18 meters high, that were created between 1979 and 1980 by Mathias Goeritz and located in front of the administration building.



THE FACULTY OF HIGHER STUDIES – CUAUTITLÁN

Inaugurated in 1974, this was the first multidisciplinary unit built outside of University City, as well as the first to become a Faculty of Higher Studies. Located in the municipality of Cuautitlán Izcalli, Mexico State, it has established itself as a key educational option in the north of the Valley of Mexico. It began with eight programs, which have since been expanded to 16 bachelor's degrees: Administration, Diagnostic Biochemistry, Accounting, Design and Visual Communication, Pharmaceuticals, Information Science, Agricultural Engineering, Food Engineering, Telecommunications, Systems and Electronics, Industrial Engineering, Electro-Mechanical Engineering, Chemical Engineering, Veterinary Medicine and Zootechnics, Chemistry, and Industrial and Technological Chemistry. This last program is offered in coordination with the Center for Applied Physics and Advanced Technology. The faculty also offers a BA in Design and Communication for distance learning students.

In terms of postgraduate programs, it offers degrees in Administration Sciences, Computer Science and Engineering, Engineering, Chemistry, and Animal Health and Reproduction; a master's in Teaching (Chemistry); and specializations in Ovine and Caprine Reproduction, Rural Property Valuation, and Hospital and Clinical Pharmacology.

THE FACULTY OF HIGHER STUDIES - Cuautitlán is the only multidisciplinary unit that participates in four area academic councils. Its campus has an area of 1,253,905.15 m², 105,010.50 m² of which have been built up, with three

libraries and eight auditoriums. Among its other facilities are a Center for Technological Integration, a Center for Foreign Trade Services, an Equestrian Hospital, and a Small Species Hospital.



THE FACULTY OF HIGHER STUDIES – IZTACALA

Founded In 1975 in the municipality of Tlalnepantla, Mexico State as the National School of Professional Studies, with a mandate to develop health-related disciplines, it acquired official faculty status in 2001, which prompted the founding of the Research and Postgraduate Division. From the start, it offered six bachelor's programs on campus—Biology, Dental Surgery, Nursing, Medical Surgery, Optometry, and Psychology—as well as a bachelor's in Psychology for distance learning students.

The faculty offers postgraduate programs in Biology, Biomedical Sciences, Ocean Sciences and Limnology, Medical Sciences, Dentistry, and Health and Psychology, as well as master's degrees in Science, Neurobiology, Nursing, and Teaching. It also offers four specializations: Endoperiodontology, Orthodontics, Nephrological Nursing, and Pediatric Stomatology.

THE INFRASTRUCTURE of the Faculty of Higher Studies - Iztacala is especially favorable to its activities, as it includes an aquarium, a butterfly garden, a botanical

garden, an herbarium, a vivarium, four clinics, four research centers, a conference center, a Scientific Documentation Center, and the Iztacala Cultural Center.



THE FACULTY OF HIGHER STUDIES – ZARAGOZA

Established in 1975 as a National School of Professional Studies with an innovative teaching method based on integrating theory, practice, and community service from the earliest stages of each program, it attends to the needs of the population in eastern Mexico City. It officially became a faculty in 1993 with the creation of the Doctorate in Science program. It offers bachelor's degrees in Biology, Community Development for Aging, Dental Surgery, Nursing, Chemical Engineering, Medical Surgery, Psychology, and Chemical and Biological Pharmacology.

The faculty offers master's and doctoral programs in Biology, Psychology, Medicine, Dentistry, and Health, as well as master's degrees in Administration of Health Systems, Administration Sciences, Nursing, and Social Work. It also offers specializations in Pediatric Stomatology, Primary Care Stomatology, Industrial Pharmacology, and Occupational Health.

THE FACULTY OF HIGHER STUDIES - Zaragoza is an interdisciplinary academic unit with two neighboring campuses and another campus in San Miguel Contla, Tlaxcala. These three campuses have a

total surface area of 19.07 hectares, with 84,800 m² of built space that includes 55 buildings, 162 classrooms, 94 laboratories, a library, an auditorium, and the Technological Center for Learning.



THE NATIONAL SCHOOL OF NURSING AND OBSTETRICS

The National School of Nursing and Obstetrics has contributed to the development of most nursing professionals who work in the National Health System. It is known for its high standards of academic performance, its methodological and practical knowledge on offer, and its instruction of the human aptitudes and attitudes needed for cultural development and the practice of caring for the country's individuals, families, and communities.

The school currently offers two bachelor's programs: Nursing, which is offered on campus and via distance learning; and Nursing and Obstetrics, which is only offered on campus. Its total enrollment is 4,593 students.

It also has 16 specialized study plans and one master's program, with an enrollment of 575 students. As for continuing education, the school offers courses, seminars, certification programs, and workshops, presenting over 100 annual events attended by nearly 5,022 people (according to the most recent records), as well as courses and certification programs that complement its degree offering with 37 events.

The school has developed 20 research projects on topics related to its various disciplines, general health issues, and care practices, among other subjects.

It also works directly with society at large through the University Center of San Luis Tlaxiátemalco, Xochimilco, which provides primary care under the rubrics of school health, sexual and reproductive health, adult and senior welfare, family health, mental health, and other social programs.

THE FACILITIES of the National School of Nursing and Obstetrics, located on Camino Viejo a Xochimilco and Viaducto Tlalpan, include a horseshoe-shaped around a central plaza, that houses

classrooms, a functioning theater, laboratories, multipurpose rooms, offices, an auditorium, and the Graciela Arroyo de Cordero Library.



THE NATIONAL SCHOOL OF LANGUAGES, LINGUISTICS, AND TRANSLATION

The National School of Languages, Linguistics, and Translation was created in March 2017 and offers foreign language courses for undergraduate and postgraduate students, as well as for the general public. It trains foreign language teachers and provides continuing linguistic education to UNAM professors. It grants language-certification and provides support, advising, and academic collaboration on foreign languages for the university as a whole.

This school teaches 15 foreign languages, as well as Nahuatl, with options available for on-campus learning, distance learning, and self-directed learning. Along with the Faculty of Philosophy and Letters and the Philological Research Institute, it hosts the Linguistics postgraduate program; in collaboration with the Learning Center for Foreigners, it offers a specialization in Teaching Spanish as a Foreign Language.

The National School of Languages, Linguistics, and Translation has 14 centers and extension programs distributed as follows: eight in the center, two in the south, and one in the southwest of Mexico City; two in Mexico State; and one in Cuernavaca, Morelos. Of these off-campus sites, ten are the result of an alliance between the school and the UNAM Foundation.

THE NATIONAL SCHOOL OF SOCIAL WORK

The discipline of social work reached the UNAM at the technical level in 1940, in the then-National School of Jurisprudence. In 1969, a bachelor's program was approved and the National School of Social Work was created in 1973, with classes first held in 1974. The school is dedicated to training excellent graduates, specialists, and teachers of social work.

The school offers a BA in Social Work with on-campus and distance learning options, as well as an MA in Social Work and a Specialization Program for Social Work; its three study plans focus on interventions with young people, women, and senior citizens.

THE NATIONAL SCHOOL OF HIGHER STUDIES – LEÓN

Ever since its founding in 2011, the National School of Higher Studies - León has established itself as an academic model both in the state of Guanajuato and across the country: an institution of higher education that emphasizes knowledge and the popularization of science, culture, and university values.

Its academic offerings reflect its commitment to society, conveyed in innovative undergraduate degrees that are relevant to the region's and the country's needs. There are seven bachelor's degrees: Intercultural Development and Management, Industrial Economics, Physical Therapy, Dentistry, Agricultural Management, Agrigenomics, and Territorial Development. Notably, enrolled students hail from 22 states across the country, as well as from many different municipalities within Guanajuato itself.

The academic staff forms a solid multidisciplinary team. Its members include both Mexicans and foreigners, all devoted to teaching and producing knowledge through research; a large number are members of the National System of Researchers, which helps support the school's educational model. The magazine *Revista Electrónica Entreciencias* is a quarterly publication that reflects the scientific production of the university community.

The National School of Higher Studies - León offers postgraduate programs such as the Dentistry Specialization Program, which includes specializations in Oral and Maxillofacial Surgery, Oral Pathology, Dental Materials and Biomaterial, Endodontics, Periodontics and Oral Implantology, and Oral Prosthetics and Rehabilitation. The school also has a Sustainability Sciences Postgraduate Program. Professors here serve as tutors for the MA and Ph.D. programs in Economics and Biology.

As part of its continuing education programs, the National School of Higher Studies - León offers certification programs, courses, and workshops, both on campus and online.

The school is part of Guanajuato's State Commission on Higher Education Planning, which has fostered exchanges of experiences and forged academic ties with other institutions of higher learning.

The National School of Higher Studies - León also participates in charitable programs that provide free or very low-cost services to the community, benefiting the population at large with this commendable labor.

As part of the activities contributing to the school's academic impact on the country, the San Miguel de Allende Learning Extension Unit was founded in 2012 with five areas of action: continuing education; languages; promotion of culture, science, the arts and the humanities; outreach; and research. This allows the university to extend its activities into other regions through courses, certification programs, workshops, and other activities that form part of the UNAM's labors.

The school has academic spaces and equipment that enhance learning and knowledge acquisition.

The National School of Higher Studies - León began as an academic project to offer innovative undergraduate and graduate programs, as well as to develop research projects and actions focused on the promotion of knowledge. This project is now a reality, having constructed a model for academic excellence that reaffirms the commitments of our country's flagship university.

THE NATIONAL SCHOOL of Higher Studies - León has a 60-hectare campus with 32 classrooms, eight specialized laboratories, and three clinics (one dental, one diagnostic, and one for continuing

education). The total surface area of its facilities is 62,350 m², to which we can add the 4.5-hectare facilities in San Miguel de Allende.



THE NATIONAL SCHOOL OF HIGHER STUDIES – MORELIA

Created in 2012 with the goal of improving opportunities for higher education in central-western Mexico, this new school is located at the Morelia campus of the UNAM, taking advantage of and expanding its infrastructure with new educational and research projects. Within a flexible, multidisciplinary, advanced educational model, it promotes the creation of new programs that are relevant to the problems and realities of contemporary Mexico. It offers bachelor's degrees in the Administration of Archives and Documentation, Art and Design, Environmental Science, the Science of Sustainable Materials, Geological History, Geosciences, Art History, Ecology, Social Sciences and Local Management, Intercultural Literature, Music and Artistic Technology, and Information Technology, with the option of obtaining technical certification at an intermediate point. It also offers postgraduate degrees in Teaching, Biology, Earth Sciences, and Sustainability.

LOCATED ON A 15-HECTARE campus, the National School of Higher Studies - Morelia has infrastructure equipped for research, teaching, culture, and sports, including workshops, laboratories, meeting rooms, practice rooms, classrooms, athletic fields, and artificial

lakes. It hosts two laboratories: the National Ecological Analysis Laboratory and the National Oral Materials Laboratory. Furthermore, the UNAM Cultural Center in downtown Morelia is one of the most important cultural forums in the state.



ESCUELA NACIONAL
DE ESTUDIOS SUPERIORES
UNIDAD MORELIA



POSTGRADUATE EDUCATION

Postgraduate studies are an essential element in training researchers and contributing to the development of science and technology, as well as in educating professionals and specialists who lend their skills to the country's development.

The UNAM's postgraduate programs are organized transversally: that is, in the 41 existing postgraduate programs (which consist of 92 study plans at the master's and doctoral levels), different schools, faculties, institutes, and research centers work in collaboration with each other. This has allowed not only for greater institutional cohesion, but also for a wider range of postgraduate programs themselves.

Currently, 95% of the UNAM's postgraduate programs are accredited by the National Postgraduate Quality Program at the National Science and Technology Council, ensuring both high-quality study plans and the opportunity for students to receive scholarships.

Starting in 2012, distance learning postgraduate degrees were first offered through virtual classrooms. There are currently six online master's programs: two in Teaching (Spanish and Biology), one in Library Science and Information Studies, two in Administration (Organization and Health Systems), and one in Auditing.

The university's postgraduate programs also include 36 specializations with 238 different orientations; medical specialties are especially prominent among them.

THE UNAM POSTGRADUATE UNIT has a surface area of 32,248 m² and hosts the Postgraduate Studies Administration offices, as well as divisions for Architecture, Arts and Design, Medicine,

and the National School of Nursing and Obstetrics. The Postgraduate Unit is built around a volcanic rock plaza with a fountain and includes 11 buildings connected by stairs and terraces.



DISTANCE LEARNING

With the development of new pedagogical frameworks and methodologies that enable continual innovation in the teaching and learning process, the UNAM now offers distance learning options designed for the needs of an information society. Such opportunities offer knowledge and instruction based on education, innovation, and digital technology as key factors for the inclusion and welfare of all citizens, promoting development in more dynamic and inclusive ways.

The UNAM's Distance Learning System offers educational programs at the high school, undergraduate, and graduate levels: a distance learning high school diploma for Spanish-speakers living outside the country; 25 bachelor's degrees, with an enrollment of 30,000 students from across the country; 14 postgraduate degrees, including specializations, master's degrees, and doctorates; and a variety of continuing education programs.

THE UNAM FORMALLY INITIATED its continuing education programs by founding the Center for Continuing Education at the Faculty of Engineering in 1971. Education, once viewed as the simple spread of information, is increasingly perceived as a dynamic

involving the transaction of knowledge, collaborative content-construction, and the active combination of knowledge and skills. The UNAM constantly offers courses, workshops, and certification programs, both on campus and online.

CONTINUING EDUCATION

Continuing education is one of the three pillars of higher education, in addition to undergraduate and graduate studies. With an average duration of four years, undergraduate studies have become the formal initiation for professionals, often followed by another six years of graduate studies. For the rest of their working lives—approximately 36 years—they engage in continuing education. Our university considers continuing education an important tool for expanding and diversifying educational options for graduates, allowing them both to remain professionally up-to-date and to redefine their professional profiles whenever necessary.

The UNAM also offers educational programs for the general population at different stages of their lives—without requiring prior university studies. This approach seeks to promote individual welfare and development through job training and cultural education.

To date, the UNAM receives around 300,000 participants in the programs offered by its Continuing Education Network and this network's constituent academic divisions and departments. Additionally, in 2016, the UNAM offered 45 Massive Open Online Courses (MOOCs), which engaged with 626,727 participants in 185 countries.



COMMUNITY SERVICES

In order to address the needs of the university community and the public at large, the university offers a wide array of support services: libraries, publications, museums, computer services, athletic and recreational activities, educational orientation services, and medical services, as well as a job placement office and an internship office.

Besides the National Library and Newspaper Archive, the UNAM has a network of 135 libraries distributed throughout its faculties, schools, centers, museums, and observatories. These services are free. Together, they represent one third of the total archive of the National Network of Public Libraries.

In responding to the health needs of the student community, the university offers services through the University Medical Center in University City, and all campuses have a medical clinic. The Faculty of Dentistry and the Faculties of Higher Studies in Iztacala and Zaragoza have 15 dental clinics that also extend their services to the public.

With the goal of educating well-rounded individuals, students have the opportunity to participate in 52 athletic activities, as well as to carry out other health-focused and leisure pursuits on campus through year-round physical education and recreation programs.

EVER SINCE ITS FOUNDING, the university has sought to educate well-balanced, multifaceted individuals. This goal encompasses cultural growth, art appreciation and artistic expression, physical education, and the promotion of

healthy, enjoyable exercise habits. Its facilities include libraries, bookstores, museums, cultural centers, galleries, concert halls, cinemas, athletic facilities, gardens, and recreational areas.



SCIENTIFIC RESEARCH

THE OLDEST ACADEMIC INSTITUTION¹ in Mexico, the UNAM gave rise to the country's scientific research system.

Despite the growth of academic institutions around the country since 1974, the UNAM remains the leader in many fields, including research. As proof, we can simply consult the total number of publications in Mexico in 2016: the UNAM produced 27.4% of the total, while 33.8% of citations in domestic publications corresponded to UNAM research, even though only 17.3% of the members of the National System of Researchers are UNAM academics.

Research has been essential to the UNAM since its inception (1910). Its many disciplinary fields, and the interactions among them, have both provoked new quests for knowledge and helped resolve traditional problems, whether academic or practical, involving economic development, energy, economic production, the development of new materials, health, agricultural production, and the environment—that is, all the critical issues confronting Mexico and the entire world.

¹ The modern university is characterized by incorporating research into its activities, while its predecessor limited itself to classroom instruction.

THE NATIONAL MACROMOLECULE

Structure Laboratory, part of the Chemistry Institute, is the only one of its kind in the country: devoted to conducting

structural and functional studies of macromolecules, it implements modern nuclear magnetic resonance and X-ray diffraction techniques.

Science asks questions it intends to answer, generating hypotheses that become theories and conceptual frameworks: that is, basic science. One example of a major paradigm that has been developed with this method is sustainability, as well as the critique of human development models that have produced deep inequalities between populations in different regions (e.g., the north and south of the country), to name just a couple. In engaging with these paradigms, the UNAM has built or acquired modern equipment on par with the resources used in practicing science around the world. Its research model increasingly tends towards developing interdisciplinary projects, although disciplinary models continue to produce important results. Projects often extend beyond the UNAM community, taking on a regional, national, or international scope.



THE SCIENTIFIC RESEARCH SUBSYSTEM

The UNAM's Scientific Research Subsystem brings together 30 different research units: 22 institutes and eight research centers, 18 located in the capital (in University City) and 12 elsewhere in Mexico. The academic communities that constitute this subsystem address three major fields of knowledge: physics and mathematics (13 research units); chemistry, biology, and health (10 research units); and earth sciences and engineering (seven research units).

In 2016, the Scientific Research Subsystem represented 36% (1,571) of the total number of UNAM academics in the National System of Researchers (4,316) and 6% of the latter's total number of researchers (24,968).²

The Scientific Research Subsystem consists of four university programs: the Health Research Program, the Food Research Program, the Sustainability Strategy Program, and the Climate Change Research Program. This subsystem also contains the Oceanographic Platform Coordination Subsystem, which has two research vessels—*El Puma*, based in Mazatlán, Sinaloa, and the *Justo Sierra*, based in Tuxpan, Veracruz—in addition to the administration of the Pedregal de San Ángel Ecological Reserve.

² According to the UNAM Statistics Department, there were 12,172 full-time academics during the 2015-'16 school year. In 2016, there were 4,316 UNAM academics in the National System of Researchers, which has a total of 24,968 researchers.

FROM ITS BASE IN MAZATLÁN, Sinaloa, *El Puma* conducts its research in the Pacific Ocean and the Sea of Cortez; for its part, the *Justo Sierra* sails the Gulf of Mexico and the Caribbean from its base in

Tuxpan, Veracruz. Built in Norway, both ships have a 2,000-ton capacity and carry out research missions for university institutions, as well as for other entities by charter.

Created in 2014, the Special Research and Teaching Support Projects Unit is also part of the Scientific Research Subsystem and includes the Center for Complexity Sciences, the International Human Genome Research Laboratory, and the Research Support Network.

The Scientific Research Subsystem also contains the Science Popularization Department, which runs two museums: Universum and the Museum of Light. Other museums in the subsystem are run by the Geology Institute: the Tlayúa Regional Mixtec Museum in Tepexi de Rodríguez, Puebla; the Geology Museum in Santa María la Ribera, Mexico City; as well as the Geology Institute Museum (also in Mexico City), which was opened in 2010. The institute maintains 19 research units and four research stations outside the city.



NATIONAL SERVICES AND OTHER SERVICES

The following services form part of the Scientific Research Subsystem: the Seismological Service, the Oceanographic Service, the Geological Service, and the Magnetic Service, as well as the Biology Institute's National Biological Collection, the National Herbarium and the Botanical Gardens. The Biology Institute also manages two important ecological reserves in Chamela, Jalisco and Los Tuxtlas, Veracruz. In addition, the Scientific Research Subsystem includes the National Astronomical Observatory, which has one site in San Pedro Mártir, Baja California and another in Tonanzintla, Puebla, both run by the Astronomy Institute.

PUBLICATIONS

In 2016, The Scientific Research Subsystem published 18% of the articles in the country and 66% of the articles in the UNAM. As for WoS citations, it represented 22% of the total citations corresponding to Mexican authors; in the case of the UNAM, the total percentage of citations was 65%.³

³ Based on 2016 data from the IIMAS Laboratory Network, with a January 2017 cutoff. For citations, the percentages given correspond to the total number of citations accumulated in Mexico and at the UNAM from 2005 to 2016, solely based on WoS data.

PNEUMATIC SUPPORTS for the 2.1-meter National Astronomical Observatory telescope at the Hill of Antennas in San Pedro Mártir, Baja

California, located 2,830 meters above sea level. The National Observatory is a research center run by the Astronomy Institute.

ACADEMICS

At The Scientific Research Subsystem, 3,025 individuals perform a variety of academic functions: 1,733 are researchers and 1,292 are academic technicians.⁴ Decentralization efforts have created an academic body with 612 researchers at four regional sites located in Baja California, Morelos, Michoacán, and Querétaro.

⁴ Source: 24/2016 payroll.



INSTITUTES AND CENTERS

PHYSICS AND MATHEMATICS

ASTRONOMY INSTITUTE

The Astronomy Institute was constituted in 1967 and incorporated into the National Astronomical Observatory, which has been part of the UNAM since 1929. Its establishment has been accompanied by a parallel process of international outreach, collaboration, and leadership. This institute promotes the development of astrophysics in Mexico through original and innovative research and education in the fields of interstellar, planetary, galactic, and extragalactic astronomy; cosmology; the evolution and structural formation of the universe and galaxies; high-energy astrophysics; the evolution of compact objects; and the study of variable stars, among others. It promotes the design and development of astronomical infrastructure and instrumentation requiring the latest technologies. It also develops new research centers and educates new generations of researchers according to world-class standards, and it plays a major role in popularizing science as a field.

Along with its excellence in astrophysical research, the Astronomy Institute develops instruments, equipment, and technologies, both for its own observatories (San Pedro Mártir, Baja California and Tonantzintla, Puebla) and for the Great Canary Telescope in Spain and the High Altitude Water Cherenkov (HAWC) Observatory in Sierra Negra, Puebla, among others.

Its contributions include the theoretical and observational study of the formation of the universe and the stars, in addition to the instrumentation and scientific use of the Great Canary Telescope and the High Altitude Water Cherenkov Observatory, the most advanced cosmic ray and gamma ray observatory in the world. The institute also oversees the innovative HYDRA project for polishing optical surfaces.

THE HAWC NATIONAL LABORATORY, located on the slopes of the Sierra Negra and Pico de Orizaba volcanoes, is the result of international collaboration and

managed by the Physics Institute. It was designed to detect gamma rays and cosmic rays and can observe two thirds of the sky for 24 hours.



THE PHYSICAL SCIENCES INSTITUTE

The Physical Sciences Institute was created in 2006 as part of an effort to decentralize the country's scientific research endeavors. It is dedicated to producing state-of-the-art knowledge on relevant issues in physics, focused both on pure science and on technological innovation, directly supporting regional and national development. It also contributes to developing human resources at the highest level while promoting the popularization of scientific information both within and beyond Mexico.

The Physics Institute studies the structural properties and dynamics of systems containing so many degrees of freedom that they don't interact in a linear fashion; it also focuses on methods of preventing the environmental and microbiological corrosion of materials. It combines experimental studies with theoretical calculations and numerical simulations connected with the molecular properties of biological systems. The institute also utilizes scanning tunneling microscopes to study ionic canals in membranes. It conducts studies in molecular dynamics, artificial intelligence, and statistics. It develops experimental and theoretical research related to the study of atoms and molecules, low-temperature plasmas, and vibrations in continuous mediums. Further, it conducts important work in designing and building experimental equipment.

The institute's achievements include producing a model to explain the effects of the movements of the earth in Mexico City in 1985, the results of which were published in *Nature* magazine in 1987; the development and synthesis of a series of highly efficient organic materials that inhibit corrosion; the development and synthesis of a derivative of Amphotericin B that proved to be a highly effective antifungal with few side effects; and the development of a model of network growth that explains, regardless of scale, the structure of many complex networks found in nature.

THE PHYSICS INSTITUTE in Cuernavaca, Morelos. In this building, which was originally constructed in the shape of a set square and then expanded to accommodate an inner garden, theoretical research is conducted in solid

state physics, statistics, mathematics, atomic and molecular physics, optics, elastic vibrations, classical and quantum chaos, field theory, astronomy, celestial mechanics, molecular biophysics, and theoretical and systems biology.



THE NUCLEAR SCIENCES INSTITUTE

The Nuclear Sciences Institute was created in 1988, but its predecessors date back to 1967. Its mission is to develop nuclear sciences toward a better understanding of the universe, as well as to assist in Mexico's technological development. It conducts theoretical, experimental, and applied research in order to study the components of matter and their interactions. The fields investigated at the institute include nuclear physics, quantum optics, elementary particles, physical mathematics, field theory, gravitation, astrophysics, cosmology, plasma physics, the chemical changes induced by ionizing radiation, chemical evolution, astrobiology, space instrumentation, nanomaterials, and smart polymers; it conducts retrospective radiation measurements and works on establishing norms and controls for radiological safety. Its work is organized into five departments: Structure of Matter, High-Energy Physics, Plasma Physics and the Interaction Between Radiation and Matter, Gravitation and Field Theory, and the Chemistry of Radiation and Radiochemistry. It has an Irradiation and Radiological Safety Unit with a Gamma Beam 651-PT irradiator that uses Cobalt 60 to support the university's research, and it offers services for industrial use.

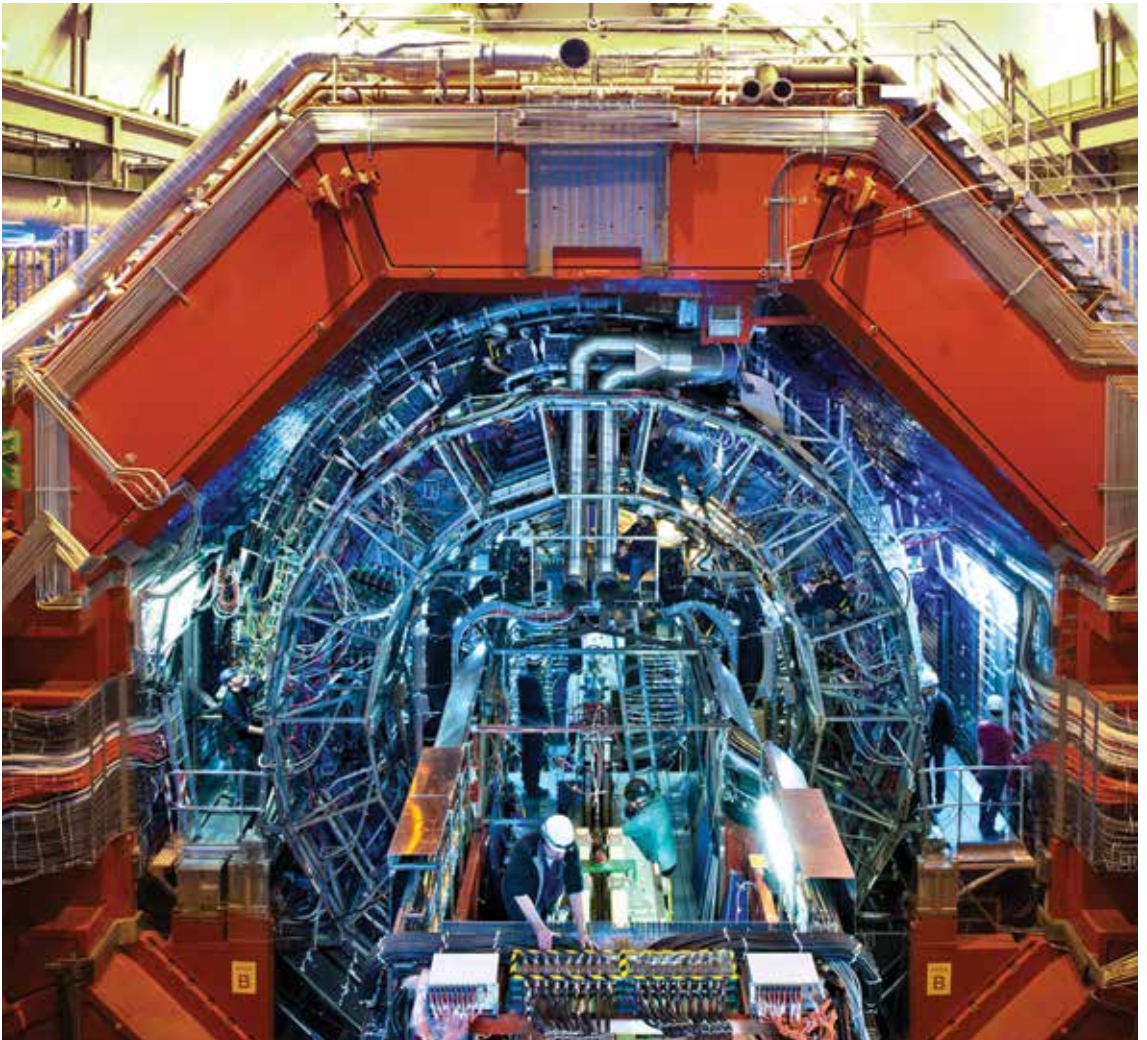
The institute often participates in international collaborations, such as with the CERN's ALICE detector, NASA's Curiosity mission, the DAMIC project that aims to find dark matter, the Pierre Auger Observatory, and the recently built HAWC gamma ray observatory. The Detectors Laboratory has developed parts of the detectors used by ALICE and is creating the infrastructure for the development of space instrumentation, such as the JEM-EUSO telescope for the International Space Station.

THE NUCLEAR SCIENCES INSTITUTE

works with agencies such as the European Organization for Nuclear Research (CERN). In this photograph, we

can see the CERN's Large Hadron Collider on the French-Swiss border, the largest particle accelerator in the world, with a 27-kilometer underground ring.

The Nuclear Sciences Institute collaborates with the Computing and Information and Communications Technology Department to develop high-performing computer systems; recently, the UNAM and the European Organization for Nuclear Research (CERN) signed an agreement for the operation of a Tier 2 computer center as part of the ALICE experiment's Worldwide Computing Grid. It also has a mass data storage system to back up the data from the HAWC observatory.



THE RENEWABLE ENERGIES INSTITUTE

Created in 1996, The Renewable Energies Institute is essential to the country's transition toward an energy model that promotes sustainable development based on renewable energy sources. It has a flexible network structure for research, teaching, popularization, and outreach. The Renewable Energies Institute uses a multidisciplinary approach to problems in science and technological development that are related to the generation, transmission, conversion, storage, utilization, and impact of energy, particularly renewable energy. It promotes innovation, technology transfers, and the creation of technology-based companies that makes efficient use of renewable energy.

The Renewable Energies Institute leads the Mexican Center for Solar Energy Innovation, which is made up of 57 different organizations, 47 of which are research and/or educational institutions and ten are private enterprises. Its projects are nationwide, comprehensive, and inclusive, promoting the creation of alliances that generate synergies between solar, geothermal, and wind energy. It has cutting-edge laboratories like the National Solar Concentration and Solar Chemistry Laboratory, which is dedicated to converting and storing energy from the sun; the Photovoltaic Innovation and Solar Cell Characterization Laboratory, dedicated to developing materials, solar cells, and photovoltaic technology; and the National Energy Conversion and Storage Laboratory, a collaboration with the National Polytechnic Institute that investigates other forms of energy conversion and storage in solar fuels and electrochemical devices. The Renewable Energy Institute also actively participates in science popularization and planning national energy policy.

AN INDUSTRIAL SOLAR OVEN in Temixco, Morelos. It is part of the National Solar Concentration and Solar Chemistry Laboratory, managed by the

UNAM's Renewable Energies Institute and the University of Sonora. This instrument can concentrate the sun's energy to the point that it reaches 3,400°C.



THE PHYSICS INSTITUTE

The Physics Institute was founded in 1939 and is dedicated to research in physics and related fields; the development of human resources at the highest level; the popularization of knowledge; and building connections between science and the country's other cultural, intellectual, and productive activities. Its theoretical and experimental research subjects cover the full spectrum of contemporary physics and describe phenomena addressing all scales of the observed universe. The institute is organized into six departments: the Solid State Department researches solid state physics and condensed matter; the Experimental Physics Department focuses on basic and applied research in physics and its connections with other disciplines; the Physical Chemistry Department researches statistical physics, condensed matter, and complex systems; the Theoretical Physics Department focuses on the theory of elementary particles and the quantum theory of fields, cosmology, ultracold atoms, and quantum optics; the Condensed Matter Department studies the structure of matter in its condensed state; and the Complex Systems Department conducts cutting-edge research into the full spectrum of complex systems. Among the institute's most important achievements is the group theory developed by Marcos Moshinsky, a mathematical theory about the symmetry of nature, with important applications in atomic, molecular, and nuclear physics. It has also made important contributions to random matrix theory.

The Physics Institute participates in a variety of international projects—including AMS, CREAM, ALICE, DESI, SNOLAB, and HAWC—studying antimatter, the distribution of mass in cosmic rays, the quark-plasma transition, the nature and dynamics of dark energy and dark matter, neutrinos, and ultraenergetic gamma rays.

The institute has four laboratories: the Accelerator and Mass Spectrometer Laboratory, the High Altitude Water Cherenkov Observatory, the National Cultural Heritage Research and Preservation Laboratory, and the National Quantum Matter Laboratory.

ISOTOPE SEPARATOR or Accelerator and Mass Spectrometer at the Physics Institute in University City. The National Mass Spectrometer Laboratory measures

concentrations of the radioisotope C^{14} and can receive outside organic samples either in their original form (wood, fabric, hair, bone, soil, etc.) or in the form of CO_2 .



THE APPLIED MATHEMATICS AND SYSTEMS RESEARCH INSTITUTE

The Applied Mathematics and Systems Research Institute was constituted in its current form in 1976, although its predecessors date back to 1958. Its work is divided into six departments: the Physical Mathematics Department carries out mathematical and combinatorial analysis applied to physics and engineering problems; the Mathematics and Mechanics Department focuses on theoretical and applied aspects of differential equations that appear in the study of nonlinear phenomena in disciplines such as physics, biology, engineering, and medicine; the Mathematical Modeling of Social Systems Department studies social processes and the history of science; the Probability and Statistics Department engages in high-level research into probability and statistics, as well as issues related to finance, applied probability, and operational research; the Computer Science Department provides theoretical and practical contributions to the fields of cognitive science, artificial intelligence, computational vision, and robotics; and the Systems Engineering and Automatization Department studies bioinspired systems, distributed and parallel systems, and systems used in the control and processing of signals and images, among others.

The Applied Mathematics and Systems Research Institute has created the University High Performance Computing Laboratory to support research into applied mathematics and computing problems. This laboratory has also made a major impact through its collaborations with private businesses and government institutions, such as AGO, Pemex, INE, the National Insurance and Finance Commission, Sedena, Fonden, SEP, and the Supreme Court. These collaborations have applied the high level of technological specialization and research skills that characterize the institute's academics.

THE MATERIALS RESEARCH INSTITUTE

The Materials Research Institute has its origins in a research center founded in 1967. It conducts scientific and technological research into the structure, properties, transformation processes, and performance of materials and their possible applications in a sustainable world. The institute is distinguished by its capacity to carry out multidisciplinary studies on the science of materials, both with respect to their pure and technological aspects and to their applications in fields as diverse as the health sector and the aerospace industry.

Throughout its history, the Materials Research Institute has developed materials such as Zinalco, an alloy with superplastic properties, and Nukbone, an essential material for bone implants. It has also improved asphalts; metal foams; materials used to capture CO₂ and convert it into useful products; and materials for ultrathin coverings, fuel cells, and photocatalysis, as well as polymers with optical, mechanical, and flame retardant properties. Currently, the Materials Research Institute employs cutting-edge scientific equipment to develop a wide range of materials, including a latest-generation electron microscope and modern equipment for rheological, spectroscopic, thermic, and X-ray diffraction studies. The institute actively participates in the development of human resources through the Materials Science and Engineering postgraduate programs. The results of its research are widely circulated in domestic and international academic forums, as well as through science popularization programs that teach the general public about the impact of materials on daily life. The institute also offers specialized services for the private sector.

THE MATHEMATICS INSTITUTE

The Mathematics Institute was founded in 1942, accompanying the development of modern mathematics in Mexico. It successfully and efficiently conducts research in fields such as algebra, mathematical analysis, combinatorics and graph theory, differential equations, geometry, physical mathematics, probability, and statistics.

At the international level, the Solomon Lefschetz International Laboratory is especially important: it is an international body associated with France's Centre National de la Recherche Scientifique and supported by the National Science and Technology Council. This laboratory brings together French and Mexican institutions to promote joint research and train researchers.

The successes of this institute are evident not only in its publications and the many awards conferred on its researchers, but also in the quantity and quality of academic centers it has yielded. In the 1960s, the Mathematics Institute created the Mathematics Department of the National Polytechnic Institute's Research and Advanced Studies Institute; in the following decade, it created the Mathematics Department of the Metropolitan Autonomous University; in 1990, it created the Morelia Unit in Michoacán, which became the UNAM Center for Mathematical Sciences in 2011; in 1996, it created the Cuernavaca Unit in Morelos; since 2006, the Mathematics Institute has participated in the UNAM's Oaxacan Representation; it also contributed to the founding of the Oaxaca Mathematics House, a strategic association with Canada's Banff International Research Station for Mathematical Innovation and Discovery; and in 2011, it created the Juriquilla Unit in Querétaro. In sum, this institution has been wildly successful in developing the field of Mexican mathematics.

THE RADIOASTRONOMY AND ASTROPHYSICS INSTITUTE

The Radioastronomy and Astrophysics Institute initiated its activities in 1995 as a department of the Astronomy Institute, becoming an independent research center in 2003 and an institute in 2015. Currently, the institute is Mexico's primary locus of research and human resources with respect to radioastronomy and stellar formation. Its areas of research include interstellar space, stellar formation, turbulence and gravitational collapse, stellar evolution, high-energy rays, radioastronomy, radio instrumentation, galactic and extragalactic astronomy, and galaxy formation. The institute's researchers are world-renowned: their articles have been cited over 53,000 times between its establishment as a research center and October 2016, and together they have a Hirsch index of 98. Six of its researchers have received international awards and distinctions, and ten have received domestic awards. It is a constituent site in the UNAM's postgraduate astronomy program, awarding 30 doctorates and 64 master's degrees since 2003.

Its main achievements include, in collaboration with the National Radio Astronomy Observatory in the US, widening the bandwidth of the receptors of the Jansky Very Large Array; the increase in sensitivity of the Very Long Baseline Array; and essential contributions toward understanding the structure, formation, and collapse of pre-stellar nebulae conducted through numerical simulations and theoretical models, as well as the evolution of these nebulae in the presence of young stars. Its broad-scale popularization activities reach an average of 25,000 people per year. Many of these latter activities are carried out in conjunction with the government and other UNAM departments. In 2013, the institute registered a trademark for My Universe UNAM, which makes educational toys.

THE CENTER FOR APPLIED SCIENCES AND TECHNOLOGICAL DEVELOPMENT

The Center For Applied Sciences and Technological Development was constituted in 2002, but its predecessors date back to 1971. It is dedicated to research, technological development, and the development of human resources, as well as to the promotion of instrumentation, microtechnologies and nanotechnologies, and information technologies. It employs a multidisciplinary approach, applying knowledge to problems associated with health, the environment, energy, and education. Its most important lines of research include acoustics, optics, photonics, advanced materials, catalysis and nanotechnology, information technologies, manufacturing technologies, and science and technology education.

The center's Metrology Laboratory was the first at the UNAM to be accredited, and it currently has international accreditation for its dimensional measurements.

The prototypes developed at the Center for Applied Sciences and Technological Development include an automated press for molding polymers, a multisampler for obtaining samples of the seabed, a process for producing molds for cranioplasty, and an active control system for ventilator noise.

The center also runs a Research and Technological Development Unit at Mexico City's General Hospital for research and development into new materials, equipment, software, diagnostic procedures, and therapies, in addition to support for professional practice and clinical pedagogy. It also runs the University Spectroscopy Laboratory and the University Environmental Nanotechnology Laboratory, both of which are distinguished by their high analytic capacity and seek to provide specialized services to universities and the public and private sectors. Finally, the center oversees the National Manufacturing Additive, 3D Digitalization, and Computerized Tomography Laboratory, which uses manufacturing equipment to produce polymers, resins, metals, and biomaterials, making it one of the most modern and competitive laboratories in the country.

THE CENTER FOR MATHEMATICAL SCIENCES

While its predecessors date back to 1990, the Center for Mathematical Sciences was founded in 2011. It conducts research into a wide range of mathematical issues and their interactions with natural sciences such as physics and biology; it also contributes to the education of future researchers and popularizes the results of its research for the benefit of society.

Its working methods are innovative, as researchers are freely grouped into projects in accordance with their academic interests and supported through four units: Computing, Popularization and Outreach, Teaching, and Documentation.

The working groups conduct research into algebra, combinatorics, physical mathematics, geometry, dynamic systems, topology, partial differential equations, and number theory, granting this center a unique identity that makes it stand out among Mexico's mathematical institutions.

The Center for Mathematical Sciences has contributed to the development of research groups involved in international collaborations. With the consolidation of its working groups, it creates ideal conditions for incorporating young researchers into strategic fields for the center and the country. In this sense, the establishment of the logic and fundamentals group, as well as the biomathematical research group, has been especially important.

The Center for Mathematical Sciences has reaffirmed its role as an internationally prestigious research center, as evidenced by the productivity of its researchers, the citations of their published work, and the center's intense academic exchanges with world-renowned institutions. The center often hosts meetings of experts and its researchers are members of international scientific and editorial committees.

With respect to classroom instruction, it has worked hard to promote mathematics at all educational levels in Michoacán. It has also created a postgraduate program in mathematical sciences that is jointly administered by the UNAM and the San Nicolás de Hidalgo University of Michoacán—a special program with a unique institutional makeup.

THE CENTER FOR APPLIED PHYSICS AND ADVANCED TECHNOLOGY
 The Center For Applied Physics and Advanced Technology was created in 2002; its predecessors date back to 1991. It conducts basic and applied research of a multidisciplinary and interdisciplinary nature in the field of applied physics; educates new generations of students in their fields; and successfully integrates academic work into addressing industry and societal needs, addressing technological problems and participating in the scientific and cultural development of the state of Querétaro and Mexico as a whole.

Research at the center is divided into two departments: the Molecular and Materials Engineering Department and the Nanotechnology Department. It conducts cutting-edge work on applying physics to biology and medicine, applied mathematics, optics and photonics, the design and synthesis of materials, food technology, and the design and development of prototypes.

Such research has been acclaimed for its innovative methods and for the technologies it has developed, some of which have already been adopted by domestic companies.

It has 16 research laboratories, five of which provide analytical services for internal and external users and are certified by ISO 9001:2008. The Center for Applied Physics and Advanced Technology also offers academic programs such as a bachelor's in Technology and a postgraduate program in Materials Science and Engineering. The center maintains close ties to the government of Querétaro and important educational institutions with which it has signed inter-institutional collaboration agreements for academic exchange.

THE CENTER FOR APPLIED PHYSICS and Advanced Technology is located at the UNAM's Juriquilla campus. Its facilities, laboratories, classrooms, workshops, storage areas, and work areas take up 6,710 m². The center has placed special

emphasis on having the latest equipment for the characterization of materials and nanomaterials. It has participated in the Querétaro Science Popularization Network since 2014.



THE CENTER FOR NANOSCIENCES AND NANOTECHNOLOGY

The Center for Nanosciences and Nanotechnology was created in 2008, though its predecessors date back to 1981. It focuses on theoretical and experimental research, generating knowledge and technological applications associated with nanomaterials. Simultaneously, it has developed educational programs in all disciplines of nanoscience and nanotechnology at the undergraduate and postgraduate levels, thus helping to develop a hub for nanoscience and nanotechnology in northwestern Mexico. It also manages regional and national promotion programs with inter-institutional participation.

The research department is centered on the study of matter at the atomic level, focusing on its modification in order to create many different nanostructures with a range of morphologies and innovative properties. This is a multidisciplinary field in which physics, chemistry, and biology all interact, enabling various lines of research that include spintronics and electronic transport, information processing models in quantum structures, the optical properties of nanostructures, multipurpose piezoelectric and ferroelectric materials, nanobiocatalysis, viral capsids for transport purposes, nanomaterial toxicity, biomaterials, environmental catalysis, and luminescent materials.

The Center for Nanosciences and Nanotechnology has a great deal of specialized equipment and instrumentation in its laboratories—for example, the Nanocharacterization Unit, the Environmental Catalysis Laboratory, the Bionanotechnology Laboratory, micromanufacturing and nanomanufacturing laboratories, and so forth—which have made it possible to conduct important technological research projects for the health sector, microdevices, and nanodevices and catalytic converters for the oil industry.

IN NOVEMBER 1983, the Center for Nanosciences and Nanotechnology was inaugurated in Ensenada, Baja California. Its facilities have been expanded periodically. The center's geographic

location, close to the border with California, has favored international collaboration. Its library is specialized in physics, chemistry, mathematics, biology, and engineering.



CHEMICAL, BIOLOGICAL AND HEALTH SCIENCES

THE BIOLOGY INSTITUTE

The Biology Institute was founded in 1929. It conducts scientific research on the origins of biodiversity and its interactions, distribution, current composition, implementation, and conservation. It is also the custodian of the National Biological Collections, which include Mexico's National Herbarium, its ten National Zoos, and its Botanical Gardens, as well as the Los Tuxtlas Biosphere Reserve and the Chamela-Cuixmala Biosphere Reserve. Its research addresses the morphology, diversity, phylogenetic relationships, and distribution of the algae, fungi, plants and animals found in Mexico. At the same time, it develops human resources and popularizes knowledge across society with the goal of expanding the comprehension and conservation of biodiversity in Mexico and the planet as a whole.

The institute's primary research objectives are to establish interdisciplinary work policies that promote knowledge of Mexico's biodiversity and to collaborate with the public and private sectors, social organizations, and groups of international academics in resolving environmental problems.

Besides promoting the development of new institutions, the Biology Institute's academic staff has discovered approximately 950 new species of flora and fauna. Furthermore, it has created the National Biodiversity Laboratory with the goal of organizing, modernizing, and expanding its infrastructure and equipment. This laboratory facilitates the study of Mexico's biodiversity with respect to taxonomy, systematization, biogeography, evolution, conservation, and sustainable use. It has also made substantial advances in digitalizing the samples contained in the National Biological Collections with the support of the National Commission for Biodiversity Knowledge and Use, the Biology Institute's Bioinformation Unit, and the UNAM's Department of Digital Collections. Close to a million samples have been digitalized in three years.

THE BIOLOGY INSTITUTE is the custodian of the country's most important biological collections, including both flora (the National Herbarium includes vascular plants, bryophytes, algae, lichen, and fungi) and fauna (arachnids, mites,

insects, crustaceans, helminths, molluscs, fish, amphibians, reptiles, birds, and mammals). Many of these collections include specimens from other parts of the world, and they are currently being digitalized.



THE BIOTECHNOLOGY INSTITUTE

The Biotechnology Institute was founded in 1991; its predecessors go back to 1982. This relatively new institute has nevertheless garnered great prestige at the national and international levels, focusing on generating knowledge in the disciplines of molecular biology, cellular biology, microbiology, biochemistry, immunology, structural biology, microbial ecology, and the biology of development. It also develops competitive biotechnology in the fields of health, agriculture, industry, and environmental remediation through the rational use of biological knowledge and related fields.

The Biotechnology Institute is organized into basic research cells (groups or committees) led by one or more researchers, and its academic structure facilitates horizontal collaboration. The results of its scientific work have generated new information in areas such as the genetics and molecular physiology of systems, model organisms and organisms, and viruses that have a relationship to human beings (salmonella, rotavirus, beans, corn), as well as the structural biology of model systems and systems related to pathological processes or industrially useful molecules. The institute has also developed technologies in collaboration with Mexican and foreign firms: for example, the production of antivenoms, penicillins, and semisynthetic cephalosporins; the extraction of enzymes from oils and vegetable pigments; the production of precursor compounds for the synthesis of vitamins in plants; the production of recombinant proteins with pharmacological properties; the development of bioinsecticides and biofungicides; the creation and perfection of molecular tools and computational bioprocesses; and the production of vaccines and systems for detecting congenital problems through the use of monoclonal antibodies, among many others.

The institute is the leader both in the number of patents and in the social impact of its results. As such, it constitutes yet another example of how the UNAM is conducting research with a global focus.

THE BIOTECHNOLOGY INSTITUTE is the site of three laboratories: the National Molecular and Biotech Production and Analysis Laboratory, the National

Advanced Microscopy and Living Cell Image Analysis Laboratory, and the National Genomic Sciences Support Laboratory.



THE OCEAN SCIENCES AND LIMNOLOGY INSTITUTE

The Ocean Sciences and Limnology Institute was founded in 1981, although its work began at the Biology Institute in 1939. The institute carries out important work in scientific research, teaching, outreach, and promotion, and it serves as the custodian of the university's marine life collections. It is made up of four academic units: two in University City; one in Mazatlán, Sinaloa; and another in Puerto Morelos, Quintana Roo. It also has a research station in Ciudad del Carmen, Campeche. The researchers at the Aquatic Biodiversity and Ecology Unit study the marine environment to understand the factors that determine changes in biodiversity and ecosystem functioning. The researchers at the Oceanic and Coastal Processes Unit work on analyzing geological, chemical, and biological processes in the water column, the coasts, and the sea bottom, where energy and mineral resources are examined. The researchers at the Reef Systems Unit, located in a protected marine area in Puerto Morelos along one of the world's most important reefs, study reef ecosystems on different scales of time and space. The Mazatlán Unit, located strategically where the Sea of Cortez meets the Pacific Ocean, contributes to our knowledge of biological diversity, biogeochemistry, and coastal pollution and conservation. The El Carmen Research Station is located at the Pargo Estuary on Isla del Carmen, Campeche, along the Términos Lagoon, allowing researchers to study the ecology and biogeochemistry of estuary ecosystems.

The Ocean Sciences and Limnology Institute has registered many patents based on its research: rectifiers and tidal amplifiers, water regenerators, growth strategies for important aquatic species, and software. The knowledge generated there is of great interest to many social sectors. Current trends include studying climate change and its effect on marine life, the importance of the sea for health and social welfare, understanding diversity, and providing services for sustainable uses of the seas.

THE OCEAN SCIENCES AND LIMNOLOGY
Institute provides consulting, technical

support, and photographic services to
domestic and international agencies.



THE ECOLOGY INSTITUTE

The Ecology Institute was created in 1988, but its predecessors date back to 1972. Its mission is to conduct high-quality research, educate researchers and professionals, popularize scientific knowledge, and apply it to solving environmental problems in Mexico and around the world. At the Ecology Institute, pure and applied research is conducted on all scales and levels of biological organization, from the genome and molecular ecology to studies on climate change and all types of ecosystems. Nowadays its academics are research leaders in evolutionary ecology, conservation biology and genetics, the ecology of germination, the genetics of development, biological interactions, microbial genomics, the ecology and genetics of invasive species, behavioral ecology, ecological restoration, and historical and community ecology.

Ever since its founding, the institute has been involved in outreach projects, the promotion of environmental regulations, the creation of natural areas and environmental impact decision-making, and the management of natural resources. It has also played an important role in zoning regulations and generating information on genetically modified organisms.

Among its most important achievements is having pioneered research in tropical ecology and demographics, evolutionary ecology, population genetics, and behavioral ecology. It promoted the creation of the National Commission on the Knowledge and Use of Biodiversity and recently established the National Sustainability Sciences Laboratory, which seeks to properly integrate scientific research into planning and decision-making processes at the local and federal levels. The institute also created the UNAM's first multidisciplinary postgraduate program, focused on sustainability sciences.

THE CELLULAR PHYSIOLOGY INSTITUTE

The Cellular Physiology Institute was constituted in 1979, although its origins go back to 1973. It is dedicated to producing knowledge, teaching, developing human resources, and popularizing knowledge to benefit science and Mexican society. It focuses on the fields of cellular and molecular biology, biochemistry, developmental biology, and neuroscience. The institute's activities are organized into six departments: the Biochemistry and Structural Biology Department is dedicated to biochemical research, protein-protein interactions, and the integration of networks and computer modeling; the Molecular Biology Department researches microbiology, bioenergy, mitochondrial biology and epigenetics, and signal transduction; the Cellular Biology and Development Department uses different experimental models to ask questions about signal transduction mechanisms, liver regeneration, and responses to hormonal stimulation; the Neurodevelopment and Physiology Department studies brain construction mechanisms and neuronal death, as well as the physiology of neuronal stem cells and their potential therapeutic use; lines of research at the Cognitive Neuroscience Department include the study of arterial hypertension, the properties of neuronal networks, the modulation of anxiety, memory, the decoding of sensory information, and decision-making, as well as aspects of neurophysiology in a variety of health problems; the Molecular Neuropathology Department studies neuropathologies using *in vitro* models and live animals with a cellular, molecular, electrophysiological, and comprehensive approach. The institute also has several service units, such as the Microarrangements Unit, the Imagenology Unit, the Molecular Biology Unit, the Histology Unit, and the National Channelopathy Laboratory.

THE BIOMEDICAL RESEARCH INSTITUTE

The Biomedical Research Institute has been working in research, teaching, and popularization for over seven decades. It is dedicated to the study of biological phenomena on the molecular, organismal, and populational levels, as well as the application of knowledge and technology to curing human illnesses.

The Biomedical Research Institute has done important work on the country's epidemiological profile, with an emphasis on the study of infectious diseases (cisticercosis, tuberculosis, amebiasis) and more recently on proliferative (cancer) and chronic degenerative (diabetes and Alzheimer's) diseases. It has also identified the genes linked to the etiopathology of Type 2 Diabetes and diabetogenic factors such as arsenic.

Some projects at the institute are aimed at developing tools for controlling parasitic diseases, while others address health problems associated with genetics and environmental pollution. As reemerging diseases are a problem, there is also an emphasis on tuberculosis, Chagas disease, toxoplasmosis, and cervical/uterine cancer.

It also focuses on neuronal communication and plasticity, cellular stress, and DNA oxidation, as well as the health effects of environmental contamination. Six research programs have joined forces to tackle the country's health problems: Breast Cancer Research; Vaccine Development and Optimization, Diagnostic Methods, and Adjuvants; Urban Toxicogenomics; New Medications for Infectious Diseases; Etiopathological Mechanisms and Prevention Strategies for Obesity and Diabetes; and the Production of Biomolecules in Bacteria and Fungi.

Some of the institute's most important achievements have been the creation of the bachelor's program in Biomedical Research, the establishment of neonatal screening for metabolic disorders, pioneering work in immunology and environmental toxicology research, and the development of Transkript (an antineoplastic) and Vinpocetina (an antiepileptic). Other achievements include the development of a vaccine for porcine cisticercosis and a biomarker for the detection of acute kidney injury.

THE SUSTAINABILITY AND ECOSYSTEMS RESEARCH INSTITUTE

The Sustainability And Ecosystems Research Institute was founded in 2003. Its mission is to generate scientific knowledge with disciplinary and interdisciplinary focuses, to conduct science education with a focus on sustainability, and to create alliances with sectors involved in the sustainable management of socioecological systems. It seeks to contribute to the construction of sustainable societies that use the material and cultural goods derived from ecosystems in a fair and equitable manner, without affecting their resilience or that of the processes that support biodiversity. The institute generates models, theories, and empirical and experimental information on the structure and processes of socioecological systems, providing principles for their sustainable management and solutions to national and global problems. It designs ecotechnological tools (e.g., protocols, guides, manuals, software and instruments) for the use of renewable energies; the management of water and waste; the restoration of soils, forests, and jungles; the design of agroecological systems; the sustainable use of timber-yielding and non-timber-yielding products; and the management of agrosilvopastoral systems, among others. It leads outreach to many sectors (government, nongovernmental organizations, rural and urban communities, the private sector, and the general public) to influence decision-making and provide principles for policies on sustainability and the environment. The institute is part of many decision-making bodies, primarily in western Mexico, such as the Michoacán Ecology Council for Municipal Development. The institute constantly carries out science popularization activities in a variety of contexts, including the organization of the annual National Ecotechnology Fair and Encounter (1,000 to 4,000 attendees per event) and the stewardship of an Ecogarden that offers courses and talks with a cumulative attendance of over 8,000 visitors.

THE NEUROBIOLOGY INSTITUTE

Created in 1993, the Neurobiology Institute is focused on researching the structure and function of the nervous system, employing a comprehensive, multidisciplinary approach that includes the development of specialized human resources and constant interaction with different educational and health sector agencies. The Neurobiology Institute comprises the National Magnetic Resonance Imaging Laboratory, which conducts cognitive research and diagnoses neurological diseases, carrying out over 36,000 studies on patients and containing a seven-Tesla MRI machine for animals; the National Advanced Scientific Visualization Laboratory, which provides support for research and teaching projects that require visualization techniques and high-performance computing; the National Neurodevelopment Laboratory, which focuses on promptly detecting and treating brain damage in newborns; the University Biomechanics Laboratory, which is dedicated to detecting and correcting problems in the motor system; the University Multi-Photon Excitation Microscopy Laboratory, which is able to conduct morphological and structural analysis of living tissue; and the University Vivarium for Genetically Modified Animals.

The Neurobiology Institute has ties to health institutions and other agencies, such as the Gonzalo Río Arronte Foundation, the Querétaro State Council for Science and Technology, and the Autonomous University of Querétaro. It is a key actor in regional science fairs and summer research programs, and each year it organizes Brain Week, which receives 5,000 visitors from all over the country. It has hosted the Latin American Training Program, financed by the Society for Neuroscience and the Grass Foundation.

THE CHEMISTRY INSTITUTE

The Chemistry Institute was founded in 1941 with the objective of conducting research into questions that involve molecular structure and reactivity, especially when the results can be applied to the country's particular conditions and problems. Another central mission is teaching and cultural promotion within its field.

The institute is organized into five departments. First, the Natural Products Department, known as the “Cathedral of Sesquiterpene Lactones,” has studied more than 600 species belonging to 42 families of plants, insects, fungi, and marine life, obtaining more than 4,000 chemical compounds and leading to over 1,000 publications. Second, the Physical Chemistry Department, which is considered to have founded the field of physical organic chemistry in Mexico and focuses on understanding reactivity mechanisms, having more recently begun theoretical-experimental studies of chemical reactivity, molecular recognition, and femtochemistry. Third, the Inorganic Chemistry Department studies the chemistry of representative elements, applied catalysis, and the design of crystals. Fourth, the Biomacromolecule Chemistry Department works on the study of protein structure and, as the first Mexican institution to develop protein crystals, is considered a pioneering group in biostructure, bioenergy, and biological crystallogenesis studies, as well as studies of the molecular basis of allergies. And fifth, the Organic Chemistry Department—which is one of the oldest—focuses on the total synthesis of natural products, as well as free radical reactions, organocatalysis, and electrochemistry.

The Chemistry Institute, together with the Autonomous University of Mexico State, founded the Joint Research Center for Sustainable Chemistry in Toluca with the goal of developing sustainability-oriented chemistry research projects.

THE CENTER FOR GENOMIC SCIENCES

The Center For Genomic Sciences was founded in 2004 and its predecessors date back to 1980. Its work is focused on developing professionals and researchers in the field of genomics with a transdisciplinary perspective (biology, mathematics, and computation) and on conducting pure and applied research.

Work at the center is organized into seven research programs. First, Genomic Ecology focuses on bacterial populations, their diversity, and their taxonomy, as well on as the molecular basis for their interactions with other organisms. Second, Computational Genomics is dedicated to computational biology, conducting comparative and evolutionary analyses of the regulation of genetic expressions in bacteria. Third, Dynamic Genomics employs a focus based on systems and synthetic biology to generate new bacterial phenotypes and to understand the spatial and temporal mechanisms involved in antibiotic resistance, as well as the evolution of sexual chromosomes and bacterial regulation systems in response to the environment. Fourth, Evolutionary Genomics analyzes molecular evolution processes for the structure of rhizobial genomes and pathogenic bacteria; it also analyzes the organization of regulatory networks with an evolutionary and systems biology focus. Fifth, Functional Eukaryote Genomics investigates the functional genomics of the common bean (*Phaseolus vulgaris*), both in terms of symbiosis as well as in response to abiotic stress and resistance to disease. Sixth, Functional Prokaryote Genomics analyzes determining genomic factors for the physiology of rhizobia and has discovered and characterized nitrogen-fixing endophytes in beans, opening up new perspectives on biofertilization; in addition, it pursues the study of cervical-uterine cancer. And seventh, Genomic Engineering studies horizontal gene transfer, recombination, and essential genes for rhizobial genomes, utilizing phylogenomics for the study of rhizobia and other bacteria, both in pristine and contaminated environments.

THE INFRASTRUCTURE, EQUIPMENT, and facilities of the Center for Genomic Studies are ideal for cutting-edge research into human genetics and automated DNA

sequencing. It also has videoconferencing equipment, facilitating long-distance interaction with the best research and teaching institutions in the world.

The center's achievements include the first genomic sequencing performed in Mexico (for *Rhizobium etli*) and the sequencing of an additional 45 bacteria; it also participated in the sequencing of *Taenia solium* and the first transcriptome and proteome analysis in Mexico. The center founded and advanced the field of computational biology in Mexico. It also established the country's first bachelor's program in Genomic Sciences and helps train doctors in the field.



EARTH SCIENCES AND ENGINEERING

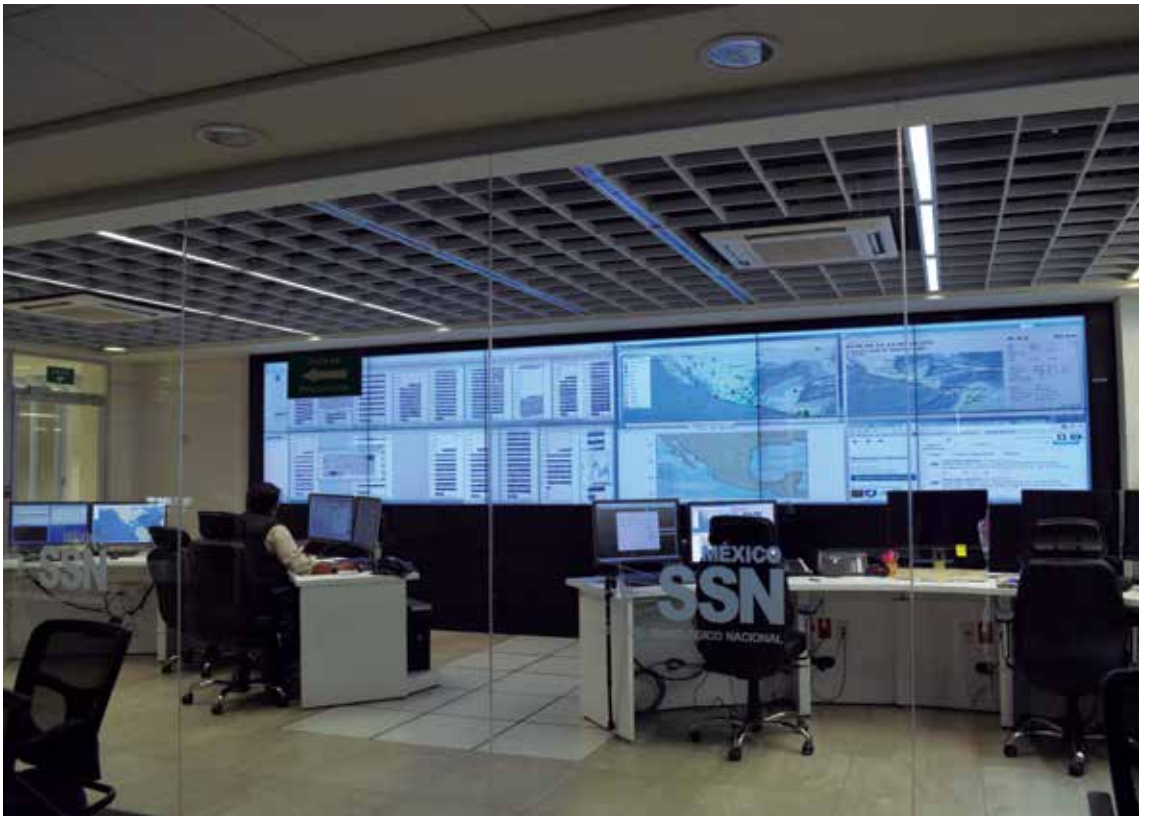
THE GEOPHYSICS INSTITUTE

The Geophysics Institute was founded in 1945. Its objective is to conduct interdisciplinary research into earth sciences and the spatial environment, covering all geophysical phenomena that occur in or affect the nation's territory and that are determined by plate tectonics, such as earthquakes, volcanoes, hydrothermal systems, and deformations of the crust. The institute's research involves geology, physical oceanography, and some engineering fields. It conducts extensive research into the Chicxulub crater, formed by the meteorite impact that marked the end of the Cretaceous. It is the leader in the discovery of slow earthquakes, which are movements of large masses of earth over a long period time—a process that produces results similar to an earthquake but is undetectable by traditional seismological instruments (seismometers and accelerographs). The discovery of this phenomenon represented a paradigm shift in seismotectonics. The largest slow earthquakes in the world have been reported on the Guerrero coast and the Geophysics Institute has played a key role in their study.

The institute has contributed to the creation and consolidation of other institutions, such as the Ensenada Center for Scientific Research and Higher Studies, the UNAM Center for Atmospheric Sciences, and the UNAM Center for Geosciences. It also runs the Geophysics Museum, located in a beautiful Porfirian building that contains important collections of geophysical instruments, such as a 17-ton German Wichert seismograph. The institute has also promoted the creation of a postgraduate program in earth sciences and runs the National Seismological Service, which currently maintains hundreds of seismological stations across the country. Another one of its responsibilities is to reduce the risks associated with natural disasters; its infrastructure is accordingly extensive and varied, containing isotopic geochemistry, petrology, radiocarbon laboratories, and a radio telescope for interplanetary observation.

THE BUILDING THAT HOUSES the Geophysics Institute in University City was designed by the architects Salvador Ortega and Manuel de la Mora. It contains consulting and support areas and graphical and editorial services for the

production of drawings, plans, maps, and photographic materials, as well as laboratories and electronic maintenance services for instruments and research stations. Its facilities also include the Ricardo Monges López Auditorium.



THE GEOGRAPHY INSTITUTE

The Geography Institute was founded in 1943. Its work is focused on original scientific research in pure and applied geography, aimed at expanding knowledge of Mexico's territory; its natural, social, and economic resources; and their current and potential exploitation. Under this framework, the institute has made contributions to the study of domestic geography and the search for solutions to domestic and global problems such as poverty, natural disasters, and climate change. It also focuses on the development of professionals in accordance with their areas of specialization and the highest international standards.

The Geography Institute is also renowned for the application of diverse methodologies and the study of space on different scales, from the global to the local. By exploring the complexity of geographical space from a broad range of perspectives, it privileges interdisciplinary work. Its Social Geography, Economic Geography, and Physical Geography departments contribute to cutting-edge analysis of different aspects of sustainability. Its efforts in developing human resources, popularizing knowledge, outreach, and academic collaborations are also important activities for its community.

One essential tool for the institute's work is the Geospatial Analysis Laboratory, which is specialized in the acquisition and processing of aerial and satellite images, remote sensing, and technological development applied to the generation and interpretation of geological information (volcanic activity, the climate, hurricanes, flora inventory, and ocean temperature and color).

The results of its research are published in the journals *Investigaciones Geográficas* and the *Boletín del Instituto de Geografía*, the only nationwide publication in its field to be included in the National Science and Technology Council's Excellence Program and the international citation database Scopus.

A variety of agreements with government agencies have led to the development of the National Forest Inventory, methodological guides for the preparation of state zoning programs, and the Geographical Information System of the Infrastructure Department at the Communications and Transportation Secretariat, among others.

THE GEOLOGY INSTITUTE

The Geology Institute was created in 1929. It studies the earth, its processes, and its resources for the benefit of humanity and the environment; it conducts research in various fields of geology and provides solutions to contemporary problems affecting Mexico; and it educates students at the undergraduate and graduate levels, training professionals for the government sector, the private sector, research, and teaching.

The Geology Institute is dedicated to researching Mexico's geology, the endogenous and exogenous processes that have constituted it over time, and related natural resources. It has recently expanded its vision to include the study of underground water deposits, geological threats, the development of geobiology, and meteorites, with all their implications for global geology.

As part of its cutting-edge research, it has strengthened its analytical infrastructure with accreditation from the National Geochemistry and Minerology Laboratory.

The services provided by the institute to society through agreements with the public and private sectors include the exploration and analysis of mineral deposits, studies on the environmental impacts of mine leachates and tailings, and hydrocarbon studies. Its hydrogeological and edaphological studies monitor the state of aquifers and the topsoil in different regions of the country.

The Geology Institute engages in the popularization of knowledge through the Geology Museum and the Earthmover, a vehicle equipped with models and games that visits elementary schools to give workshops on basic earth science.

Among its achievements are the identification of a little ice age, located by studying pollen and lacustrine sediments in central Mexico, and the discovery of a variety of new fossil species. The institute has also identified ancient tsunamis on Mexico's Pacific coast and studied the danger of landslides in the mountains of Oaxaca and Veracruz. It utilizes geochemical tracers in particulate matter and biomarkers to study genotoxic pollutants in arid regions, as well as the geoavailability and bioaccessibility of potentially toxic elements in soils contaminated by metallurgic activities.

The Geology Institute's research into the impact of antibiotic and pesticide pollution in water and soil have been of immense social and economic value, as have its analyses of the sources of CO₂ in urban areas, utilizing radiocarbon as a tracer. Other contributions include studies on the origin of volcanism in the Trans-Mexican Volcanic Belt, the tectonic evolution and mineral deposits of western Mexico, and the reconstruction of the orogen of the Sierra Madre Oriental.

THE ENGINEERING INSTITUTE

The Engineering Institute was created in 1976 and its predecessors go back to 1956. It has contributed to national development and strengthened Mexico's social welfare through research, the expansion of human resources, societal outreach, and the solution of technical problems.

The institute has a large budget due to the fact that its projects are funded by municipal, state, and local governments, as well as by the private sector—a sign of its prestige.

It is responsible for a large number of patents and technological developments, many of which have been transferred to the private sector and put to productive use.

The institute develops technologies (e.g., prototype desalination plants, food dehydrators, and generators) that utilize the country's geothermal resources, thus promoting the use of renewable energies and reducing water and electricity shortages: essential advances for the country's future.

It has become a technical consultant for the federal authorities responsible for building the new Mexico City airport through numerical analyses, laboratory work, and field work on geotechnical and structural issues.

The Engineering Institute has a hydrological observatory that uses digital advances and information and communications technology to monitor hydrological variables in real time, publishing weather warnings online. This work helps expand the knowledge and abilities of future engineers.

Supported by the Bill and Melinda Gates Foundation, it has developed a computing program for quantifying the eggs of intestinal parasites in environmental samples, a development that will help improve public health conditions.

With the participation of universities, research centers, and companies, the Engineering Institute has developed the Mexican Innovation Center for Bioenergy and Gaseous and Liquid Biofuel Clusters, which produces hydrogen, methane, ethanol, and butanol obtained from solid, liquid, and lignocellulose waste.

THE CENTER FOR ATMOSPHERIC SCIENCES

The Center for Atmospheric Sciences was founded in 1977 and its predecessors date back to 1949. Its goals are to develop atmospheric and environmental sciences in Mexico through the production of knowledge and the development of researchers and professionals, all with an interdisciplinary approach.

In the field of atmospheric sciences, the center studies climate change, the ocean-atmosphere interaction, the development of mathematical and climate models of atmospheric processes, cloud physics, and the hydrological-meteorological relationship. In the field of environmental sciences, it evaluates air quality, biological and chemical atmospheric pollution, and their biological effects on Mexico City and other areas of the country.

Due to the need for reliable measurements, the Center for Atmospheric Sciences has created the Instrumentation and Atmospheric Observation Department, which designs equipment and operates a mobile laboratory, research stations, and platforms for atmospheric observation, as well as an aerostatic balloon.

The center coordinates outreach projects that generate information by interacting with scientists and society at large. It also maintains formal associations with the private, social, and government sectors.

Its University Atmospheric Observation Network measures meteorological and environmental variables at 12 platforms around the country. The Mexican Aerobiology Network monitors atmospheric pollen associated with climate change and human health. The center's website publishes weather and air quality forecasts; volcanic ash warnings; data from the University Atmospheric Observation Network and the Mexican Aerobiology Network; and the Digital Climate Atlas, acclaimed by the magazine *Geospatial World*.

Among the center's most important achievements are its thermodynamic climate model and its collaboration with the Intergovernmental Panel on Climate Change, winner of the 2007 Nobel Peace Prize.

The center is the only academic institution in Mexico with two indexed journals: *Atmósfera* and *Revista Internacional de Contaminación Ambiental*.

THE CENTER FOR GEOSCIENCES

The Center For Geosciences was founded in 2002 and its predecessors go back to 1997. It conducts pure and applied scientific research in three strategic fields of geoscience that expand knowledge of the nation's territory, the sustainable use of natural and energy resources, and environmental protection. It also engages in educational and popularization activities.

The center consists of a multidisciplinary group that conducts cutting-edge research, renowned at the national, regional, and international levels. Its academic work is organized into ten lines of research that have been grouped, in turn, into three branches: solid earth, environmental geosciences, and natural resources. It also carries out strategic economic and social impact projects, including disaster prevention, the exploration of energy resources, geomedical research, and environmental protection.

The Center for Geosciences has 18 laboratories, including the Isotopic Studies Laboratory, which conducts geochemical analyses of isotopes, dating (U/Pb and U-TH), and LA-ICP-MS microanalysis; the Geochronology Laboratory (K/Ar and Ar/Ar); the Microtomography X-Ray Laboratory; and the Rock Physics Laboratory, which is currently being created and aims to serve as a nation-wide model in its field.

Among the center's alliances are agreements with Pemex, the Federal Electricity Commission, the National Water Commission, and local governments (the Iztapalapa borough of Mexico City, the government of Mexico State, etc.). It also participates in the Mexican Center for Geothermic Energy Innovation.

The center publishes the *Revista Mexicana de Ciencias Geológicas*, which is included in the Science Citation Index and has had a 1.1 impact factor over the last five years, as well as the digital cartography journal *Terra Digitalis*.

THE CENTER FOR ENVIRONMENTAL GEOGRAPHY RESEARCH

The University Council approved the creation of the Center for Environmental Geography Research on August 17, 2007. Its mission is to engage in planning and natural resource management through a comprehensive program of research, teaching, and outreach. It emphasizes the geographic and historical dimensions of environmental problems and prioritizes outreach to society, whose needs guide and give meaning to its activities. Its work is focused on understanding and finding solutions to local environmental problems in relation to global changes.

The Center for Environmental Geography Research is among the most productive academic bodies in the field of geography, both at the national and international levels. It produces a quantity of indexed publications that are cited at a comparable level to that of successful geography departments across Europe and the Americas.

In coordination with the National School of Higher Studies - Morelia, the center has collaborated on the development and consolidation of a variety of undergraduate programs. It is one of the bodies responsible for the postgraduate geography degrees and it coordinates the Comprehensive Landscape Management Knowledge Camp.

The center has also conducted participatory and transdisciplinary research into social problems, such as water management in the dry tropics and the Cutzamala watershed, forest conservation, agrodiversity, and traditional farming knowledge. It has offered consulting on the creation of farmers' councils, community resource monitoring, and the development of rural cooperatives, as well as developing proposals for municipal management in urban and suburban environments. It provides technical training in accordance with social needs. In addition, it works to strengthen the local and regional development capacities of rural, urban, and suburban communities.

THE RESEARCH AND TEACHING SUPPORT SPECIAL PROJECTS UNIT
 On January 13, 2014, the *Gaceta UNAM* published the text of an agreement that reorganized the administrative structure of the Scientific Research Department. Its objective was to improve organizational and working conditions in such a way that the department's basic goals were better met, simultaneously creating efficient models for new activities and developing human resources at the highest level for emergent, specialized, and flexible work. As a result, the Research and Teaching Support Special Projects Unit was created. Its primary functions are as follows:

- To promote multidisciplinary research in emergent fields with a broad, modern approach.
- To explore new forms of interacting with academic bodies and other institutions, both foreign and domestic, in order to promote integrated research on relevant issues.
- To generate alternative programs promoting multi-, inter-, and transdisciplinary interactions so as to pursue ambitious projects that facilitate the development of the academics in the Scientific Research Subsystem.

THE INTERNATIONAL HUMAN Genome Research Laboratory was inaugurated in 2015 in Juriquilla, Querétaro. Its lines of research include the dynamics and evolution of the human genome, genome regulation (genetic circuits and biological

systems), population genomics and paleogenomics (genomics of the past), cancer biology, and the genomics of the brain (development and functions).

The Research and Teaching Support Special Projects Unit includes:

- The Research Support Network in the health sector, which contains the National Autonomous University of Mexico, the Salvador Zubirán National Medical Science and Nutrition Institute, the National Cancerology Institute, the National Genomics Institute, and the Ignacio Chávez National Cardiology Institute.
- The International Human Genome Research Laboratory, which facilitates exchanges between the UNAM and Cold Spring Harbor Laboratory in the US.
- The Center for Complexity Sciences, which promotes multidisciplinary collaboration between different departments of the university and other foreign and domestic institutions.



EXPERIMENTAL CAPACITY

When it comes to cutting-edge results, the development of scientific knowledge requires a high experimental capacity. The UNAM has made major efforts to provide its academics with the best research conditions possible. In recent years, it has promoted an intensive program to renovate, update, and modernize the experimental equipment of its institutes and research centers. For one thing, it has promoted the creation of national, university, and certified laboratories. For another, it has designed the LabUNAM platform, which serves to update and disseminate the experimental tools and scientific and technological equipment used by the UNAM in its research and teaching, as well as to demonstrate its research and service potential to the private sector. To date, the platform has incorporated 264 laboratories, which are classified as:

National laboratories (34), 27 of which are already in operation and seven in the process of being established. Twenty-three academic bodies participate in these laboratories (three centers, 16 institutes, three faculties, and the National School of Higher Studies - Morelia).

University laboratories (53) with 17 participating academic bodies (five centers and 12 institutes). Twelve of these laboratories have ISO 9001 certification.

Research support units (177) with the participation of 35 academic bodies (18 institutes, eight centers, and seven faculties, as well as the national schools of higher studies in Morelia and Iztacala). The Research and Teaching Support Special Projects Unit, the Research Support Network, the International Human Genome Research Laboratory, and the Center for Complexity Studies were incorporated into these 177 units in 2014.

THE UNAM HAS ISSUED general regulations for laboratories independently of the protocols established by each academic body. These regulations promote awareness of general and

specific dangers in lab work, the risks of chemical reagents and reactions, the actions that should be taken in the event of emergency, and all other relevant safety documents.

There is also one international laboratory, known as the Solomon Lefschetz International Laboratory.

- 53 university laboratories with 17 participating academic bodies (five centers and 12 institutes); 12 of these have ISO 9001 certification.
- 177 research support units with the participation of 36 academic bodies (18 institutes, eight centers, seven faculties, and two national schools of higher studies) and the Research Support Network.⁵

The national laboratories that have been created at the UNAM's initiative represent 40% of the total number of laboratories in Mexico.

⁵ According to the LabUNAM census conducted in April 2017.



GEOGRAPHIC DISTRIBUTION OF UNAM LABORATORIES

IN UNIVERSITY CITY, MEXICO CITY

NATIONAL LABORATORIES

1. The National Macromolecule Structure Laboratory, run by the Chemistry Institute in collaboration with the Autonomous University of the State of Morelos through the Center for Chemistry Research (Nuclear Magnetic Resonance and X-Ray Diffraction).
2. The National Sustainability Sciences Laboratory, run by the Ecology and Engineering Institutes, the University Sustainability Strategy Program, the National Ecology and Climate Change Institute, and the National Commission on Protected Nature Areas.
3. The Accelerator and Mass Spectrometer Laboratory, run by the Physics Institute in collaboration with nine academic bodies and eight national institutions.
4. The National Manufacturing Additive, 3D Digitalization, and Computerized Tomography Laboratory, run by the Center for Applied Sciences and Technological Development.
5. The National Biodiversity Laboratory, located in the Biology Institute.
6. The National Complexity Sciences Laboratory, run by the Nuclear Sciences Institute in collaboration with 25 foreign and domestic academic bodies and other institutions.
7. The National Cultural Heritage Research and Preservation Laboratory, run by the Physics, Chemistry, and Aesthetic Research Institutes.
8. The National Quantum Matter Laboratory, which investigates ultracold matter and quantum information, located in the Physics Institute.
9. The National Biomimetic Diagnostics and Therapy Solutions Laboratory, located in the Faculty of Sciences. It collaborates with three institutes within the Scientific Research Subsystem: the Cellular Physiology Institute, the Materials Research Institute, and the Biomedical Research Institute. Outside the UNAM, it collaborates with the National Rehabilitation Institute and the National Respiratory Diseases Institute.
10. The National Channelopathy Laboratory of the Cellular Physiology Institute.
11. The National Flow Cytometry Laboratory of the Biomedical Research Institute.
12. The National Biodiversity Laboratory of the Biology Institute.

13. The National Advanced Technology Laboratory Center of the Faculty of Engineering.
14. The National Genomic Science Support Laboratory of the Biomedical Research Institute.

UNIVERSITY LABORATORIES

1. The University Electron Microscope Laboratory, run by the Materials Research, Engineering, and Physics Institutes; the Center for Applied Physics; the postgraduate programs in materials science and engineering; and the Scientific Research Department.
2. The University Optical Equipment Fabrication Laboratory of the Center for Applied Sciences and Technological Development.
3. The University Design Engineering and Advanced Manufacturing Laboratory of the Center for Applied Sciences and Technological Development.
4. The University Spectroscopy Characterization Laboratory of the Center for Applied Sciences and Technological Development.
5. The University Environmental Nanotechnology Laboratory of the Center for Applied Sciences and Technological Development.
6. The University Biodiversity Microscopy and Photography Laboratory of the Biology Institute.
7. The University Genome Sequencing Laboratory for Biodiversity and Health, located in the Biology Institute and operating in collaboration with the Ecology and Biomedical Research Institutes.
8. The University Detection Laboratory of the Nuclear Science Institute.
9. The University Plasma Chemistry and Planetary Studies Laboratory of the Nuclear Sciences Institute.
10. The University Radiation Laboratory of the Nuclear Sciences Institute.
11. The University Luminescence Laboratory of the Nuclear Sciences Institute.
12. The University Central Microscopy Laboratory of the Physics Institute.
13. The University Surface Optics Laboratory of the Physics Institute.
14. The University Molecular Electronics Laboratory of the Physics Institute.
15. The University Optical Micromanipulation Laboratory of the Physics Institute.
16. The University X-Ray Diffraction Laboratory of the Physics Institute.
17. The University Nanoscience Laboratory of the Physics Institute.
18. The University X-Ray Irradiation Laboratory of the Physics Institute.
19. The University Microarrangements Unit of the Cellular Physiology Institute.

20. The University Vivarium for Genetically Modified Animals of the Cellular Physiology Institute.
21. The University Vivarium for Pathogen-Free Animals of the Cellular Physiology Institute.
22. The University Microscopy Unit of the Cellular Physiology Institute.
23. The University Isotopic Geochemistry Laboratory of the Geophysics, Geology, and Anthropological Research Institutes and the Scientific Research Department.
24. The University Radiocarbon Laboratory of the Geophysics and Geology Institutes.
25. The University Petrology Laboratory of the Geophysics and Geology Institutes.
26. The University Geochemistry and Mineralogy Laboratory of the Geology Institute.
27. The University High Performance Computing Laboratory of the Applied Mathematics and Systems Research Institute.

THE UNIVERSITY LABORATORIES have sophisticated research equipment, providing services or supporting lines of research conducted outside the particular institute or center that runs them. They have the capacity to offer services and

support for outside research endeavors. They are organized in accordance with the resources of the academic body that oversees them, as well as those of the UNAM's Scientific Research Department.



CERTIFIED LABORATORIES

1. The Certified Spectroscopic, Paramagnetic, and Electromagnetic Laboratory of the Chemistry Institute.
2. The Certified X-Ray Diffraction Laboratory of the Chemistry Institute.
3. The Certified Nuclear Magnetic Resonance Spectroscopy Laboratory of the Chemistry Institute.
4. The Certified Mass Spectrometry Laboratory of the Chemistry Institute.
5. The Certified Spectrometry and Polarimetry Laboratory of the Chemistry Institute.
6. The Certified Biological Testing Laboratory of the Chemistry Institute.
7. The Certified Chromatology Laboratory of the Chemistry Institute.

IN MEXICO STATE

NATIONAL LABORATORIES

1. The National Health Laboratory, focusing on molecular diagnostics and environmental effects on chronic-degenerative diseases, run by the Faculty of Higher Studies - Iztacala.

IN PUEBLA

NATIONAL LABORATORIES

1. The National Gamma Ray Laboratory, a collaboration between the Physics, Astronomy, Nuclear Sciences, and Geophysics Institutes, as well as seven Mexican and 12 American institutions.

THE NATIONAL HAWC LABORATORY is designed to carry out astronomical measurements through purified water detectors containing photomultipliers that are sensitive to gamma rays. The

observatory's mission is to map the diffusion of gamma rays throughout the galaxy, determine their spectrum, and monitor known emission sources while discovering new ones.



BAJA CALIFORNIA

NATIONAL LABORATORIES

1. The National Astrophysics Laboratory in San Pedro Mártir, run by the Astronomy Institute in collaboration with the National Astrophysics, Optics, and Electronics Institute, the University of Arizona, and the University of Toulouse, France.
2. The National Nanomanufacturing Laboratory of the Center for Nanosciences and Nanotechnology.

UNIVERSITY LABORATORIES

1. The University Nanocharacterization Laboratory of the Center for Nanosciences and Nanotechnology.

MORELOS

INTERNATIONAL LABORATORIES

1. The Solomon Lefschetz International Laboratory, located in Cuernavaca, Morelos.

NATIONAL LABORATORIES

1. The National Solar Concentration and Solar Chemistry Laboratory at the Renewable Energies Institute, a collaboration with the Center for Applied Sciences and Technological Development and other Mexican and Spanish institutions, located in Temixco.
2. The National Solar Concentration and Solar Chemistry Laboratory, Second Stage - Temixco.
3. The National Photovoltaic Innovation and Solar Cell Characterization Laboratory at the Renewable Energies Institute, a collaboration with the Center for Applied Sciences and Technological Development, the Materials Research Institute, and ten other domestic institutions - Temixco.

THE NATIONAL SOLAR CONCENTRATION and Solar Chemistry Laboratory operates three different facilities: a solar

concentration oven, a photocatalytic plant for the treatment of wastewater, and a testing field for heliostats.

4. The National Emergent Diseases Laboratory, a collaboration between the Biotechnology, Biomedical Research, and Cellular Physiology Institutes.
5. The National Advanced Microscopy and Living Cell Image Analysis Laboratory, run by the Biotechnology Institute.
6. The National Molecular and Biotech Production and Analysis Laboratory, run by the Biotechnology Institute.

UNIVERSITY LABORATORIES

1. The University Proteome Laboratory, run by the Biotechnology Institute and the Scientific Research Department.
2. The University DNA Sequencing Unit, run by the Biotechnology Institute in collaboration with the Biomedical Research and Neurobiology Institutes, the Center for Genomic Sciences, and the Scientific Research Department.
3. The University Computational Biology Unit, run by the Biotechnology Institute.



QUERÉTARO

NATIONAL LABORATORIES

1. The International Human Genome Research Laboratory, located in Juriquilla. As part of the Research and Teaching Support Special Projects Unit, it promotes nationwide and international academic collaboration. Its primary collaborator is Cold Spring Harbor Laboratory in New York.
2. The National Magnetic Resonance Imaging Laboratory, run by the Neurobiology Institute - Juriquilla.
3. The National Advanced Scientific Visualization Laboratory, a collaboration carried out among the Neurobiology Institute, the Center for Geosciences, the Center for Applied Physics and Advanced Technology, the International Human Genome Research Laboratory, and the Engineering and Mathematics Institutes - Juriquilla.
4. The National Advanced Technology Laboratory Center of the Faculty of Engineering - Juriquilla.
5. The National Microgravimetry Laboratory of the Center for Geosciences - Juriquilla.

UNIVERSITY LABORATORIES

1. The University Confocal Microscopy and Multi-Photon Imaging Laboratory of the Neurobiology Institute, the Center for Geosciences, and the Center for Applied Physics and Advanced Technology.
2. The Advanced Wastewater Treatment Research Laboratory of the Engineering Institute.
3. The University Isotopic Studies, Microanalysis, and Dating Laboratory of the Center for Geosciences.
4. The University Vivarium for Genetically Modified Animals of the Neurobiology Institute.
5. The University Biomechanics Laboratory, a collaboration between the Neurobiology Institute, the Gonzalo Río Arronte Foundation, the Querétaro State Council for Science and Technology, and the Finance and Public Credit Secretariat.
6. The Behavioral Laboratory Unit, a support unit for the Neurobiology Institute.
7. The Proteogenomics Laboratory Unit, a support unit for the Neurobiology Institute.

CERTIFIED LABORATORIES

1. The Certified X-Ray Diffraction Laboratory of the Center for Applied Physics and Advanced Technology.
2. The Certified Light Dispersion Laboratory of the Center for Applied Physics and Advanced Technology.
3. The Certified Optical Spectroscopy Laboratory of the Center for Applied Physics and Advanced Technology.
4. The Certified Mechanical Testing Laboratory of the Center for Applied Physics and Advanced Technology.

MICHOACÁN

NATIONAL LABORATORIES

1. The National Oral Materials Laboratory of the National School of Higher Studies - Morelia.
2. The National Ecological Analysis and Synthesis Laboratory for the Conservation of Genetic Resources of the National School of Higher Studies - Morelia.
3. The National Ecotechnology Innovation and Sustainability Laboratory of the Sustainability and Ecosystems Research Institute.
4. The National Spatial Climate Laboratory of the Geophysics Institute, Mexart - Coeneo.

UNIVERSITY LABORATORIES

1. The University High Performance Computing Laboratory of the Radioastronomy and Astrophysics Institute.
2. The University Soil and Water Analysis Laboratory of the Center for Environmental Geography Research.
3. The Spatial Analysis Laboratory, a support unit for the Center for Environmental Geography Research.
4. The University Interplanetary Observation Laboratory - Coeneo.
5. The University Environmental Geophysics Laboratory of the Center for Environmental Geography Research, in collaboration with the Geophysics Institute - Morelia, the Michoacán University of San Nicolás de Hidalgo, and the University of Guadalajara.

6. The Inter-institutional University Natural Magnetism Laboratory of the Geophysics Institute.
7. The University Archaeometrics Laboratory of the Geophysics Institute.

SONORA

NATIONAL LABORATORIES

1. The National Solar Concentration and Solar Chemistry Laboratory of the Renewable Energies Institute in collaboration with the University of Sonora and other Mexican and Spanish institutions.

YUCATÁN

NATIONAL LABORATORIES

1. The National Coastal Resilience Laboratory. An outdoor laboratory established in association with institutions from across Mexico with the goal of expanding the scientific-technological capacities of different groups that research coastal resilience.

UNIVERSITY PROGRAMS

University programs represent a model of coordinated efforts within the UNAM in their respective fields; they also provide outreach to other social sectors that can finance and/or take advantage of the research results. These university programs give rise to social strategies focused on health, food, climate change, and the environment, among other important subjects.

THE UNIVERSITY HEALTH RESEARCH PROGRAM

The University Clinical Research Program began its activities in 1981, changing its name to the University Health Research Program in 1988. Its objectives are as follows:

- Connecting the UNAM's health research with the work of other institutions in order to address the primary health problems affecting the Mexican population by granting awards to the best research conducted by specialized doctors and providing stimulus programs to outstanding projects.
- Contributing to the development of human resources in research through Research Methodology and Basic Applied Statistics for Health courses, as well as providing a Refresher Certification program in Comprehensive Medical Knowledge.
- Promoting the results of the UNAM's health research through books, electronic publications, Radio UNAM, and *Gaceta UNAM*.
- Collaborating with the Distance Learning Department on the University Spectator series and with the Faculty of Medicine on the Permanent Bioethics Seminar.

THE UNIVERSITY FOOD PROGRAM

The University Food Program was founded in 1981. It focuses on bringing together multidisciplinary and interdisciplinary research efforts aimed at resolving complex food problems and applying the results to society. The program tested a work model that has yielded strong results and subsequently been applied to other departments of the UNAM.

The University Food Program currently focuses on four important activities: strengthening lines of research on food issues and creating interdisciplinary and multidisciplinary working groups; developing academic human resources through a varied and constant array of continuing education courses; following up on social needs with respect to the production, management, distribution, and commercialization of food products (which includes providing technical services and consulting to a variety of sectors, including the government); and popularizing knowledge about the food sector.

THE UNIVERSITY SUSTAINABILITY STRATEGY PROGRAM

The University Sustainability Strategy Program coordinates the development and application of sustainability strategies through education, training, and outreach, as well as by operating academic institutions and organizations in all sectors of society to promote a vision of the country based on social justice, economic equality, and environmental responsibility.

The University Sustainability Strategy Program is coordinated by EcoPuma, whose goal is to incorporate sustainability objectives into the UNAM's everyday activities.

It conducts studies and research projects applied to sustainability sciences in order to solve complex socioenvironmental problems and improve the environmental, economic, social, and governmental performance of institutions, companies, and public and private sector entities.

The strategy program develops professionals and researchers who incorporate sustainable development into their everyday activities and decision-making processes.

It also designs and promotes communication strategies on environmental and sustainability issues from a science popularization perspective.

THE UNIVERSITY CLIMATE CHANGE RESEARCH PROGRAM

The University Climate Change Research Program was created in April 2010. Its objective is to promote research that confronts; mitigates; and, if possible, repairs the adverse effects of climate change in our country, as well as to anticipate possibilities for sustainable national development. It places a major emphasis on disseminating its research results, both within the academy and in different sectors of society. After all, it would be impossible to make a difference regarding climate change without an informed and committed general public.

The program's work model is based on multidisciplinary and multi-institutional analysis that explores the ecological, environmental, technological, socio-economic, and political implications that climate change has and will have on Mexico and the world. It also provides information for decision-making processes, creating public policies at the local and regional levels and helping create an international strategic vision for addressing climate change.

THE PEDREGAL DE SAN ÁNGEL ECOLOGICAL RESERVE

Pedregal de San Ángel is an urban nature reserve managed by the UNAM that contains a unique 237-hectare dry scrubland ecosystem inhabited by around 1,500 native species that are adapted to the conditions in the southern Valley of Mexico. The reserve covers a third of the total area of University City and represents the natural heritage of the UNAM—and therefore of Mexican society as a whole.

THE OCEANOGRAPHIC PLATFORMS DEPARTMENT

The UNAM has two oceanographic vessels, *El Puma* and the *Justo Sierra*, which are respectively based in Mazatlán, Sinaloa and Tuxpan, Veracruz. The Oceanographic Platforms Department is in charge of operating and maintaining these vessels to ensure that they continue to serve as efficient tools for the development of ocean sciences in Mexico.

THE SCIENCE POPULARIZATION DEPARTMENT

The Science Popularization Department was founded in 1987, but its predecessors date back to 1970. It is dedicated to popularizing the scientific and technological knowledge developed at the UNAM and elsewhere, a mission it pursues through museums and exhibitions; a variety of publications, radio, and television programs; conferences; fairs; summer courses; and other activities targeting the general public. It also helps train young professionals in the field of science popularization.

MUSEUMS

As evidenced by its flood of annual visitors, Universum is a museum that has attained considerable prestige. It is the largest museum of its kind in Latin America. Its guiding mission is to further the goals of the Science Popularization Department. It has both permanent and temporary exhibitions, most of which are instructional and interactive in nature. It offers guided tours to schools; presents plays, movies, and lectures; and organizes courses and fairs, working with the Scientific Research Subsystem and personnel assigned by the Science Popularization Department. Universum is a meeting place for both experts and non-experts.

The Museum of Light is a comprehensive, inclusive space that approaches light from the viewpoints of science, technology, and art, thus offering a multifaceted discourse and providing meaningful experiences to all visitors. This space is unique both for its subject matter and for its means of communicating the many different aspects of light as a phenomenon.

INAUGURATED IN 1992, THE UNIVERSUM Science Museum is a pioneering institution in Latin America. It has infrastructure for courses, workshops, conferences, concerts,

and exhibitions, including the José de la Herrán Planetarium, gardens, and a play area. Its permanent exhibition spaces take up 12,000 m² of its 25,000 m² total surface area.



The Tlayúa Regional Mixtec Museum currently has two modules: the first has a reading room with bibliographic material from Tepexi; the second consists of the Shelton P. Applegate Hall, which transports visitors to the seas of the Ordovician Period (475 million years ago), taking them on a journey through the mineral kingdom in all its richness and offering a brief description of the language of rocks. The splendid diversity of fossil life from the Cretaceous to the Paleogene and the Neogene is displayed through well-preserved organisms whose lives and relationships with the present are clearly explained through visual aids.

The UNAM Geology Museum houses invaluable geological patrimony and works to popularize knowledge of the earth sciences.

The Geophysics Museum exhibits the field of geophysics and all disciplines involved in studying the earth, including seismology, volcanology, oceanography, meteorology, geomagnetism, and solar physics. It also exhibits different instruments that have measured the country's seismology over time, some of which remain in use today.

THE MUSEUM OF LIGHT occupies the Lesser School of the old San Ildefonso College. It is a thematic museum that explores the phenomenon of light and its relationship with science, technology, and art.

THE TLAYÚA REGIONAL MIXTEC MUSEUM in Tepexi de Rodríguez, Puebla, popularizes geological and paleontological concepts. Its archive includes fossils discovered in the Tlayúa quarry and Pie de Vaca.



**HUMANITIES AND
SOCIAL SCIENCES RESEARCH**

THE HUMANITIES SUBSYSTEM

THE DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES is made up of 26 academic bodies that are primarily focused on research: 11 institutes, seven centers, two academic units, and six university programs. It also has two museums and two outreach facilities, staffed by 942 researchers, 621 technical academics, 70 professors, and 105 postgraduate adjuncts.

INSTITUTES

THE ANTHROPOLOGICAL RESEARCH INSTITUTE

Created in 1973, its predecessor existed in the Anthropology Department of the Historical Research Institute, founded ten years prior. Its purpose is to conduct comprehensive interdisciplinary research into physical anthropology, archaeology, social anthropology, ethnology, and linguistic anthropology, with the goal of expanding knowledge of Mexico's cultural characteristics—ranging from the distant past to the trends that will mark the future. The institute currently conducts studies that contribute to the understanding and protection of our cultural heritage, as well as to an anthropological understanding of our contemporary societal dynamics. It also offers consulting on the preservation and analysis of monuments and archaeological materials.

The Anthropological Research Institute oversees the anthropology postgraduate program. In August 2016, it launched a bachelor's degree in Anthropology in collaboration with the Center for Anthropological Studies at the Faculty of Political Science and the Philological Research Institute.

THE BUILDING THAT HOUSES the Anthropological Research Institute was designed by the architect Fidel González and has three irregular floors with a central patio. It contains Forensic Anthropology, Genetic Anthropology,

Visual Anthropology, Phytolith, Osteological Anthropology, Paleoethnobotany and Paleoecology, Paleozoology, Prehistory and Evolution, Archaeology, and Radiocarbon laboratories.



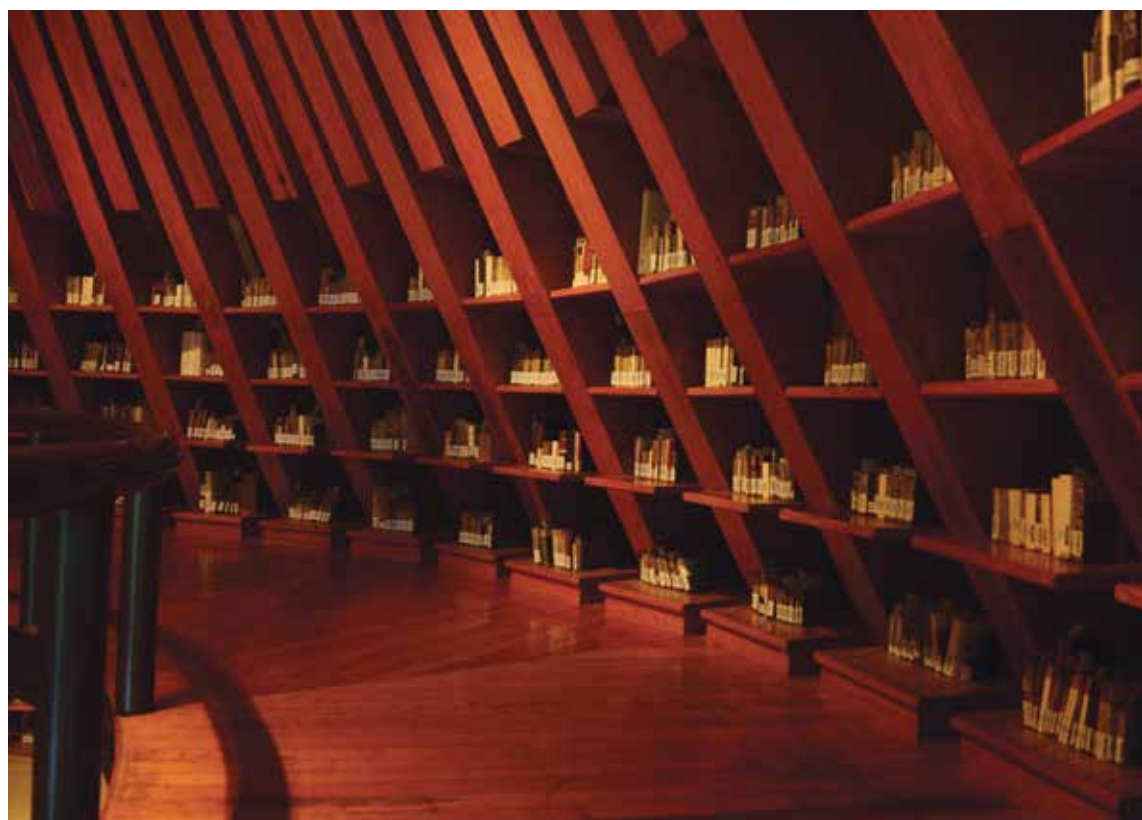
THE BIBLIOGRAPHICAL RESEARCH INSTITUTE

This Institute was established in 1967 with the primary goal of directing and coordinating the labors of the National Library and Newspaper Archive, which the federal government placed under the UNAM's control in 1929. Its principal mission is to generate information on its archives, and its responsibilities include the conservation, organization, cataloging, preservation, diffusion, and study of the nation's bibliographic records.

The Bibliographical Research Institute serves Mexican society in many ways, such as through the Mexican Digital Newspaper Archive, which is open to the public over the internet. It manages many databases, including the Mexican Press Service, which analyzes the domestic press, as well as others that provide information on the country's archival heritage.

THE ARCHITECTS ORSO NÚÑEZ RUIZ VELASCO and Arturo Treviño designed the Bibliographical Research Institute in the form of two large volumes, five stories each, connected by a dome. The building houses the National Library and

Newspaper Archive, as well as an annex, connected by a tunnel, for the Rare Book Room; this space includes the magnificent Ernesto de la Torre Villar Reading Room, with a conical design and wooden bookshelves.



THE LIBRARY SCIENCE AND INFORMATION RESEARCH INSTITUTE

Created in 1981 as the University Center for Library Research, this body became the Library Science and Information Research Institute in 2012 in order to broaden the scope of its research, expand its popularization activities, and further develop human resources in library science and information studies. Both its publications and its educational and research programs have made it a model in Latin America. The changes accompanying the rise of new information and communications technologies are also present in its areas of research.

The Library Science and Information Research Institute functions as an advisor to the recently created bachelor's program in Documentary and Archive Management, offered by the National School of Higher Studies – Morelia. It also provides essential teaching work for the BA in Library Science offered by the Faculty of Philosophy and Letters, as well as the MA and Ph.D. programs in Library Science and Information Studies.

THE ECONOMIC RESEARCH INSTITUTE

Formally constituted in 1968, its mission is to provide scientific knowledge at the service of Mexico's development, conducting high-impact research that analyzes and provides solutions for economic problems at the national and international levels. It contributes to the design and application of policies that benefit the country and the majority of its population. Its lines of research include industrial policy, technological innovation, productive development and employment, food security, tax studies, labor markets, the development of human capital, and poverty and inequality.

The Economic Research Institute also contributes to the Economics and Latin American Studies postgraduate programs, and it provides counsel for the BA in Local Studies and Local Administration offered by the National School of Higher Studies - Morelia.

IN 2007, THE ECONOMIC Research Institute took possession of the facilities designed by the architect Héctor Vega Castelán in the Humanities Research Campus; it has a total area of 8,600 m².

Its design addressed the need for integration into the surrounding building complex. The facilities comprise two blocks, one for research and the other for complementary areas, divided by a landscaped area.



THE AESTHETIC RESEARCH INSTITUTE

Founded in 1935, its primary mission is the study and instruction of art history, criticism, and theory, as well as the protection of Mexico's artistic and cultural heritage. The high academic performance of its researchers has made it the most important such institution in Mexico—and among the most renowned in all of Latin America. It is currently preparing the History of the Arts in Mexico.

The academics of the Aesthetic Research Institute have played an essential role in creating the bachelor's program in Art History and in the management and dissemination of the country's artistic heritage. The institute collaborates with the Faculty of Philosophy and Letters in the Art History postgraduate program and with other academic bodies on the Arts and Design postgraduate program.

THE AESTHETIC RESEARCH INSTITUTE engages in teaching and research; it is also a key player in conserving the country's artistic and cultural heritage. It provides external services through the

Justino Fernández Library, the Manuel Toussaint Photographic Archive, and the Art Diagnostics Library. It can be found at the Humanities Research Campus of University City.



THE PHILOLOGICAL RESEARCH INSTITUTE

This institute was created in 1973 through the consolidation of various centers dedicated to philological research. It currently contains the Literary Studies, Classical Studies, Hispanic Linguistics, Maya Studies, and Poetics research centers, as well as the Indigenous Languages, Critical Editing, and Hermeneutics research seminars. Its philological research has contributed to a greater understanding of the languages and cultures that form the indigenous, Hispanic, and classical roots of our civilization. It is currently preparing the History of Literature in Mexico.

The research institute collaborates with the Faculty of Philosophy and Letters on the postgraduate programs in Literature, Linguistics, and Mesoamerican Studies, as well as with other academic bodies on the master's degree in Teaching. It also contributed to the development of the bachelor's degree in Intercultural Literature offered by the National School of Higher Studies - Morelia.

THE PHILOSOPHICAL RESEARCH INSTITUTE

Ever since its founding in 1940, the Philosophical Research Institute has focused on the production and popularization of philosophy with an emphasis on clarity of expression, precise and rigorous discourse, solid argumentation in discussion, and a constant search for the truth. One product of its research is FILOS, a database of philosophy in Mexico that contains bibliographical data on the philosophical documents published here since 1986.

Its areas of research cover epistemology, aesthetics, ethics, the philosophy of science, the philosophy of law, the philosophy of history and intellectual history, the philosophy of language, the philosophy of the mind, Mexican philosophy, political philosophy, the philosophy of religion, the history of philosophy, logic, and metaphysics.

The research institute collaborates with the Faculty of Philosophy and Letters on the UNAM's postgraduate programs in Philosophy and Philosophy of Science, both held in high national and international regard.

THE PHILOLOGICAL RESEARCH

Institute's Rubén Bonifaz Nuño Library has an archive of nearly 160,000 volumes, 10,000 other materials, and over 980,000 journal issues.

THE BUILDING THAT HOUSES the

Philosophical Research Institute is shaped like three volumes, three stories each, arranged in the form of an "H." The world-renowned Eduardo García Máynez Library is also part of the institute.



THE HISTORICAL RESEARCH INSTITUTE

Founded in 1945, this institute has become a model for history professionals in Mexico and Latin America. It is committed to studying the processes that have occurred in the past—but also to focusing on their present-day impact. Its lines of research include the history of indigenous peoples, colonial history, modern and contemporary history, and world history, and it offers 21 specialized seminars. The research conducted by the institute also emphasizes the writings, thinking, culture, and sensibilities of Mexico's indigenous peoples.

The institute's researchers collaborate with the BA in History and the History postgraduate program offered by the Faculty of Philosophy and Letters, as well as with the Faculty of Architecture and the Faculty of Higher Studies - Aragón on the postgraduate program in Architecture.

THE LEGAL STUDIES INSTITUTE

Ever since its creation in 1940 as the Comparative Law Institute, the Legal Studies Institute has been one of the most important research institutions in the field, both nationally and internationally. It analyzes legal phenomena through the creation, investigation, teaching, and application of law, thus contributing to the development of the legal science, the constant improvement of our institutions, and the solution of diverse problems facing Mexico today. It interacts with all three branches of government as part of its research. It also has a wide-ranging program dedicated to the popularization of legal knowledge, which is available online. The institute has recently developed and consolidated the Tijuana Project and has begun working on the Digital Academic Projects Department. In collaboration with the Faculty of Law and the Faculties of Higher Studies in Acatlán and Aragón, it oversees the doctoral program in Law.

THE RAFAEL GARCÍA GRANADOS

LIBRARY, part of the Historical Research Institute, is focused on the history of Mexico across all periods; it also contains materials on world history.

THE HÉCTOR FIX-ZAMUDIO

AUDITORIUM, part of the Legal Studies Institute, has a 180-person capacity and is equipped with modern audiovisual technology.



THE SOCIAL RESEARCH INSTITUTE

Founded in 1930, this institute is the oldest in the UNAM's Humanities Subsystem and the largest of its kind in both Mexico and Latin America. It is organized into seven lines of research: agrarian studies, studies of education and science, urban and regional studies, social actors and processes, population and demographic studies, political institutions, and society and culture. The institute, through the Unit for Social Research and the Study of Public Opinion, has generated important documentation on different aspects of public life in Mexico.

Its primary objective is to conduct research in the field of the social sciences and thus engage in the understanding and resolution of the nation's challenges, in accordance with the principles of freedom of research and theoretical-methodological pluralism. The institute contributes to the UNAM's Political and Social Sciences, Administration, and Urbanism postgraduate programs, as well as the master's program in Political Sociology and Urbanism, which are part of the Dr. José María Luis Mora Research Institute.

THE BUILDING CURRENTLY OCCUPIED by the Social Research Institute was inaugurated on December 6, 2006. It has three floors and 6,000 m² of research stations, classrooms, and a vast library dedicated to research in the social

sciences. The institute seeks to help understand and overcome a range of challenges facing Mexico, always adhering to the principles of freedom of research and theoretical-methodological pluralism.



THE EDUCATIONAL RESEARCH INSTITUTE

Founded in 1976 as the Center for Studies on the University, it was transformed into the Educational Research Institute in 2006. Its lines of research, which are focused on education and university history, address the central problems facing the country's development, making the institute an obligatory reference point for discussions and analytical perspectives in different fields. It is also responsible for conserving, organizing, and disseminating the information contained in the UNAM Historical Archive; its 143 documentary divisions preserve the memory of the institution's past. The institute has 27 lines of research, which include curriculum, education and outreach, sociocultural diversity in education, the history of education and culture, education policy and educational theory, and philosophy, among others.

It collaborates with the Faculty of Philosophy and Letters on the Pedagogy postgraduate program and with 13 other academic bodies on the master's degree in Teaching.

IN AUGUST 2006, the building that currently houses the Educational Research Institute was inaugurated. It has five floors with conference rooms, a library, a bookstore, a multipurpose room,

an auditorium, and research spaces. The UNAM Today museum is run by the institute and can be found on the old site of the Royal and Pontifical Museum of Mexico.



INSTITUTO DE INVESTIGACIONES
SOBRE LA UNIVERSIDAD
Y LA EDUCACIÓN

CENTERS

THE CENTER FOR RESEARCH ON LATIN AMERICA AND THE CARIBBEAN

This academic space was founded in 1979 as the Center for Latin American Studies and received its current name in 2007. Its lines of research are rooted in philosophy and the history of ideas, literature and essays, history, politics, economics, and society. With their different analytical focuses, these different lines of research contribute to a better understanding of the region on issues such as regional integration, migration, the environment, cultural heritage, autonomies, and networks of knowledge, among others.

The center plays a major role in integrating the various bodies that study Latin America and the Caribbean throughout the region itself, as well as in North America, Europe, Asia, and Africa. It collaborates with other academic associations on the Latin American Studies postgraduate program, thus helping to train new experts. It also collaborates on a variety of undergraduate and graduate programs, both at the UNAM and at other domestic and foreign institutions.

THE CENTER FOR RESEARCH on Latin America and the Caribbean is located in the Humanities Tower II, a building designed by Raúl Cacho, Félix Sánchez Baylón, and Eugenio Peschard. It includes

the Simón Bolívar Library, which contains over 22,000 books and 300 periodicals. Below, we can see some of the activities organized as part of the Rigoberta Menchú Extraordinary Chair.



THE CENTER FOR RESEARCH ON NORTH AMERICA

Formally created in 1993, with antecedents in the work conducted by the University Research Program on the United States of America, this center's essential focus is on specialized knowledge of the US and Canada, as well as their relationship with Mexico. Through multidisciplinary and interdisciplinary research, it helps strengthen Mexico's presence in North America and the world.

The center promotes an objective, pluralistic understanding of the region through its six lines of research: security and governability; economic processes, integration, and development; migration and borders; cultural identities and processes; social actors, structures, and processes; and political ideas and institutions. It also collaborates with important academic institutions such as the Woodrow Wilson International Center for Scholars. The center's academic staff contributes to the UNAM's Political and Social Sciences postgraduate program and the master's degree in Mexican-American Studies at the Faculty of Higher Studies - Acatlán.

THE HUMANITIES DEPARTMENT'S Mario de la Cueva Auditorium has an 80-person capacity, a balcony, and modern technology for exhibitions and projections. It is located on the 14th floor of the

Humanities Tower II, originally known as the Tower of Science, the tallest building in University City. Until the 1970s, it was the tallest concrete building in Mexico City.

THE CENTER FOR INTERDISCIPLINARY RESEARCH IN THE SCIENCES AND HUMANITIES

The center for interdisciplinary research in the Sciences and Humanities has the objective of coordinating, promoting, and conducting interdisciplinary research projects in the fields of the sciences and the humanities, both in Mexico and abroad. Ever since its founding in January 1986, it has built bridges between scientific, social, and humanistic disciplines in order to untangle complex problems and realities, as well as to generate original knowledge and analyses, solving problems with an interdisciplinary approach.

Its research programs include the History of Science; Literature and the Social Sciences; Cyberculture and the Development of Knowledge Communities: The World in the Twenty-First Century; Cities, Administration, Territory, and the Environment; the Production of Basic Goods and Services, Power, Subjectivity, and Culture; Feminist Research; Law and Society; and Visual and Cultural Studies.

The center actively participates in the academic committees of the master's program in Social Work and in the UNAM's Latin American Studies postgraduate program.



THE CENTER FOR MULTIDISCIPLINARY RESEARCH ON CHIAPAS AND THE SOUTHERN BORDER

The center for multidisciplinary research on Mesoamerica and Chiapas was established in 1985, comprising a non-governmental organization founded by the university and four local institutions. In 1998, the UNAM decided to fully incorporate the center into the university, granting it its own budget and academic and administrative positions. After this restructuring, it was renamed the Multidisciplinary Research Program on Mesoamerica and the Southeast and was managed by the Anthropological Research Institute.

In March 2015, the University Council approved its transformation into the Center for Multidisciplinary Research on Chiapas and the Southern Border, a division of the Humanities Department. Its primary objective is to promote and conduct multidisciplinary research into the social sciences and humanities in relation to Chiapas and the southern border.

THE CENTER FOR GENDER STUDIES

In december 2016, the University Council approved the transformation of the University Gender Studies Program into the Center for Gender Studies. The center connects gender studies to other critical disciplines in order to understand gender equality in a pluralistic, interdisciplinary manner. It seeks to act as a bridge and a frontier in the production of research and activities that strengthen gender equality. It also engages in postgraduate-level instruction.

THE CENTER FOR MULTIDISCIPLINARY

Research on Chiapas and the Southern Border is located in downtown San Cristóbal de las Casas, Chiapas. The building, which is representative of the region's traditional architecture, includes research spaces, a multipurpose room, a publishing area, a bookstore, and the Paul Kirchhoff Library.

A RECITAL BY THE MUSICAL GROUP

Las Moscas Muertas during the unveiling of the magazine *Debate Feminista* at the House of the Humanities.



THE PENINSULAR CENTER FOR SOCIAL SCIENCES AND THE HUMANITIES

Created in 2007 with a basis in the Academic Unit for Social Sciences and the Humanities (founded on June 10, 2004), its mission is to strengthen and promote interdisciplinary research, develop human resources, and engage in academic outreach in the social sciences and humanities from its perspective and zone of influence in the Yucatán Peninsula.

Its teaching program offers a BA in Intercultural Development and Management and an MA in Social Work in collaboration with the National School of Social Work. It also offers courses in seven languages: English, French, Japanese, German, Italian, Spanish for Foreigners, and Maya, as well as two courses in Maya- and English-language instruction and in translation between Maya and English in specific fields, such as health and law.

THE REGIONAL CENTER FOR MULTIDISCIPLINARY RESEARCH

Located in Cuernavaca, Morelos, this center occupied an important role in social sciences and humanities research since its founding in 1985, primarily with respect to studying specific problems in local, regional, national, and international contexts. When it comes to social problems, the center engages in teaching activities and helps train academics conducting multidisciplinary research in fields such as global change; globalization and development; education, equality, and gender; the social imaginary; population; migration and social transformations; regional studies; culture, politics, and diversity; cultural sentiment and the ethics of coexistence; socioenvironmental studies; violence, rights, and health; and government and public policy.

In terms of training researchers, the center participates in the Political and Social Sciences postgraduate program and the master's program in Social Work. In 2013, at the initiative of the Social Research Institute and the Regional Center for Multidisciplinary Research, an MA in Social Demography was created as part of the Political and Social Sciences postgraduate program, with the first students matriculating in January 2014.

THE BUILDING OF THE FORMER Rendón Peniche Asylum, built in 1919 in Mérida, Yucatán, which has been repurposed as the Peninsular Center for Social Sciences and the Humanities. It is a classic example of post-revolutionary Neomaya architecture.

THE REGIONAL CENTER for Multidisciplinary Research is located on the campus of the Autonomous University of Morelos.



UNITS

THE ACADEMIC UNIT FOR REGIONAL STUDIES, LA CIÉNEGA

Located in Jiquilpan de Juárez, Michoacán and inaugurated in December 2005, the La Ciénega Academic Unit for Regional Studies conducts and promotes regionally based research on social dynamics and their actors, the environment, and territory, from the local to the global. It also engages in popularizing knowledge and culture, as well as in outreach to regional social sectors as part of an effort to search for better development models.

THE RESEARCH UNIT ON CULTURAL AND SOCIAL REPRESENTATIONS

This research unit was inaugurated in October 2015 in the facilities of the National School of Higher Studies - Morelia. A division of the Humanities Department, the Research Unit on Cultural and Social Representations uses a multidisciplinary and interdisciplinary approach to study society—in all its diverse cultural, institutional, economic, political, and social manifestations—through the concept of representation, with the goal of understanding how these phenomena are understood, assumed, and experienced in order to influence social and intercultural practices.

THE UNAM HAS LEASED the Lázaro Cárdenas Center for the Study of the Mexican Revolution, a documentary and bibliographical archive and museum devoted to Lázaro Cárdenas. This center is part of the Academic Unit for Regional Studies in Jiquilpan de Juárez, Michoacán.

THE RESEARCH UNIT on Cultural and Social Representations organizes the Identity, Culture, and Society Seminar.



UNIVERSITY PROGRAMS

University programs and seminars provide an alternative and complementary method for studying various issues and problems in Mexico and around the world. Their work has proposed policies aimed at improving the quality of life for Mexico's population and bettering practices of governance.

THE UNIVERSITY BIOETHICS PROGRAM

This program coordinates and conducts interdisciplinary research with a philosophically and scientifically rigorous foundation from a pluralistic, secular perspective. Its primary objective is to analyze the ethical, social, and environment implications of different fields, including biomedicine, biotechnology, the environment and the relationship between humans and other animals, civil and political-legal problems, and applied neuroscience, to name a few. The program works toward the development of a public, secular, and pluralistic culture of bioethics. It was founded in September 2012, with a predecessor in the Ethics and Bioethics Seminar.

THE UNIVERSITY ASIAN AND AFRICAN STUDIES PROGRAM

Emerging from the University Asian Studies Seminar, this program was created in May 2017 with the goal of promoting interdisciplinary and multidisciplinary research on issues relevant to Asian and African communities, as well as fostering academic, social, and cultural ties between Mexico and the nations of Asia and Africa.

By studying and reflecting on processes at work in these regions of the world, participants also learn to understand similar dynamics in Mexico and Latin America in terms of economics, geopolitics, security, demography, youth issues, and employment, among others. The guiding mission of the University Asian and African Studies Program emphasizes the construction of cooperation and dialogue mechanisms with national and international non-governmental organizations interested in Asian and African issues.

THESE IMAGES ILLUSTRATE the work of university programs. The top image shows a talk on plagiarism organized by the University Bioethics Program; the middle image shows a meeting of the University

Asian and African Studies Program; and the bottom image is from a cycle of lectures titled "Human Rights Today," organized by the University Human Rights Program at the Medical School Palace.

THE UNIVERSITY HUMAN RIGHTS PROGRAM

The University Human Rights Program has its origins in the International Security, Justice, and Democracy Conference, organized by the UNAM and the Iberoamerican Constitutional Law Institute, which brought together renowned national and international experts. Among other objectives, it seeks to create academic institutions that study the ways in which Mexican society is working to defend human rights.



THE UNIVERSITY URBAN STUDIES PROGRAM

Created on August 11, 1994, the University Urban Studies Program has established itself as an important academic space. Its purpose is to strengthen and interconnect the work of academics collaborating with government institutions and various social actors involved in design, planning, and administration processes for cities and territorial organizations in general. The program conducts conferences, seminars, workshops, and other popularization and outreach activities.

THE UNIVERSITY DEVELOPMENT STUDIES PROGRAM

The Multidisciplinary University Development Studies Program was created on September 22, 2011. By means of this platform, the UNAM has responded to the growing need for a space dedicated to reflecting on issues of equality, solidarity, and other social issues in contemporary societies. It seeks to conduct research that creates solutions to economic and social problems at the local, regional, and international levels.

THE UNIVERSITY CULTURAL DIVERSITY AND INTERCULTURALITY STUDIES PROGRAM

Created on March 3, 2014, with a direct predecessor in the University Program on Mexico as a Multicultural Nation, this program was founded in 2004. It aims to generate, develop, and disseminate knowledge on cultural diversity and interculturality in Mexico and elsewhere through new theoretical and methodological perspectives.

The program's instructional mission is centered on elective courses offered in various departments of the university under the rubric "Mexico: A Multicultural Nation." It also runs a scholarship program for low-income indigenous students.

PRESENTATION OF THE REPORT on Development in Mexico 2016 by the University Development Studies Program in the Humanities Department's Jorge Carpizo Auditorium.

VII CARLOS MONTEMAYOR Poetry Festival of the Languages of the Americas, organized by the University Cultural Diversity and Interculturality Studies Program, held in October 2016 at the University Cultural Center's Nezahualcōyotl Hall.



NATIONAL SERVICES

Throughout its existence, the university has played a central role in the conservation of many important national services, a task designated to it by the federal government.

THE NATIONAL LIBRARY AND NEWSPAPER ARCHIVE

The Bibliographical Research Institute administers the National Library and Newspaper Archive, as well as the digital version of the latter. It contains, conserves, expands, organizes, and offers access to Mexico's bibliographic heritage. According to its most recent user census, the National Library attended to 13,650 on-site users and 5,170 online users, while the National Newspaper Archive attended to 25,499 on-site users and 3,222 online users. The Digital Newspaper Archive has 1,239 registered users and the system's web pages have been consulted 1,652,699 times, a figure that includes both internal and external sessions. Its electronic catalog, Nautilo, has been consulted 1,434,616 times; the number of specialized researchers at the National Library came to 22,179, while 291,663 people consulted the National Newspaper Archive's collections, both contemporary and historical.

THE NATIONAL LIBRARY conserves Mexico's bibliographic memory. With an archive of over 1,250,000 books and documents, it is the country's most important library.

THE NATIONAL NEWSPAPER ARCHIVE, administered by the UNAM, houses, organizes, preserves, and disseminates periodical materials published across Mexico. It contains materials that date back to 1665.



MUSEUMS

The university museums affiliated with social science and humanities research are fundamentally educational and reflective spaces. Two new museums opened their doors in 2011: the Women's Museum, the first of its kind in the country, which seeks to promote a culture of equality and demonstrate women's contributions to Mexico's nation-building through a series of interactive academic activities; and the Museum of Mexican Constitutions, which expands our understanding of Mexico's history by exploring its constitutions. The latter museum was remodeled in 2016, reopening in May 2017 in order to celebrate the centenary of the current Mexican constitution through interactive tours and workshops that involve the community— particularly children, whom it seeks to inspire with ideals of participation, solidarity, responsibility, and human rights.

The Humanities Department is also working closely with other organizations to make the Interactive Language Museum a reality; it is currently scheduled to open in 2018.

The Humanities Department also runs the House of the Humanities and the University Book House, which organize seminars, colloquia, book launches, certification courses, workshops, concerts, exhibitions, fairs, and other literary events. The House of the Humanities has a bookstore that sells the publications issued by the Editorial Program and the Humanities Department. It also runs the Clementina Díaz y de Ovando Mobile Bookstore, which travels between different university facilities to make books available to the community and fulfill its goals of cultural outreach.

THE CLEMENTINA DÍAZ y de Ovando Mobile Bookstore in the parking lot of the Humanities Department. The vehicle went into service on February 7, 2017.

THE WOMEN'S MUSEUM was founded on March 8, 2011 in the building that once housed the old University Press in Mexico City's historic downtown area.

THE WOMEN'S MUSEUM THE OLD UNIVERSITY PRESS

The mission of the Women's Museum is to revise Mexican history, from the pre-Hispanic era until the present day, in a way that lends visibility to women's historic role and contributions to the nation. In alliance with academic institutions and civil society, the Women's Museum seeks to create a society based on gender equality and respect for human rights, as well as a citizenry that has overcome patriarchal atavisms and all types of discrimination.

The museum offers visitors a wide range of awareness-raising cultural and artistic activities. It offers courses, workshops, conferences, exhibitions, and concerts. It participates in some of the most high-profile cultural circuits and gatherings in Mexico City, such as Museum Night, the MICGender International Film Festival, and the UNAM International Film Festival. The museum also houses the Clementina Díaz y de Ovando Documentation Center, which specializes in women's history, human rights, and gender.



THE MUSEUM OF MEXICAN CONSTITUTIONS THE OLD TEMPLE OF SAN PEDRO AND SAN PABLO

Once home to the College of San Pedro and San Pablo, founded by the Jesuits in 1574, this building has been used for many purposes over the years. For instance, it was the site of Agustín de Iturbide's coronation as emperor, the first Constituent Congress, and the signing of Mexico's first constitution in 1824. It has also served as a military school, a barracks, a hospital, and a warehouse—until José Vasconcelos ordered that it be restored in 1922 and become the National Newspaper Archive, which was moved to University City in 1979. The old temple was the home of the Museum of Light from 1996 until October 2010 and now contains the Museum of Mexican Constitutions.

THE UNAM TODAY MUSEUM THE ROYAL AND PONTIFICAL UNIVERSITY OF MEXICO

The UNAM Today Museum was created as an essential means of recognizing the UNAM and all those who have made it the country's most important university. Its mission is to carry out interdisciplinary work toward promoting knowledge of the breadth, diversity, richness, and significance of the UNAM's labors. Its home is the old site of the Royal and Pontifical University of Mexico, declared a historic monument by the National Institute of Anthropology and History in 1935. After an exhaustive restoration effort, it now offers the public an exhibit with interactive elements, video projections, and digital screens that narrate the university's fascinating life.

THE OBJECTIVES OF THE MUSEUM of Mexican Constitutions is to place the 1917 Constitution at the center of our political discourse as a living text, breathing new life into the constitution's message and promoting a sense of shared citizenship.

THE UNAM TODAY MUSEUM offers information on the university's history, departments, and historic spaces. Its collections include bibliographic records, promotional materials, awards, and other forms of recognition.



THE MUSEUM OF THE LIFE AND WORK OF LÁZARO CÁRDENAS

The Museum of the Life and Work of Lázaro Cárdenas del Río, located in the facilities of the Academic Unit for Regional Studies in Jiquilpan, Michoacán, exhibits the personal and political achievements of the man honored by its name. The museum approaches General Cárdenas from three different perspectives: the international context, the national context, and his personal biography. This three-part division aims to offer a comprehensive portrait of the most important domestic and global historic events that occurred during his lifetime, many of which involved his direct participation.

Having now received 28,000 visitors, both from across Mexico and abroad, this museum seeks to serve as an important space for teaching and outreach. For this reason, its Temporary Exhibition Space is especially important, allowing for the exhibition of contemporary artistic expressions. This space has facilitated the promotion of young artists from La Ciénega, as well as artists of national and global renown, and it provides a place to show off Mexico's artisanal richness.

THE MUSEUM OF THE LIFE AND WORK OF LÁZARO CÁRDENAS was inaugurated on November 29, 1976, with the goal of showcasing the personal and political accomplishments of the generals Lázaro Cárdenas del Río and Francisco J. Múgica,

as well as different aspects of the Mexican Revolution and issues connected to the region's society, economics, and politics. The university has leased this museum since 2005.



OUTREACH HOUSES

The Humanities Department runs the House of the Humanities and the University Book House, which organize seminars, colloquia, book launches, and other literary events as part of their mission to promote culture.

THE HOUSE OF THE HUMANITIES

The House Of The Humanities has been the home of many inter-institutional projects at the UNAM. In 1979, it housed the Latin American Health Center. From 1980 to 1989, it hosted the University Health Technology Center, dedicated to developing instructional materials to facilitate the learning process in different areas of the health field. Later, from 1989 to 1998, the building became an alternate site for the UNAM's distance learning courses. In February 2000, the building opened its doors to the House of the Humanities, which seeks to popularize knowledge of the social sciences and humanities by organizing a variety of academic activities. The House of the Humanities is also home to the Humanities Department's Editorial Program.

THE UNIVERSITY BOOK HOUSE

The University Book House—a division of the Humanities Department since 1986, when the Asturian Center of Mexico leased the building to the UNAM—is committed to offering the very best in terms of editorial training and promotion. It also constitutes a permanent platform for circulating the research conducted by the institutes, centers, programs, and units of the Humanities Subsystem.

The University Book House promotes activities that seek to strengthen its community's cultural values, and its primary vocation centers on books.

THE HOUSE OF THE HUMANITIES has an auditorium, a multipurpose room, and a videoconference room. It offers courses, recitals, conferences, and film screenings.

THE UNIVERSITY BOOK HOUSE is located in an old two-story palace with a basement that was built between 1914 and 1925 by the architects Miguel Rebolledo and Manuel Gorozpe for Joaquín Baranda and Dolores Luján.



CULTURE

THE UNAM IN CULTURAL PROMOTION

EVER SINCE ITS INAUGURATION in 1910, the UNAM has played an essential role in enriching Mexico's cultural life.

It contributes to the preservation, enrichment, and promotion of a vast historic and artistic heritage, and it endeavors to support and circulate new trends and concepts from both the domestic and international art worlds.

CultureUNAM, the most important university cultural project in Latin America, centers on three central ideas. The first, *an emphasis on youth*, offers audience outreach programs and promotes reading and artistic creation. The second, *the vision of culture as a political and social action*, arises from the conviction that culture and art should not be seen as forms of entertainment, but rather as an integral element of education, emphasizing a critical spirit and contact with reality. And the third, *the connection between science, culture, and art*, seeks to forge connections and unity among different forms of knowledge. Art and science are vehicles that use different instruments of our universe to seek out truth and self-knowledge.

Each year, the UNAM offers over 10,000 music, dance, theater, and film activities, as well as exhibitions, conferences, publications, literary events, workshops, and colloquia that involve the participation of over two million people.

THE EXHIBITION "ANISH KAPOOR: Archaeology and Biology," held at the University Contemporary Art Museum (MUAC, its acronym in Spanish) in 2016, reflected on the possibilities of the creative act through sculptures and large-scale installations.

THE UNAM'S DANCE Department celebrates International Dance Day each year with a wide range of presentations by a variety of dance companies, along with workshops, film series, and talks.

THE UNAM PHILHARMONIC Orchestra, with its 80-year history, is the oldest and most prestigious university orchestra in Mexico. Its home is Nezahualcóyotl Hall.



To enhance the coherence and visibility of its programming, CultureUNAM promotes the development of 11 projects:

1. The International University Theater Festival (February)

This festival offers a week of theater and dramaturgy at the university. It is organized by the Theater Department.

2. The UNAM International Film Festival (February)

The film festival carries out activities that promote audiovisual works and offer reflections on this art form. It is coordinated by the Cinematographic Activities Department.

3. The Book and Roses Fair (April)

A celebration of literature, reading, and books at the UNAM. It includes a book fair and other activities in the University Cultural Center and other areas of the campus. It is organized by the Literature and Publication and Editorial Promotion departments.

4. International Dance Day (April)

A celebration of dance in all its forms, held in different areas of the university campus. It is coordinated by the Dance Department.

5. IM•PULSE

Music • Stage • Summer • UNAM (April)

A special forum for music and stage arts, where professional and up-and-coming companies showcase interdisciplinary work. A platform for encouraging young artists' creative activity.

6. International University Book Fair (August)

This new book fair demonstrates the richness and variety of the university's publishing efforts. Accompanied by an impressive program of cultural events, it is organized by the Publication and Editorial Promotion Department.

7. International Music Day (October)

Music Against Forgetting

The UNAM is a space for recognizing diverse musical practices. Involving the participation of many different professional and amateur artists, this celebration is part of the UNESCO's International Music Day.

8. El Aleph Science and Art Festival (October)

This festival proposes creative and intellectual explorations of art and science as two sides of the same coin: knowledge. The program of events focuses on cutting-edge physics.

9. Experimentation, Technological Innovation, and Avant-Garde Art Month (November)

A space for transdisciplinary work and technological innovation in artistic fields. Experimental and avant-garde projects enrich its programming.

10. Knowledge Campus (November)

Driven by a spirit of debate, renowned artists and academics participate in a collective reflection on the state of culture in the context of the nationalisms and neofascisms characterizing the Trump Era.

11. Great Annual MUAC Exhibition

As part of the large-scale exhibition organized each year at the University Contemporary Art Museum (MUAC), different departments organize complementary activities.

VISUAL ARTS

THE UNIVERSITY CONTEMPORARY ART MUSEUM

The University Contemporary Art Museum (MUAC), designed by the architect Teodoro González de León and located in the University Cultural Center, was inaugurated in November 2008. It is currently a cultural touchstone at the UNAM.

The MUAC is a space that captures the vitality of contemporary art in Mexico and collects the debates at work within it, making it one of the most important platforms for cultural production in the Americas. This museum seeks to produce synergy between aesthetic excitement, intellectual ambition, and social inclusion.

The museum contains art and documentation archives that are essential reserves of university and national heritage; it also houses important works of contemporary Mexican art. It is an agent of knowledge-production that seeks to reflect on contemporary art and culture.

The MUAC collaborates closely with different academic bodies and takes a strong stance in the globalized world. It is administered according to rigorous, cutting-edge criteria focused on creating community, both within and beyond the university.

THE UNIVERSITY SCIENCE AND ART MUSEUM - ROMA

The University Science And Art Museum - Roma encourages, researches, and promotes Mexican design, architecture, and visual art. It is a space that fosters creative collaborations between the university and urban communities in order to provoke critical reflection through the museum experience.

Above left and below:

THE FACILITIES of the University Art Museum cover 13,808 m² of space and are at the vanguard of museology. Its exhibition halls have multimedia staging capacity and darkening systems.

Above right:

THE UNIVERSITY SCIENCE and Art Museum in Mexico City's Roma neighborhood opened its doors in 1999 in an old Porfirian-era house, taking up the activities of the celebrated Aristos University Gallery. In 2006, it relocated to its current home on Calle Tonalá.



FILM

The diverse film programming offered by the UNAM's theaters and film clubs provides a range of options for accessing and understanding different conceptions of cinema. Its film series are complemented with conferences, debates, and talks with filmmakers, which allows for an enriching, reflective approach to this art form. In addition to its numerous festival circuits, the university organizes the annual UNAM International Film Festival, one of the most renowned, avant-garde auteur cinema festivals. This event also includes the Ingmar Bergman Chair in Film and Theater, held in the recently remodeled Carlos Monsiváis, Julio Bracho and José Revueltas theaters in the University Cultural Center—together one of the most important cinema complexes in the city.

THE UNAM FILM LIBRARY

The UNAM has its own film library, one of the most important cinema archives in the country—a benchmark for the conservation and restoration of materials.

This institution recovers, preserves, restores, and promotes the country's film heritage. It fosters the enrichment of cinematic culture in the community through the exhibition of films and the organization of festivals, forums, conferences, workshops, and courses, both within and beyond the university campus.

Without a doubt, the film library serves as an exemplar in terms of film preservation and restoration, managing its archive in accordance with the highest international standards.

THE UNAM FILM LIBRARY provides film cataloging, storage, production, and rental services. Over the course of the year, it organizes a variety of competitions and provides support for the UNAM International Film Festival. The Film

Library also has a collection of antique film technology, an image bank, a documentation center, a cinematographic laboratory, a digital laboratory, and a restoration workshop.



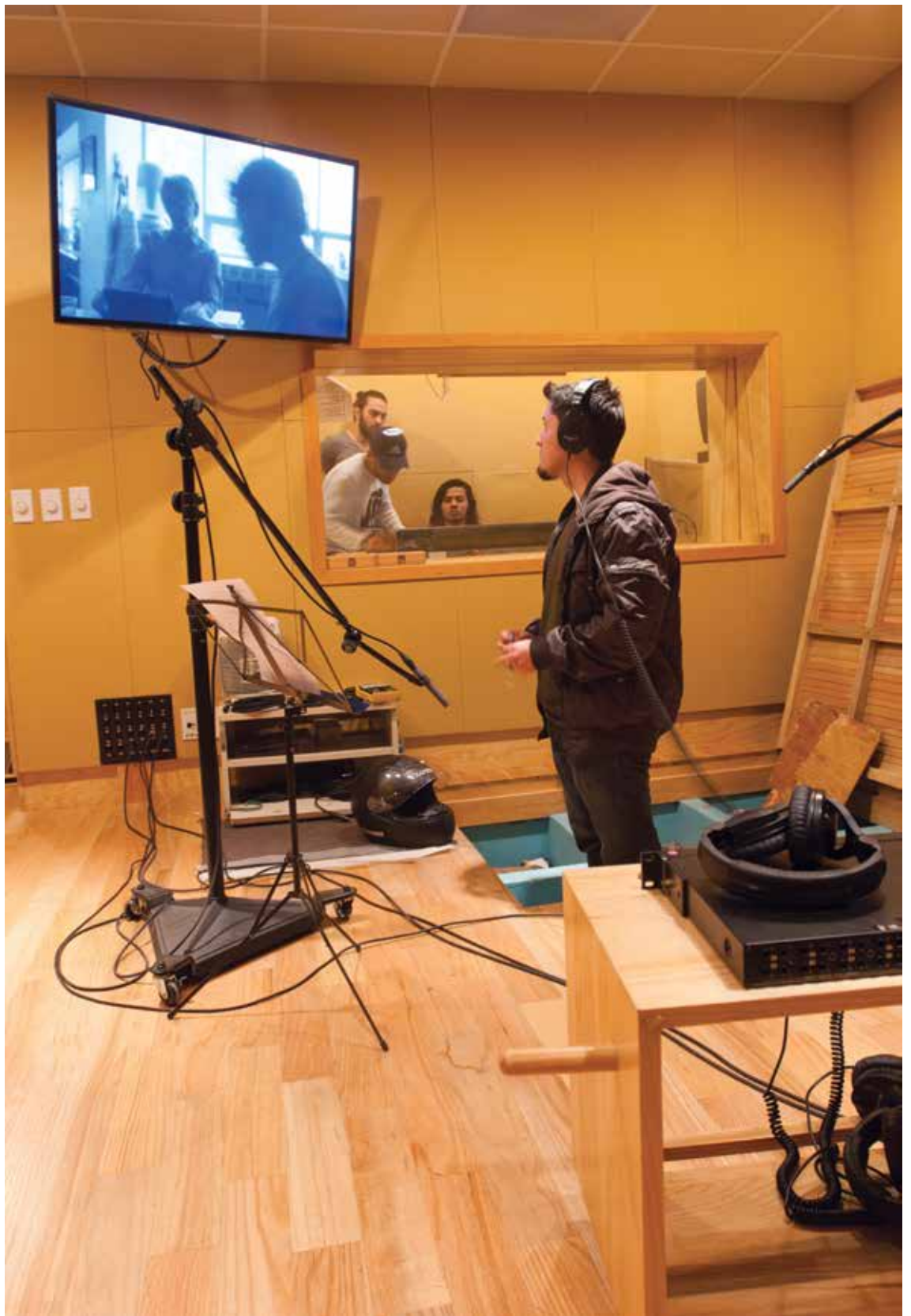
THE UNIVERSITY CENTER FOR FILM STUDIES

The University Center for Film Studies is the oldest film school in Latin America. Its purpose is to offer professional studies for the creation and diffusion of cinema, as well as academic options allowing for the training of specialists in fields such as directing, scriptwriting, producing, cinematography, sound, art direction, education, research, promotion, and cultural administration.

It currently offers a bachelor's degree in Film Studies; the quality of its content, as well as the scope of its practices and production, have made this an especially popular program. With 15 students in each class, it produces an average of 30 short films, which are shown at film festivals and film schools abroad. The center promotes the enhancement of new cinematic ideas and also offers a master's degree in Documentary Film as part of the arts postgraduate program.

THE NEW HOME of the University Center for Film Studies was inaugurated in 2013: two buildings with classrooms, multipurpose rooms, recording and post-production studios, a library, a publication

department, sound recording studios, and a cafeteria, as well as the Manuel González Casanova Theater, which has space for 102 viewers and boasts advanced projection and sound technology.



DANCE

CultureUNAM, through the Dance Department, presents dance performances in the Miguel Covarrubias Hall, the Dance Hall, and other sites; these performances cover a variety of genres and artistic perspectives and involve the participation of national and international dance companies. It also develops important activities for the university community and for society at large, such as the annual International Dance Day, an enormous festival devoted to physical expression through dance, as well as the permanent activities of the Free Dance Workshops.

DanceUNAM is a space focused on the enjoyment of and reflection on the many possibilities offered by dance practices. Its programming dialogues with both tradition and experimentation, recognizing all voices.

This department believes in the need to privilege criticism of contemporary dance and art, which has led it to launch an academic program.

At DanceUNAM, the voices of tradition harmonize with the voices of experimentation in an enriching exercise that promotes contemporary dance and thought, both within and beyond the university. One example of this union is the UNAM Choreography Workshop, an essential reference point for cultural and artistic activity in Mexico. Having operated continuously for 47 years, it provides a space for the creation of and research into new forms of dance production.

The UNAM is committed to promoting and developing this discipline in an environment of innovation and participation within Mexico's political, social, and cultural framework.

THE UNAM'S DANCE Department primarily holds its presentations at Miguel Covarrubias Hall, designed in the style of an Italian theater, its two levels arranged in the shape of a horseshoe; it has a 691-viewer capacity.

THE UNAM STIMULATES experimentation as a means of contributing to the development of dance as an art. This philosophy is evidenced by, for example, the 1970 founding of the UNAM Choreography Workshop by the ballerina and choreographer Gloria Contreras.

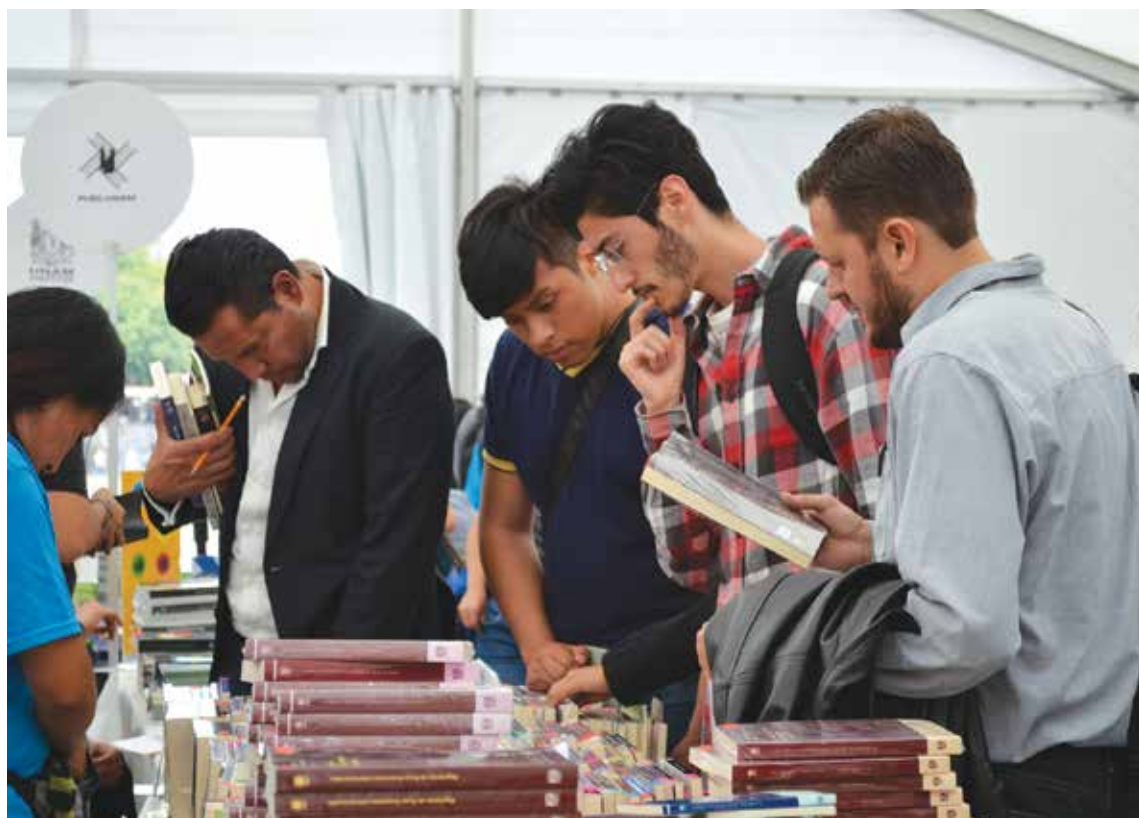


LITERATURE

Promoting the country's literary expressions and activities is one of the UNAM's primary goals. As such, the Literature Department operates under the following objectives: to capture the most representative literary voices and disseminate them through books, periodical publications, digital editions, and cultural activities; to promote contact between authors and readers, as well as interactive forms of participation; and to use awards and contests as a means of fomenting the literary creations of the university community and talented outside writers.

THE LITERATURE DEPARTMENT was founded in March 1986. It publishes the following collections: Film and Literature, Diagonal, The Study, The Bridge, The Tent, Reading Material, Perpetual Present, Hopscotch, Just Stories, and

Living Voice, as well as the magazine *Punto de Partida*, founded by Margo Glantz in 1966, and the online magazine *Periódico de Poesía*. This image is from the Book and Roses Fair, organized to celebrate World Book and Copyright Day.



MUSIC

Over the course of the year, the university presents a series of concerts performed by national and international artists, promotes festivals and competitions for young musicians, and encourages the preservation and restoration of Mexico's rich musical heritage.

The University Cultural Center includes Nezahualcóyotl Hall, home to the UNAM Philharmonic Orchestra and the university's three other major musical groups: the Palace of Mining Symphonic Orchestra, the National Music School Symphonic Orchestra, and the Eduardo Mata Youth Orchestra.

Nezahualcóyotl Hall seeks to provide young concertgoers with a place to approach the world of classical music, as well as a space for professional musicians to develop their careers.

CONCERT OF THE EDUARDO MATA Youth Orchestra in Nezahualcóyotl Hall, which was inaugurated on December 30, 1976. The building's design—the work of the

architect Arcadio Artis and the acoustic designer Christopher Jaffe—was inspired by Amsterdam's Concertgebouw and the home of the Berlin Philharmonic Orchestra.



PUBLICATIONS

The UNAM is Mexico's premiere academic publishing house, renowned both for its production volume and its presence in the country's publishing and graphic arts industry. It is one of the most influential and prestigious publishing houses in the Spanish language.

Every year, the institution produces approximately 1,500 print books, 600 e-books, and close to 200 periodical publications.

The university has organized courses for publishing professionalization initiatives, book fairs, and university bookstores. It has also introduced ISBN numbers and bar codes to the Mexican publishing industry, as well as other technological innovations in print and digital publications.

It has its own network of bookstores as part of the Publication and Editorial Promotion Department, which is in charge of distributing and commercializing the university's book catalog and which represents the institution in domestic and overseas book fairs.

The UNAM organizes the annual International Book Fair at the Palace of Mining, which involves the participation of 600 publishing companies and receives 150,000 visitors, as well as the Book and Roses Fair and the University Book Fair.

THE BOOKSTORE AT THE PALACE of Mining was remodeled in 2015 to incorporate the latest technology, such as the Arbora interactive center. The university's network of bookstores also includes the Henrique González Casanova,

Jaime García Terrés, Jorge Carpizo, Julio Torri, and Your UNAM Store bookstores, as well as the University Book House in the Roma neighborhood and the Zócalo-Pino Suárez Book Passage in the Mexico City Metro.



THE JOSÉ EMILIO PACHECO EXTRAORDINARY CHAIR IN READING PROMOTION, THE UNIVERSITY CULTURAL PROMOTION PROGRAM, UNIVERSE OF LETTERS

The UNAM's first reading promotion program was created to encourage reading and creative writing among university students, as well as to create communities based on written culture. The program includes educational activities, such as the Circle of Letters reading workshops and a web platform that explores forms of collective literary creation.

The José Emilio Pacheco Extraordinary Chair in Reading Promotion is part of the academic activities organized for reading promoters, teachers, and the general public. The Universe of Letters seeks to interconnect the reading promotion activities developed in recent years by the Cultural Promotion Department, such as the Book and Roses Fair and Word Donors, among others. It currently includes a multidisciplinary social service program, the Reading Island, which educates young people as mediators. This program is run in coordination with the Orientation and Educational Attention Department directed by the Foundation for Mexican Letters.

THEATER

The primary goal of TheaterUNAM is to provide innovative theatrical projects that reflect the diversity and quality of Mexico's classical, experimental, and contemporary theater, both for the university community and for the general public. Thanks to the Theater Department's three forums—the Juan Ruiz Alarcón Theater, the Sor Juana Inés de la Cruz Theater, and the Santa Catarina Theater (as well as the mobile Comedy Troupe)—it is able to stage plays with excellent content and production standards, encouraging both children and adults to get involved in the theater and developing a sophisticated audience.

TheaterUNAM offers an extensive program of theatrical events organized as contemporary plays, classical theater for young people, women's voices in the theater, contemporary chamber opera, transmediatic shows with new technologies applied to the dramatic arts, children's theater, and one-person shows.

It also has an extensive training program, offering workshops devoted to improving different technical and staging aspects; theatrical incubators for the professionalization of up-and-coming groups; critical preparation programs for viewers; and events in which the public can engage in conversation with actors and playwrights.

SELF-PORTRAIT IN SEPIA, a work by Luis Enrique Gutiérrez Ortiz Monasterio, performed at the University Cultural Center's Juan Ruiz de Alarcón Theater under the direction of Martín Acosta.

Since the 1960s, experimental theater in Mexico has been synonymous with theater at the UNAM. The Theater Department is responsible for maintaining and enriching this long and important tradition.

THE UNIVERSITY THEATER CENTER

Created in 1962 as an alternative to existing theater schools, the University Theater Center has been the driving engine for theatrical creation at the UNAM since its inception. Devoted to producing research and knowledge toward the development of theater professionals and artists, the center has also positioned itself as a vehicle for innovative projects that seek to reinvent theatrical languages and techniques.

With small-scale enrollment, a four-year study plan, and an academic team of theater professionals, the University Theater Center gives priority to experimentation, artistic and pedagogical innovation, apprenticeship, and participation at all levels of the creative and production process—which involves exchanges between students and professors at the UNAM with other foreign and domestic institutions.



NETWORK OF ARTISTIC LABORATORIES

Besides the University Cultural Center, located in the Pedregal campus, the UNAM has a variety of spaces dedicated to the development of specific projects. Together, these spaces are known as the Network of Artistic Laboratories.

These five facilities are located in central and northern Mexico City. Each focuses on different communities and audiences, promoting projects that address their respective history and context.

TLATELOLCO UNIVERSITY CULTURAL CENTER

This Center focuses on programs that connect art and culture with human rights, resistance, and social and student movements. It also organized the 50th anniversary commemorations of the 1968 student movement.

Created in 2007, this multidisciplinary space is home to important archives and offers permanent and temporary exhibitions at the '68 Memorial, the Tlatelolco Site Museum, the Stavenhagen Collection, and the University Collections Hall. It is also a forum for concerts, film, theater, literature, and dance, and it promotes academic activities, mediation, and artistic education through its focus on art, memory, and community.



CASA DEL LAGO JUAN JOSÉ ARREOLA

This Center focuses on environmental issues and multidisciplinary creation.

Constructed in Chapultepec Forest for the Automobile Club in 1908, Casa del Lago became part of the UNAM in 1929, when it was used to house the Biology Institute. In 1959, it became the first cultural center outside the university campus, quickly gaining a reputation as a reference point for up-and-coming art. It offers an active and inclusive program of events, accessible both to the families visiting the park and to the audiences who regularly attend exhibits, concerts, films, plays, dance performances, and poetry readings.



The Casa del Lago Juan José Arreola also offers workshops in chess, visual arts, dance, ecology, photography, literature, music, and theater. Since 2013, it has directed its focus on Art and the Environment toward political and social issues that encourage reflection on environmental problems.

EL CHOPO UNIVERSITY MUSEUM

This museum focuses on alternative and urban culture, gender, and sexual diversity.

Inaugurated in 1975, El Chopo University Museum has intensified its promotion of cutting-edge culture since 2012. Built at the start of the twentieth century in the traditional Santa María la Ribera neighborhood, its design and structure constitute part of its legacy. It has become a symbol of the area, and its artistic originality and pluralism—encompassing visual art, performance art, music, experimental literature, film, information on alternative cultural movements, and over 90 workshops—have made it a key indicator of the university's cultural work.



THE UNIVERSITY SCIENCE AND ART MUSEUM - ROMA

This museum is dedicated to artistic and scientific experimentation and technological innovation.

A gallery, exhibition space, and studio for unconventional visual arts since 1999, the University Science and Art Museum - Roma focuses on research into the relationships between art, science, and new technologies. It is a multidisciplinary project in which each exhibition involves domestic and foreign artists, curators, academics, and specialists.



EL ECO EXPERIMENTAL MUSEUM

This museum focuses on architecture projects and artistic experimentation.

Designed by the artist Mathias Goeritz in 1952 on a commission from the Mexican businessman Daniel Mont, El Eco was inaugurated in 1953 as a home for contemporary art. It was acquired and restored by the UNAM in 2004, reopening its doors the following year as a university facility. It preserves its interdisciplinary, experimental spirit through artistic practices that investigate architectonic spaces. The museum is located in a central area of the city that carries on a continual, multi-level dialogue with its surroundings and audiences.



MEDIA

UNAM GAZETTE

The *Gaceta UNAM*, or UNAM Gazette, has become a platform bringing the university community together through the diffusion and discussion of developments in teaching, research, promotion, cultural outreach, and athletic activities. It is an essential fixture in university life. A digital version was launched in 2014, broadening its coverage of university activities.

RADIO UNAM AND TV UNAM

The University's assets include communication infrastructure such as Radio UNAM and TV UNAM, which offer spaces in which university activities and scientific and humanistic knowledge can be circulated through in-house programming and high-quality programming from elsewhere.

The UNAM's radio and TV stations have a broad scope in terms of disseminating cultural content and university activities.

FERNANDO RUIZ CALDERÓN and Laura García conducting a TV UNAM program. Since 2005, programming at the university television station has included quality domestic productions and the best

of international cultural offerings. It provides national coverage through cable and satellite TV and also runs a multimedia platform, tv.unam.mx.

WEB UNAM

The University's institutional portal is the most visited educational website in Mexico and, according to Alexa, the fourth-most visited website in all of Mexico. In terms of the online presence of unam.mx, the UNAM occupies the 141st position among over 12,000 universities, according to the biannual list of the best university websites prepared by the Spanish Scientific Research Council.¹ From 2014 to the time of this writing, the university has incorporated over 115,000 digital products into its support programs for the development, cataloging, and publication of digital resources.

¹ July 2017.



CULTUREUNAM COMMUNITY PROGRAM

Connecting the UNAM's cultural and artistic work with the student community, from high schools to postgraduate programs, the CultureUNAM Community stimulates art appreciation and aesthetic reflection.

Through its digital platform, this program allows students to reserve—at no cost—up to two spots for all the activities and facilities managed by the Cultural Promotion Department, as well as non-university institutions that have joined the program.

It also produces quality events in all artistic disciplines that are presented at the UNAM, in addition to the annual arts festival that bears its name, which is held at five simultaneous sites.

CULTURAL DOWNLOAD

The UNAM's cultural podcast is a free service, accessible to the public, that the university provides to the student community and society at large. It can be streamed or downloaded at www.descargacultura.unam.mx.

Since November 2008, this university outreach service has uploaded over 750 titles: novels, short stories, poems, essays, conferences, courses taught by renowned professors, music, scientific materials, and much more.

Downloading CultureUNAM and its mobile apps is an efficient and attractive way of obtaining quality audio content that accompanies users during their commutes, as they exercise or go for a walk, or simply in their free time. Over a million and a half people have accessed this program.

THE CULTUREUNAM COMMUNITY invites students to enjoy theater, music, dance, exhibitions, literature, and a variety of other UNAM cultural projects via its digital platform.

ALBERTO CHIMAL during a recording at the UNAM studios. A wide range of novels, short stories, poems, nonfiction narratives, essays, and plays—many of which are read in their authors' voices— can be downloaded for free through the Cultural Download podcast Cultural Download.



GREAT TEACHERS UNAM

This program seeks to disseminate the results of UNAM research and academic study through high-quality general interest courses on a variety of topics, open to the university community and the general public.

Taught by some of the UNAM's most outstanding teachers, these courses are given in person, but they are transmitted live at a variety of locations and later uploaded to www.descargacultura.unam.mx and www.grandesmaestros.unam.mx.

EXTRAORDINARY CHAIRS

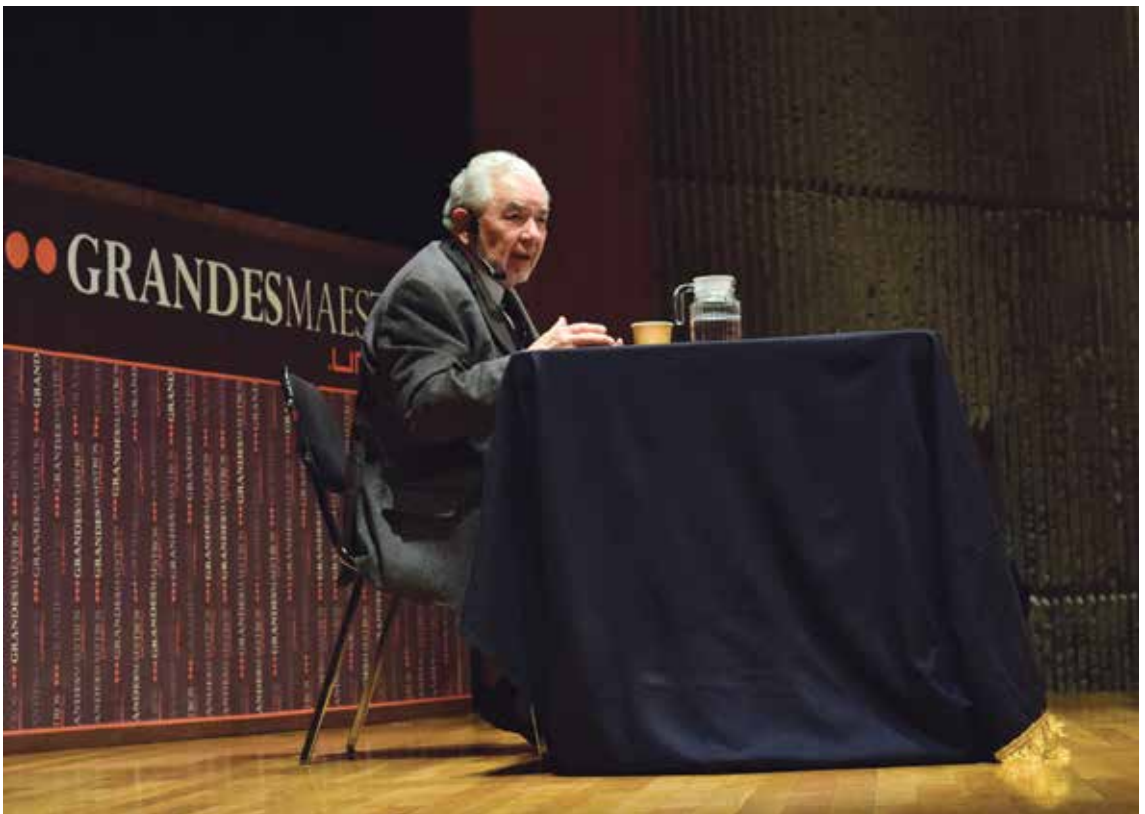
CultureUNAM promotes specialized education through its extraordinary chairs at every educational level.

These professorships intensify the international exchanges that allow us to put young people's creative work to the best possible use, developing multidisciplinary programs for reflection, experimentation, creation, and audience formation.

SERGIO GARCÍA RAMÍREZ teaching a human rights course at Carlos Chávez Hall in the University Cultural Center as part of the Great Teachers program, which disseminates the knowledge and expertise of important academics in

different fields. Among others, this program has included courses by renowned individuals such as Miguel León Portilla, Hernán Lara Zavala, Elsa Cross, Vicente Quirarte, Roger Bartra, and Alfredo López Austin.

- The Max Aub Chair in Art and Technology.
- The Ingmar Bergman Chair in Film and Theater.
- The Nelson Mandela Chair in Human Rights in Film and Literature (to be renamed Art and Human Rights).
- The José Emilio Pacheco Chair in Reading Promotion.
- The Arturo Márquez Chair in Musical Composition, part of the Music Department.
- The Gloria Contreras Chair in Dance, part of the Dance Department.
- The William Bullock Chair in Critical Museology, part of the Visual Arts Department.
- The Olivier Debrouse Chair in Images: Devices, Production, and Criticism, part of the Visual Arts Department.
- The Helen Escobedo Chair in Public Spaces in Mexico and Latin America, part of the Visual Arts Department.



SEMINARS

INSTITUTIONAL AND SOCIAL PERFORMANCE ANALYSIS SEMINAR

Initiated on August 27, 2015, with the objective of studying institutional performance through rubrics such as efficiency, the production of public goods and fulfillment of societal needs, dynamics of social cohesion and/or malaise, results in terms of different aspects of societal welfare, and consequences in terms of societal progress.

HIGHER EDUCATION SEMINAR

Instituted on April 15, 2004, as a forum for organized debate and reflection on the future of the public university in Mexico, as well as its role in educational, political, cultural, and globalization processes on the international level. The academic work generated at this seminar has strengthened connections between Mexico's public universities and universities in other countries, as mediated by the National Association of Universities and Higher Education Institutions.

YOUTH RESEARCH SEMINAR

Since May 12, 2008, this seminar has focused on discussing reality as faced by young people today and has developed mechanisms for disseminating information on youth-related issues. Among other primary achievements, it has offered the third version of the course titled Youth Worlds and the seventh version of the Youth Cultures course, as well as theory and research; the establishment of agreements with the Iberoamerican Youth Organization on the coordination of the 2012 Iberoamerican Youth Survey; and the 2013 National Diagnostic on Mexican Youth.

INTERDISCIPLINARY BIOMEDICAL RESEARCH SEMINAR

Created in January 2011, it offers a platform for researchers from different fields to come together and lecture and reflect on biomedical research.

HISTORY AND NATIONAL MEMORY RESEARCH SEMINAR

Created on June 23, 2008, this seminar is rooted in a collective, multidisciplinary project titled “1810-2010: The Intellectual Configuration of Modern and Contemporary Mexico.” It has organized five collective projects: “Commemorations of 1960,” “Interpretation and Reconstruction of the Origins and Development of Republican Humanism in Mexico,” “Generational Anthology of Twentieth-Century Mexican Literature,” “Two Centuries of Civic Imagery and Imaginaries,” and “The University of Mexico in the Nineteenth Century as Seen by Documentary Sources.” It is currently engaged in studying, analyzing, and developing the centennial of the Mexican constitutions. Its research on the commemorations of major milestones in Mexican history have naturally led it to study the relationship between history and memory, particularly within the domestic context, offering a multidisciplinary space for reflection and analysis.

INFORMATION SOCIETY AND CULTURAL DIVERSITY RESEARCH SEMINAR

Since April 23, 2009, this seminar has promoted interdisciplinary studies and research, encompassing a variety of academic areas, on different philosophical, economic, political, cultural, epistemological, ethical, and legal aspects of the generation, distribution, appropriation, and application of knowledge for the benefit of society, paying special attention to Mexico’s cultural diversity. It provides diagnostics on economic, educational, cultural, scientific, technological, and innovative policies. The seminar seeks to provide solutions that will benefit Mexico, creating a fairer, more democratic, and more pluralistic information society.

SEMINAR ON MEXICAN CHALLENGES

Established on June 4, 2015, through an agreement with the College of Mexico, this seminar seeks to analyze and diagnose economic, demographic, political, and social problems in Mexico, as well as to propose solutions and influence policy.

MEDICINE AND HEALTH SEMINAR

Since March 2008, this seminar has studied the health system in Mexico, medical paternalism, heart problems in seniors, aging and cancer, diabetes and nutritional problems in seniors, debilitating conditions such as arthritis and osteoporosis, the general direction of aging-related research, sensory alterations due to aging (e.g., hearing loss), drug interactions in seniors, and genitourinary disorders in seniors. In terms of teaching, the seminar coordinated the Evidence-Based Prescriptions course at the Faculty of Medicine's postgraduate program in 2012. It has also participated in the Medicine and Literature, Health and Aging symposium; the conference series titled Agenda for the Twentieth-Century at the National Medical History and Philosophy Congress; and the Contemporary and Future Pneumology symposium, among other events.

UNIVERSITY SEMINAR ON MIDDLE EASTERN CULTURE

Created on June 30, 2016, in order to study different Middle Eastern societies, understanding these as a set of values, beliefs, rules, practices, signs, symbols, and modes of thinking that are learned and reproduced in everyday life, thus guiding and legitimizing the actions and behaviors of individuals as a form of social functioning.

UNIVERSITY SEMINAR ON SOCIO-ENVIRONMENTAL THREATS

Established on March 2, 2017, this seminar analyzes natural, social, cultural, economic, and political aspects of socio-environmental threats in order to provide a comprehensive prevention and management perspective that will contribute to the development of concrete strategies. It also participates in networks that bring together universities, government institutions, and social organizations that actively address different facets of prevention and responses to socio-environmental emergencies.

UNIVERSITY SEMINAR ON THE STUDY OF INTERNAL DISPLACEMENT, MIGRATION, EXILE, AND REPATRIATION

Created on May 8, 2017, with the objective of convoking, promoting, and encouraging research on migrants (both refugees and economic migrants), internally displaced persons, exiles, and deportees through multidisciplinary and inter-institutional teams, both within and beyond the university, this seminar seeks to generate and disseminate knowledge on freedom of movement, as well as to execute strategic projects and activities that promote this inalienable right.

UNIVERSITY SEMINAR ON THE STUDY OF SOCIETY, INSTITUTIONS, AND RESOURCES

Created on March 26, 2012, it aspires to inter-institutional collaboration involving specialists from a variety of academic disciplines that study society, institutions, and resources at federal, state, and municipal levels. In this way, the seminar's overarching goal is to develop studies, proposals, and programs on community human development.

UNIVERSITY SEMINAR ON GOVERNABILITY AND AUDITING

Established on September 11, 2014, at the Faculty of Accounting and Administration, its objectives include research on, cooperation within, and the popularization of issues involving and contributing to governability and auditing. It also seeks to identify and develop related issues—in line with the postulates of the United Nations, the International Reconstruction and Development Bank, the World Bank, and the Bank of Mexico—that favor the development of policies aimed at improving competitiveness as based on the knowledge economy.

UNIVERSITY RESEARCH SEMINAR ON CULTURAL HERITAGE

Created on June 29, 2015, with the objective of strengthening and promoting interdisciplinary research on fields related to cultural heritage and access, this seminar develops and promotes theoretical and applied research on cultural heritage from an academic perspective that arises from the UNAM's own research and teaching practices, thus using them to influence archival conservation policies.

UNIVERSITY RESEARCH SEMINAR ON ARTISTIC CREATION

Since May 16, 2016, this seminar has sought to generate diagnostics from the research conducted on the creation and interpretation of the arts, as well as to foster knowledge, discussion, and methodological developments on creative and interpretive artistic processes, thus integrating the arts with other fields of knowledge.

UNIVERSITY SEMINAR ON MODERNITY

Instituted on April 15, 2004, in close collaboration with the Faculty of Science and the Faculty of Philosophy and Letters, this seminar promotes discussion and research on modernity, particularly on issues relating to nature and the body. Its objective is to promote the exchange of social experiences in the Mexican environment with other projects addressing modernity in the twentieth century. The seminar seeks to determine the basic concept of modernity, its variants, its transformations over time, and its impact on Mexican social life.

UNIVERSITY SEMINAR ON MUSEUMS AND MUSEOGRAPHICAL SPACES

Established on May 22, 2017, this seminar endeavors to strengthen and promote multidisciplinary research on issues regarding the UNAM's museified collections, museums, and museographical spaces, guaranteeing their conservation and accessibility through analysis, development, and promotion in different mediums and collaborative work on university heritage.

UNIVERSITY SEMINAR ON SCIENTIFIC AND PHILOSOPHICAL PROBLEMS

Created on September 24, 1992, this seminar addresses a variety of subjects: individual memory and the memory of the other; social and historical time; computational creativity; the generation of narratives; political neurons; species evolution; the ethnography of contemporary bioanthropological discourse; eucumenical time; anecumenical time; paradigmatic proposals; and diversity, complexity, and time.

UNIVERSITY SEMINAR ON TRANSPARENCY

Instituted on February 27, 2014, this seminar works to analyze the scope and effects of transparency on different policy fields, identify the impact of transparency and its social and economic consequences, study the creation of spaces for social inclusion that foster transparency, understand factors that intersect with other policies (such as citizen participation and social auditing, among others), and propose measures to make transparency policies more effective.

INTERDISCIPLINARY UNIVERSITY SEMINAR ON AGING AND THE ELDERLY

Instituted on November 22, 2011, this seminar seeks to analyze and propose long-term strategies for comprehensive care as the national population ages.

INTERDISCIPLINARY UNIVERSITY SEMINAR ON SCHOOL VIOLENCE

Since September 11, 2014, this seminar has promoted reflection and analysis on school violence, both domestic and international, based on interdisciplinary research and methodologies. It also works to develop responses, mediation, and intervention models that can be used to design research protocols and public policies.

UNIVERSITY SEMINAR FOR IMPROVING MATHEMATICAL EDUCATION AT THE UNAM

Arising from a consolidation of the efforts undertaken by the Working Group for the Improvement of Mathematical Education, organized in 2012 in response to the problem of poor performance among math students, this seminar analyzes possible causes toward proposing solutions. Its goals are to improve mathematical education, analyze underlying problems, and make proposals for training professors; it also seeks to reflect on the activities that keep the math curriculum up-to-date and in dialogue with societal needs, particularly with regard to disciplinary standards. Finally, the seminar works to contribute to the popularization of mathematical culture.

UNIVERSITY SEMINAR ON AFFECTION AND EMOTIONS

Created on May 28, 2015, as an academic space for interdisciplinary study and research on affection and emotions, this seminar seeks to develop a fuller perspective regarding the emotional aspects of life and a better understanding of mental issues.

UNIVERSITY SEMINAR ON THE CURRENT STATE OF THE SCIENCES AND HUMANITIES

Established on October 20, 2014, this seminar contributes to research on the current state of the sciences and humanities and the popularization of related knowledge. Its objectives are to create spaces for academic dialogue between “hegemonic and primary currents” and “critical or alternative theories” and to foster academic dialogue as an essential tool for confronting scientific and social problems related to the sciences and humanities.

UNIVERSITY SEMINAR ON FORENSIC DISCOURSES

This seminar was created on October 21, 2013, to collaborate with other academic, social, and government institutions toward the identification, in confrontational discourses, consistencies and inconsistencies that weaken or strengthen the social fabric and the legal system. The seminar systematizes data for discourse analysis and constructs a legal, journalistic, and literary corpus on a variety of issues. The study of forensic discourse does not cover theory alone, but also practical aspects of how language is used in different social environments.

UNIVERSITY SEMINAR ON HYDROCARBONS RESEARCH

Created on June 25, 2015, this seminar's primary objective is to promote academic approaches and collaboration among different UNAM departments that are interested in hydrocarbons research, thus fostering the study of their exploration, exploitation, industrial transformation, contamination, and cleanup, among others.

UNIVERSITY SEMINAR ON SOCIETY, THE ENVIRONMENT, AND INSTITUTIONS

This seminar was instituted on June 20, 2016, as a platform for reflecting on Mexico's experiences with biodiversity management and for discussing important proposals in the fields of ecosystems, environmental governance, and global environmental changes. In this way, its larger goal is to generate useful elements for the design of socio-environmental governance policies and strategies.

HISTORIC BUILDINGS

THE ACADEMY OF SAN CARLOS

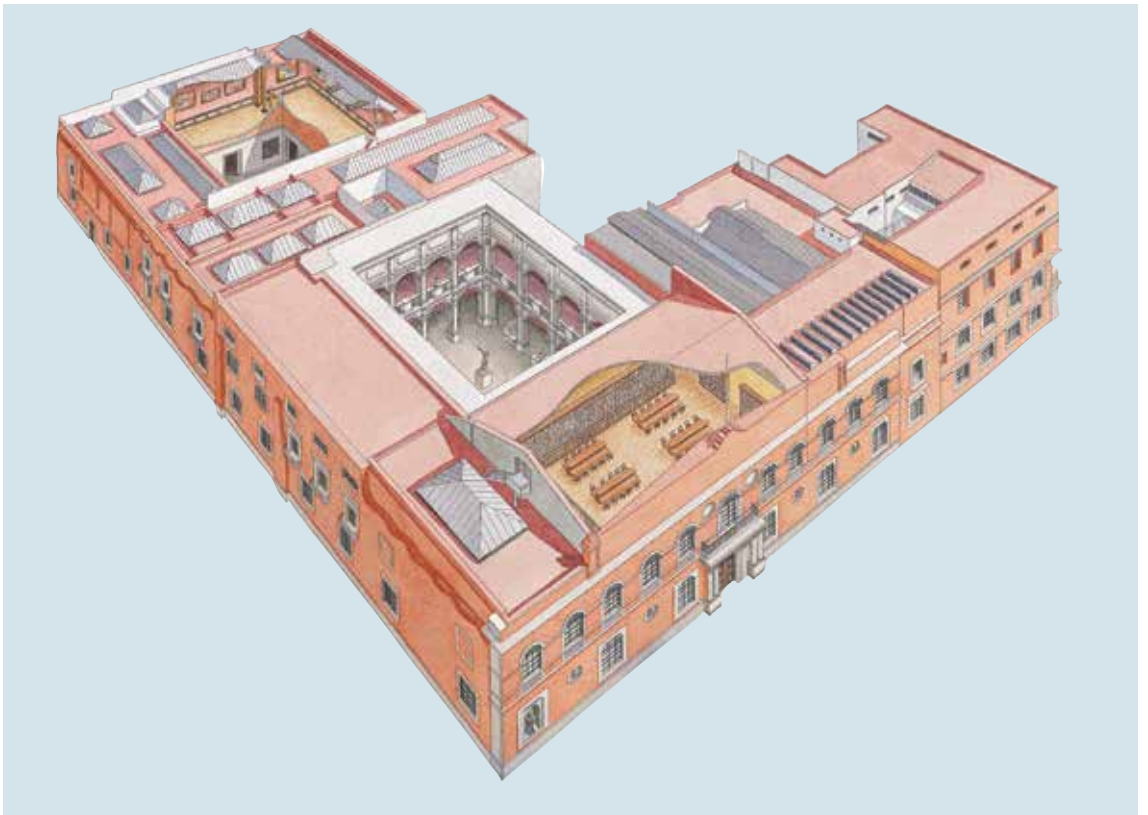
The San Carlos Academy of the Noble Arts was founded by royal decree in New Spain on November 25, 1783, installed at the site of the old Amor de Dios Hospital. Between 1783 and 1810, the academy experienced a period of growth that ended with the War of Independence. The school had to close its doors between 1821 and 1824. In 1843, Antonio López de Santa Anna reorganized it, providing it with guaranteed revenue through the San Carlos Lottery. On May 26, 1910, the school was incorporated into the National University; in 1929, it was divided between the Faculty of Architecture and the National School of Plastic Arts. The Faculty of Architecture occupied the building until 1954, when it was transferred to University City. The National School of Plastic Arts remained there until 1980 and then relocated to Xochimilco. The Academy of San Carlos is currently home to the Faculty of Arts and Design's postgraduate program. In 2010, it opened the San Carlos Cultural Center, with galleries that exhibit both the university's artistic heritage and examples of contemporary art.

THE OLD SCHOOL OF ECONOMICS

Between 1902 and 1904, the Ortiz de la Huerta family—partners at the Commercial Bank of Mexico—ordered the construction of this stone mansion, which began to house a range of tenants from 1925 onward. The building, designed by the architect Manuel Gorozpe, was the home of the National School of Economics as of 1938. When the present-day Faculty of Economics relocated to its new home in 1954, the building was abandoned. The building was later restored, becoming the headquarters for the Faculty of Economics Alumni Association in 1988.

THE SAN CARLOS ACADEMY of the Noble Arts moved in 1791 to the site of the old Amor de Dios Hospital, which had been founded by Juan de Zumárraga in the sixteenth century. In 1858, Javier Cavallari modified the building into its current form.

THE FAÇADE OF THE ECLECTIC building that once housed the School of Economics has three sections: the lower rusticated section bears an arched entryway crowned with a medallion, which depicts a woman's head emerging from the jaws of a lion.



THE OLD SCHOOL OF CHEMICAL SCIENCES

Founded in 1916 as the National School of Industrial Chemistry and later incorporated into the National University as the National School of Chemical Sciences, this school moved to University City in 1957. The building currently houses the Faculty of Chemistry's Center for Academic Outreach.

THE OLD SCHOOL OF JURISPRUDENCE

The building that once housed the Santa Catalina de Siena convent later became the home of the National School of Jurisprudence. In 1910, the school was incorporated into the National University of Mexico at the initiative of Justo Sierra. In 1915, one of the most important classes of students matriculated: the founders of the Society for Legal-Social Studies, known as the "seven wise men." This group included Manuel Gómez Morín, Antonio Castro Leal, Vicente Lombardo Tolezano, and Alfonso Caso. In 1948, the building officially became part of the university's architectural heritage. In 1954, when the university was moved to University City, the National School of Jurisprudence left the downtown area and became the Faculty of Law. The building currently houses the Department of Continuing Education and the faculty's Free Legal Clinic.

THE OLD SAN ILDEFONSO COLLEGE

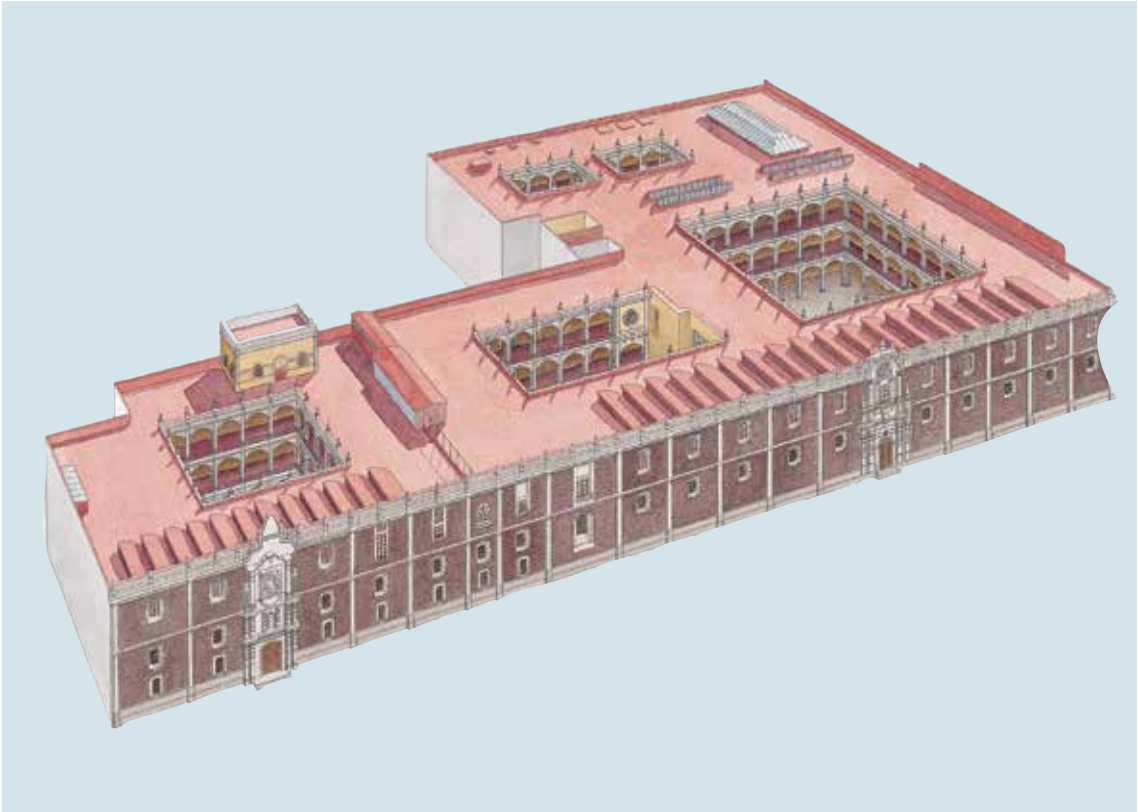
Of Jesuit origin, this is one of Mexico City's most emblematic historic buildings, dating back to the late sixteenth century. At the end of the nineteenth century, it served as the site of the National Preparatory School. It has been part of the National University since its founding in 1910. The classrooms of the Old San Ildefonso College have seen generations of intellectuals, artists, and professionals who have contributed to the development of contemporary Mexico. It was also the cradle of Mexican muralism. Restored in 1992, it hosted the exhibition "Mexico, the Splendors of 30 Centuries." Since then, it has been a prestigious museum devoted to showcasing important temporary exhibitions.

THE LEOPOLDO RÍO DE LA ROSA

BUILDING that served as the site of the National School of Industrial Chemistry, founded in 1916 in the town of Tacuba by Juan Salvador Agraz and Ramírez de Prado.

THE BUILDING OF THE OLD SAN

ILDEFONSO College was built between 1712 and 1749 by the Society of Jesus under the rectorship of Cristóbal Escobar y Llamas. It originally consisted of three buildings, each with its own central patio.



THE OLD TEMPLE OF SAN AGUSTÍN

Built in the sixteenth and seventeenth centuries, it was remodeled in 1868. After a long period of neglect, then-president Juárez decreed that it would house the National Library and the country's most important bibliographic collections, which had previously been overseen by a variety of religious orders. In 1929, this archive was placed under the custody of the university and is now part of the Rare Books Room at the National Library.

THE OLD TEMPLE OF SAN PEDRO AND SAN PABLO

Founded by the society of Jesus as the College of San Pedro and San Pablo in 1574, this building has had a wide variety of historic uses over the years: here, for example, Agustín de Iturbide was crowned emperor and the first Constituent Congress was signed, as was the first constitution of independent Mexico in 1824. It has also functioned as a military academy, a barracks, a hospital, and a warehouse. José Vasconcelos ordered its restoration in order to house the National Newspaper Archive in 1922, which was moved to the University Cultural Center in 1979. The temple housed the Museum of Light from 1996 to October 2010, and it is currently home to the Museum of Mexican Constitutions.

THE HOUSE OF GARGOYLES

Construction on this building began in 1766 and was finally finished in 1822. In 1912, the university took possession of its oldest section with the goal of giving summer courses to foreign students; some time later, the space began to be shared with the National School of Music. In 1934, the School of Higher Studies became the Faculty of Philosophy and Letters and found its home there. In 1940, the building was officially made part of the university's heritage. It currently houses a computer center and a language lab run by the National School of Languages, Linguistics, and Translation.

CONSTRUCTION BEGAN ON THE HOUSE of Gargoyles on the orders of Count José Vivanco Hurtado de Mendoza, but the project was interrupted in 1771; it remained stagnant until the nineteenth century, when Manuel Moreno y Jove

completed it. Its ornamented façade is composed of seven sections separated by pilasters with an Atlas in the upper part, except for those flanking the entrance arch. Each Atlas bears the houses' name.



THE GEOLOGY MUSEUM

Built between 1900 and 1906 to house the National Geologic Institute, which was moved to University City in 1959, this building is currently used for the Geology Museum. It contains ten canvases by the illustrious landscape painter José María Velasco.

THE TACUBAYA SEISMOLOGICAL OBSERVATORY

Constructed in 1908 and inaugurated in 1910 as one of the first seismological facilities in Mexico, the observatory was transferred to the university in 1929 and has been run by the Institute of Geophysics ever since. It contains a seismographic archive—currently held by the Earth Sciences Library in University City—with records dating back to 1903. Since September 2010, it has housed the Geophysics Museum, which exhibits seismographic, vulcanological, magnetic, and geodesy instruments, among others.

THE PALACE OF AUTONOMY

During the colonial era, the space that is currently the Palace of Autonomy was the Santa Teresa la Antigua convent. On August 19, 1929, the building was ceded to the National University of Mexico and housed the rector's office for a short time. In 1934, the National School of Dentistry, founded in 1904, moved to this building. Finally, in 1958, it relocated to University City; the palace was first repurposed as the School of University Induction and later the Erasmo Castellanos Quinto National Preparatory School. It currently contains the University Autonomy Museum, the Mexican Hall of Dentistry, and the Radio UNAM Music Library.

THE BUILDING THAT HOUSES the Museum of Geology and Paleontology was built with volcanic rocks. Its façade includes figures depicting fossils of shells, fish, and reptiles, and it is inscribed with the names of the earth sciences.

DETAIL OF THE CYLINDRICAL façade of the building that housed the National School for Teachers in 1910 and was later occupied by the rector's office of the National University of Mexico, where students fought for and won the university's autonomy in 1929.



THE PALACE OF MEDICINE

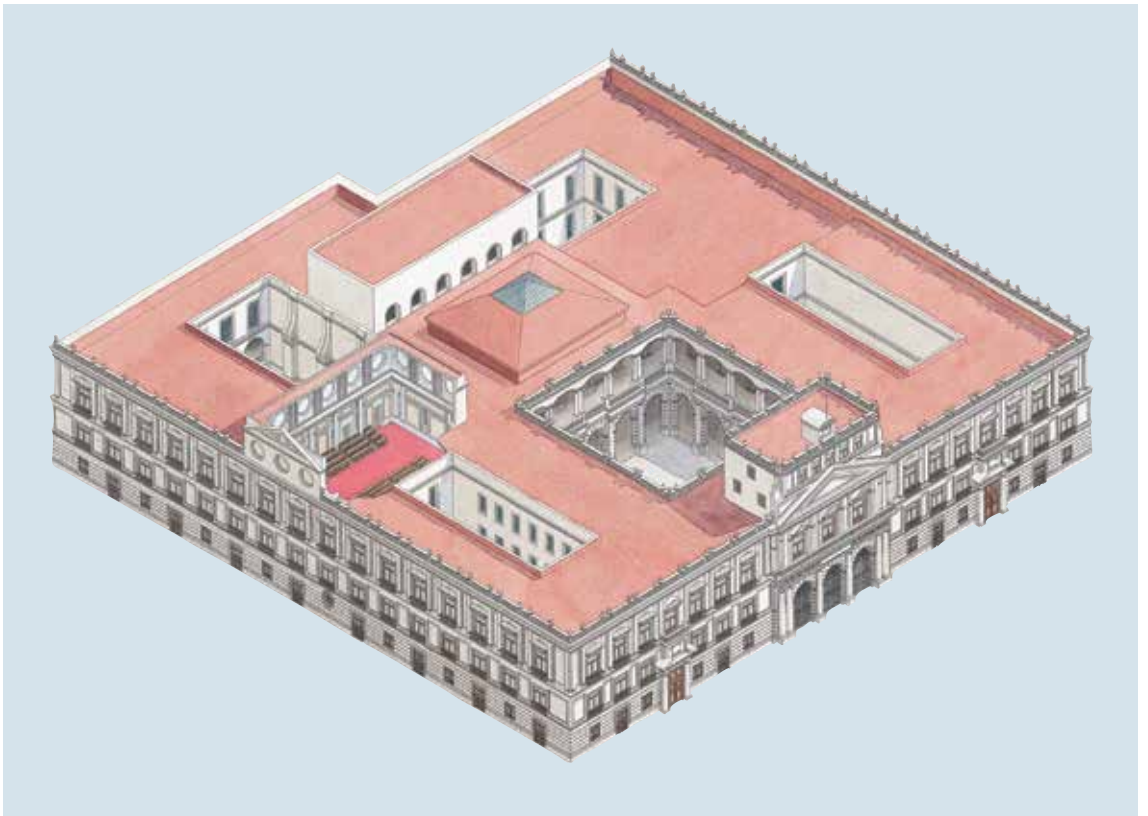
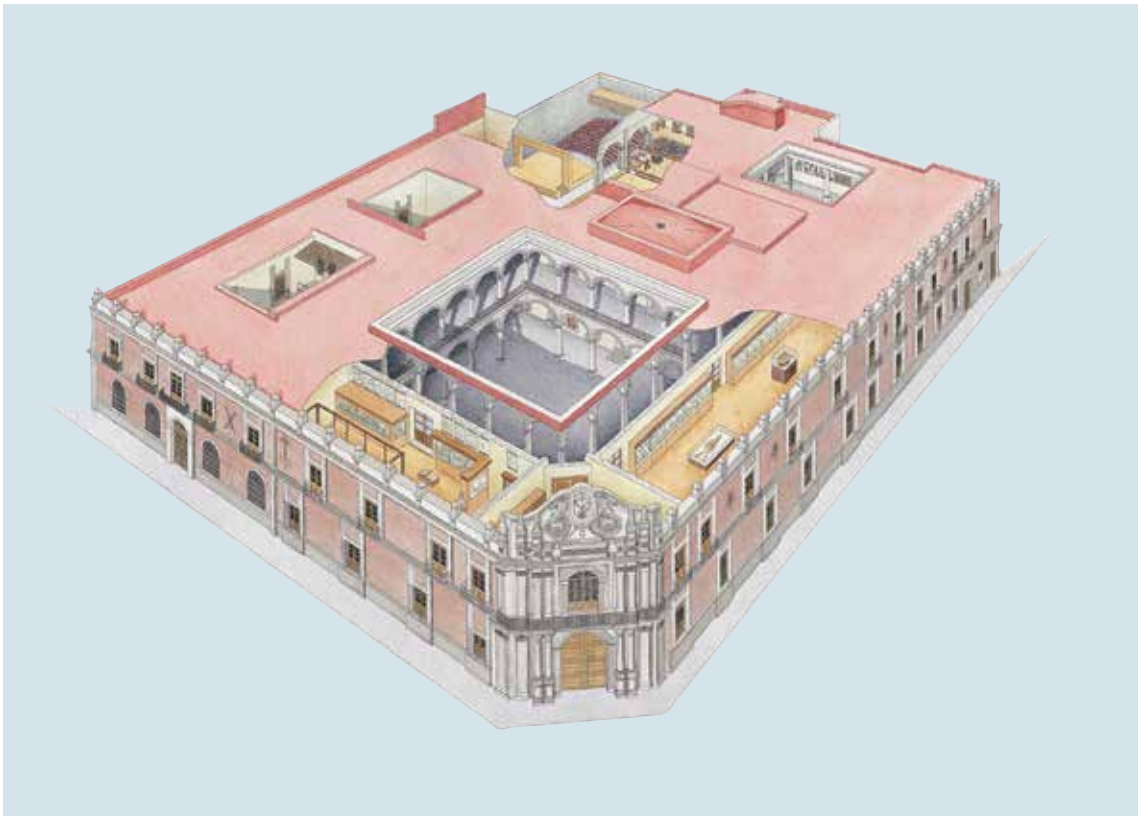
The Tribunal of the Holy Office was established in Mexico City in 1570. In 1732, the architect Pedro Arrieta was charged with building the Palace of the Inquisition. After the Inquisition was abolished in 1820, the building was used for various purposes: it was the site of the National Lottery, the chambers of Congress, the War and Naval Tribunal, and the Lancaster Institute. Finally, in 1854, it began to house the National School of Medicine, which became part of the National University in 1929. In 1956, this school was moved to University City. The National School of Nursing and Obstetrics remained at the palace until 1979. The Palace of Medicine is currently the site of the History and Philosophy of Medicine Department and the Museum of Medicine.

THE PALACE OF MINING

At the end of the eighteenth century, after new mining ordinances were decreed, Manuel Tolsá was asked to design a building that would house the Royal Seminary of Mining. During the conflict with Maximilian, the building was converted into a prison for imperialist officers and, months later, into the barracks of the Republican Army. In 1867, with Benito Juárez's educational reform, the college began to incorporate all branches of engineering and changed its name to the National School of Engineers. From 1954 onward, it was occupied by a variety of institutions, among them the Ministry of Public Education and Culture and the Academy of Science and Literature. After a period of neglect, the Faculty of Engineering Alumni Society commenced a restoration process that concluded in 1976. The building currently houses different divisions of the faculty and hosts the annual International Book Fair at the Palace of Mining.

THE PALACE OF MEDICINE, an example of early Baroque style, opens on to Santo Domingo Plaza through a beveled corner, which prompted its nickname: the "snub-nosed house."

THE PALACE OF MINING, an emblematic example of Mexican Neoclassical architecture, has an ashlar façade with three levels and three entrances. It also includes the remnant of an old observatory.



THE ROYAL AND PONTIFICAL UNIVERSITY OF MEXICO

On January 25, 1553, courses began at the Royal and Pontifical University of Mexico. Many students attended the seven initial programs that made up this nascent institution. In 1584, the university acquired its own land through the purchase of four lots that had previously belonged to the Marquis del Valle near the Plaza del Volador. The latter building no longer exists, as it was demolished in 1908 to represent a symbolic break with the old colonial order. Its first home, given its high historic value, was ceded to the UNAM on October 21, 1988.

From 1994 to 2010, the Royal and Pontifical University of Mexico was occupied by the University Urban Studies Program. It was completely restored between 2013 and 2015 and currently houses the UNAM Today Museum.

THE FIRST HOME OF THE ROYAL and Pontifical University of Mexico was at the corner of Arzobispado and San Sebastián Streets, now Moneda and Seminario. It relocated from this site in 1561 and had to be completely reconstructed due to the

damage caused by the great flood of 1629 and the changes made in 1743—the year it was given its simple façade, interrupted only by the stone alcove on the second level and the entrance on the corner.



THE UNAM'S PRESENCE

ACROSS THE COUNTRY

THE UNAM CURRENTLY MAINTAINS a presence in all 32 states of Mexico, This presence is expressed in modalities such as teaching (faculties and schools), research (institutes and centers), cultural outreach through university-affiliated entities, academic collaboration and exchange agreements, seismological and oceanographic research stations, and digital libraries, among others. The university has a policy of cooperation and exchange with state universities and other regional public and private institutions, meeting the societal and environmental needs of the country's different states.

The map of university entities clearly displays the diversity of the UNAM's activities across the country.

THE UNAM IS AN INSTITUTION that has developed alongside the country itself, adapting to demographic, social, and cultural changes, as well as the introduction of information and communications technologies. Its

presence has expanded across the country as it strengthens its connections with the educational, cultural, scientific, and technological research systems and industrial and economic activities of Mexico.



IN THE WORLD

ACADEMIC COOPERATION AND EXCHANGE

The University strengthens and promotes cooperation with institutions devoted to higher education, science, and culture, both domestically and abroad, with the goal of supporting the continuing education of students and academic staff. It also conducts bilateral and multilateral research projects in all areas.

The education of students, professors, and researchers capable of acting effectively within a global reality entails the need to construct shared spaces of knowledge around the world. This interest has led the UNAM to establish networks and collaboration programs that increase student and academic exchanges. In 2016, the UNAM signed 96 academic collaboration agreements with foreign higher education institutions and international organizations. It has also developed projects oriented toward developing double majors and transfer credits that meet international standards, as well as expanding funds for these programs. In order to carry out its internationalization programs, the current university administration created the Department of International Relations and Affairs, which is run by the Cooperation and Internationalization Department. This department is responsible for signing and implementing international agreements, as well as promoting the mobility of undergraduate students and receiving foreign students studying abroad at the UNAM.

THE UNAM HAS CREATED programs for students and academics not only so that they may conduct activities within the institution, but also so that they may interact with their peers and colleagues in other countries. Such programs likewise

allow them to learn from other forms and methods of teaching, conduct research, engage in outreach, and serve the community. Communication networks are essential in a global world.



The Learning Center for Foreigners promotes the Spanish language and Mexican culture in the community of foreign students in Mexico. In order to further its international influence, this UNAM center has 11 different campuses, located in San Antonio (founded in 1944) and Chicago (2002) in the United States, Ottawa-Gatineau (1995) in Canada, and Beijing (2012) in China, the last of these a Center for Mexican Studies in collaboration with the International Students University in Beijing. In 2013, a Center for Mexican Studies was established in Madrid (Spain) in collaboration with the Cervantes Institute. The year 2014 saw the inauguration of the Costa Rica Center for Mexican Studies (in collaboration with the University of Costa Rica), the France Center for Mexican Studies (in collaboration with the Sorbonne), the Seattle Center for Mexican Studies (in collaboration with the University of Washington), and the Los Angeles Center for Mexican Studies (in collaboration with California State University, Northridge; in 2015, the United Kingdom Center for Mexican Studies was founded (in collaboration with King's College), as well as the Tucson Center for Mexican Studies (with the University of Arizona). In 2017, the Boston Center for Mexican Studies was established (in collaboration with the University of Massachusetts), as well as the Germany Center for Mexican Studies (in collaboration with the Free University of Berlin) and the South Africa Center for Mexican Studies (in collaboration with the University of the Witwatersrand).

THE LEARNING CENTER for Foreigners, with its many campuses and its Centers for Mexican Studies, carries out important work in teaching Spanish as a second language, training teachers specialized in Spanish-language instruction,

and promoting the richness of Mexican culture. The essential role granted to the UNAM under Article 3 of its bylaws stipulates that the university will function at the service of the country and of humanity as a whole.



OUTREACH AND INNOVATION

One of the primary functions of university research is outreach to other domestic and international educational institutions—as well as to public, private, and social organizations—with the goal of confronting and working to solve educational, economic, social, and productive problems in Mexico. To support this work, the Innovation and Development Department has been established to incentivize the production of innovative technologies and the development of patents, as well as products and processes connected with the university's work on national challenges.

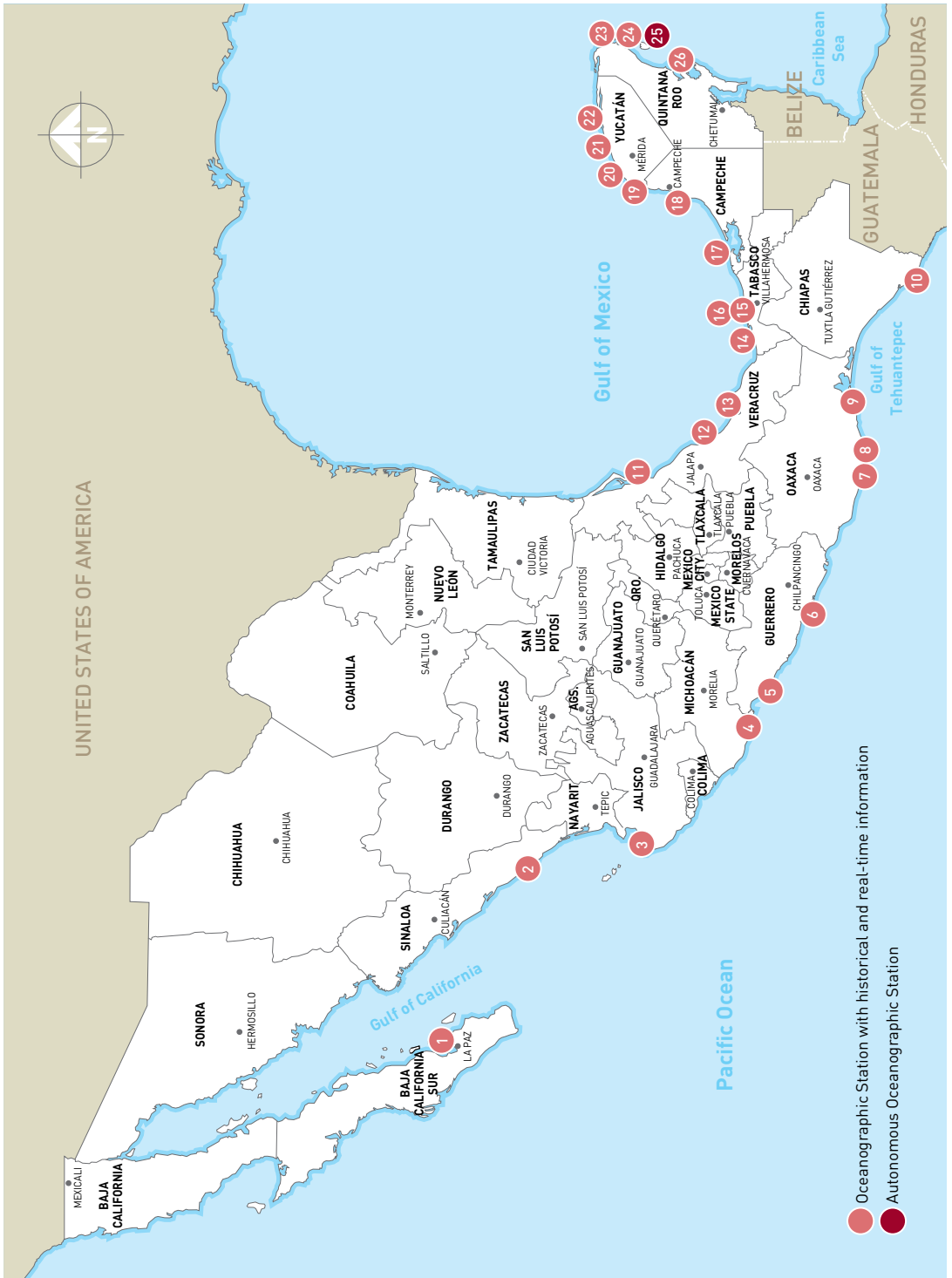
STUDENT MOBILITY AND PARTICIPATION IN INTERNATIONAL NETWORKS

In terms of academic mobility, the UNAM engages in a variety of international academic activities dedicated to teaching and research programs, as well as to professor and student exchanges. The UNAM has 437 agreements with academic institutions in Mexico and around the world.

AT THE NATIONAL and international levels, policy approaches have changed from a closed paradigm, centered on the institution itself, to a more open paradigm that evolves alongside society and promotes

the establishment of cooperative networks between institutions and services. This shift has created educational focuses and mechanisms that more effectively address societal challenges.



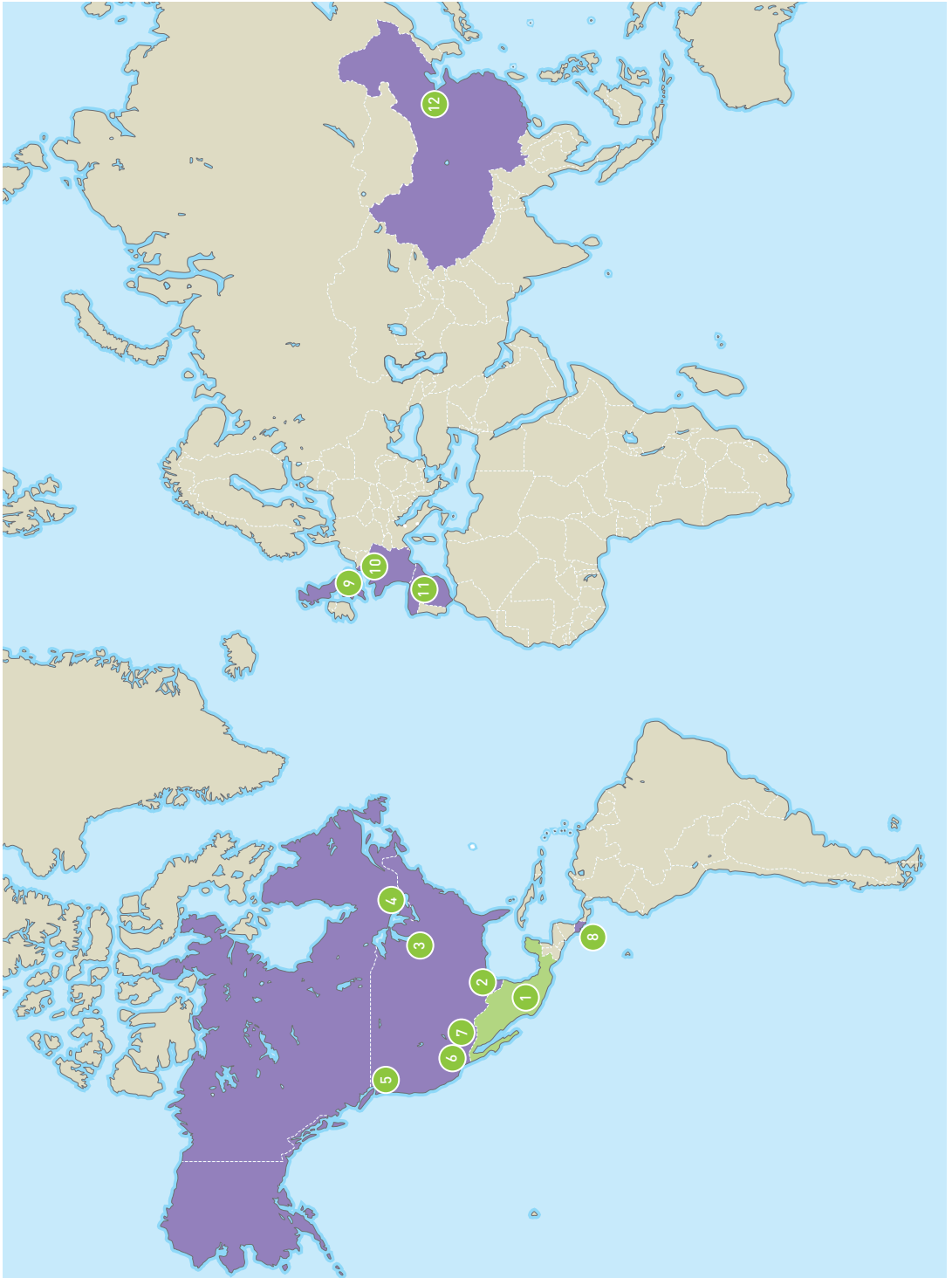


UNAM. OCEANOGRAPHIC STATIONS IN MEXICO

STATION	ADDRESS	LATITUDE	LONGITUDE
1	La Paz, Baja California Sur Muelle de API, Pichilingue, La Paz, Baja California Sur	24°16'2.35"N	110°19'58.22"W
2	Mazatlán, Sinaloa Muelle de B.O. <i>El Puma</i> , Mazatlán, Sinaloa	23°10'53.08"N	106°25'25.89"W
3	Puerto Vallarta, Jalisco Muelle 3 de API Vallarta, Puerto Vallarta, Jalisco	20°39'28.65"N	105°14'34.43"W
4	Lázaro Cárdenas, Michoacán Muelle de terminal granelera, recinto portuario, Lázaro Cárdenas, Michoacán	17°56'23.32"N	102°10'40.98"W
5	Zihuatanejo, Guerrero Muelle municipal, Zihuatanejo, Guerrero	17°38'10.24"N	101°33'29.74"W
6	Acapulco, Guerrero Muelle de Club de Yates, Acapulco, Guerrero	16°50'16.67"N	99°54'10.64"W
7	Puerto Ángel, Oaxaca Muelle municipal, Puerto Ángel, San Pedro Pochutla, Oaxaca	15°39'55.14"N	96°29'29.81"W
8	Huatulco, Oaxaca Muelle Cruceros API, Fonatur BMO, Sta. Cruz Huatulco, Sta. Ma. de Huatulco, Oaxaca	15°45'11.15"N	96°07'45.98"W
9	Salina Cruz, Oaxaca Muelle de recinto portuario, Salina Cruz, Oaxaca	16°10'6.34"N	95°11'48.34"W
10	Puerto Madero, Chiapas Muelle de API, Puerto Madero, Puerto Chiapas, Tapachula, Chiapas	14°42'44.52"N	92°24'4.44"W
11	Tuxpan, Veracruz Barra norte del río Tuxpan, Tuxpan, Veracruz	20°58'8.58"N	97°18'41.77"W
12	Veracruz, Veracruz Escuela Náutica Fernando Siliceo Veracruz, Veracruz	19°11'31.49"N	96°07'24.73"W
13	Alvarado, Veracruz Malecón de Alvarado, Calle Juan Soto, Alvarado, Veracruz	18°45'58.23"N	95°45'21.50"W
14	Sánchez Magallanes, Tabasco Calle El Playón S/N, Sánchez Magallanes, Tabasco	18°17'48.34"N	93°51'16.36"W
15	Frontera, Tabasco Muelle Fiscal Frontera, Centla, Tabasco	18°31'56.26"N	92°39'17.53"W
16	Desembocadura Río Grijalva, Tabasco Desembocadura río Grijalva Frontera, Centla, Tabasco	18°34'19.86"N	92°42'23.06"W
17	Ciudad del Carmen, Campeche Muelle Remolcadores Turístico, Ciudad del Carmen, Campeche	18°38'9.95"N	91°50'10.04"W
18	Lerma, Campeche Muelle API Campeche, Lerma, Campeche	19°48'43.20"N	90°35'41.59"W
19	Celestún, Yucatán Muelle municipal, Celestún, Yucatán	20°51'31.19"N	90°24'12.33"W
20	Sisal, Yucatán Dársena municipal, Sisal, Hunucmá, Yucatán	21°09'40.14"N	90°02'51.95"W
21	Progreso, Yucatán Muelle API Progreso, Progreso, Yucatán	21°18'11.34"N	89°39'59.32"W
22	Telchac, Yucatán Dársena Municipal, Telchac, Yucatán	21°20'25.82"N	89°18'31.30"W
23	Isla Mujeres, Quintana Roo Muelle API Quintana Roo, Isla Mujeres, Quintana Roo	21°15'16.57"N	86°44'45.83"W
24	Puerto Morelos, Quintana Roo Muelle U.A. ICML Puerto Morelos, Puerto Morelos, Benito Juárez, Quintana Roo	20°52'5.30"N	86°52'0.60"W
25	Isla Cozumel, Quintana Roo Puerto de Abrigo Banco Playa, Cozumel, Quintana Roo	20°31'36.96"N	86°56'24.64"W
26	Sian Ka'an, Quintana Roo Estación Naval Avanzada de Semar, Punta Herreró, Quintana Roo	19°18'49.70"N	87°26'48.10"W

NOTE: These facilities have been equipped with sea level meters, data transmission equipment, and meteorological equipment.

February 2017. Institute of Geophysics. National Oceanographic Service. Construction and Conservation Department.



UNAM. PRESENCE IN THE WORLD

UNAM - MÉXICO

- ① Presence Across Mexico 32 states

LEARNING CENTERS FOR FOREIGNERS

University City

University City, Coyoacán, Mexico City

Taxco

Taxco, Guerrero

Polanco

Polanco, Miguel Hidalgo, Mexico City

FOREIGN CAMPUSES

- ② UNAM - San Antonio

San Antonio, Texas, United States of America

- ③ UNAM - Chicago

Chicago, Illinois, United States of America

- ④ UNAM - Canada

Gatineau, Ottawa, Canada

CENTERS FOR MEXICAN STUDIES

- ⑤ UNAM - Seattle

University of Washington, Seattle, Washington, United States of America

- ⑥ UNAM - Los Angeles

California State University, Northridge, California, United States of America

- ⑦ UNAM - Tucson

University of Arizona, Tucson, Arizona, United States of America

- ⑧ UNAM - Costa Rica

Universidad de Costa Rica, San José, Costa Rica

- ⑨ UNAM - United Kingdom

King's College London, London, England

- ⑩ UNAM - France

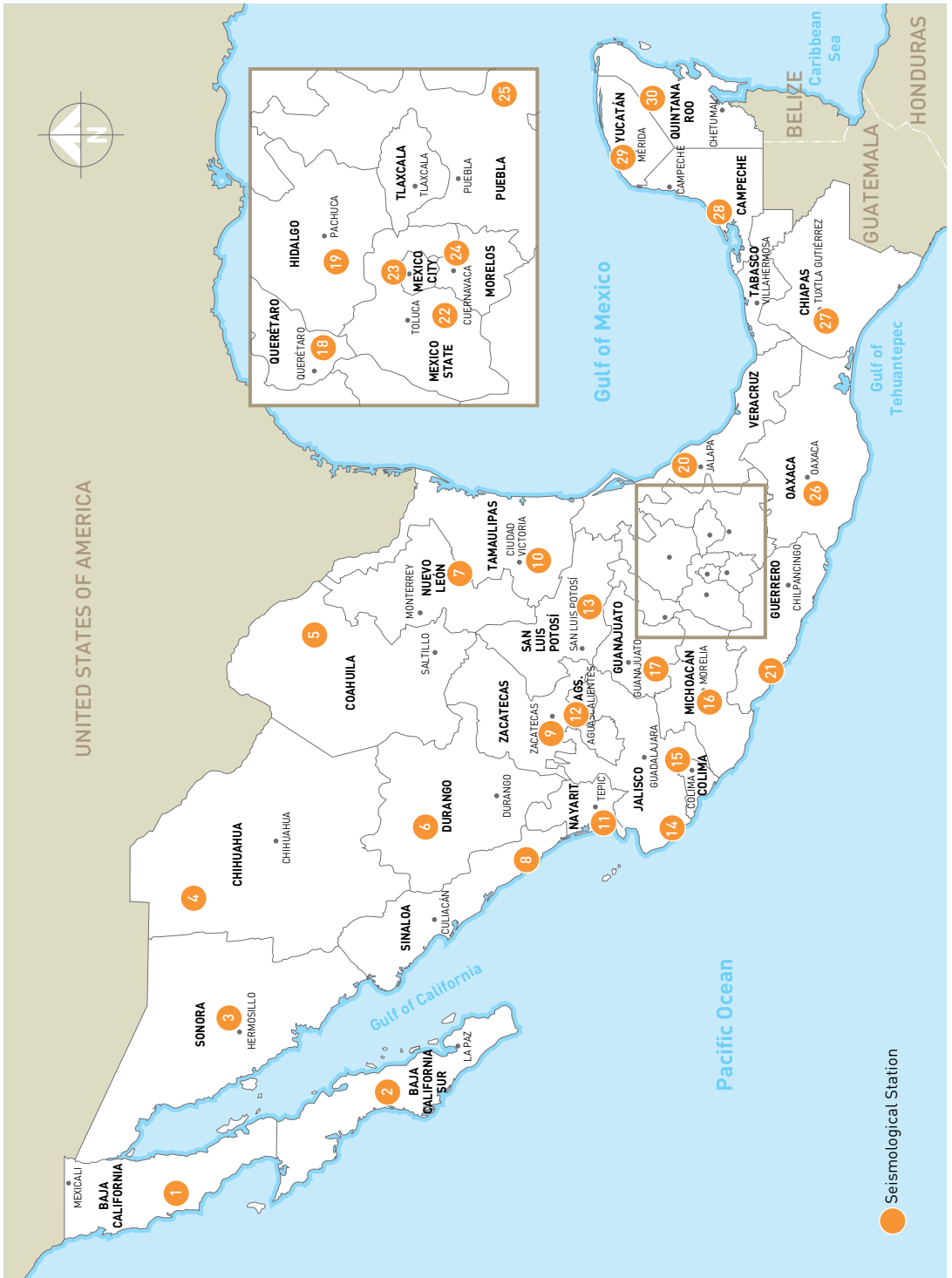
Université Pierre-et-Marie-Curie, Sorbonne, Paris, France

- ⑪ UNAM - Spain

Instituto Cervantes, Madrid, Spain

- ⑫ UNAM - China

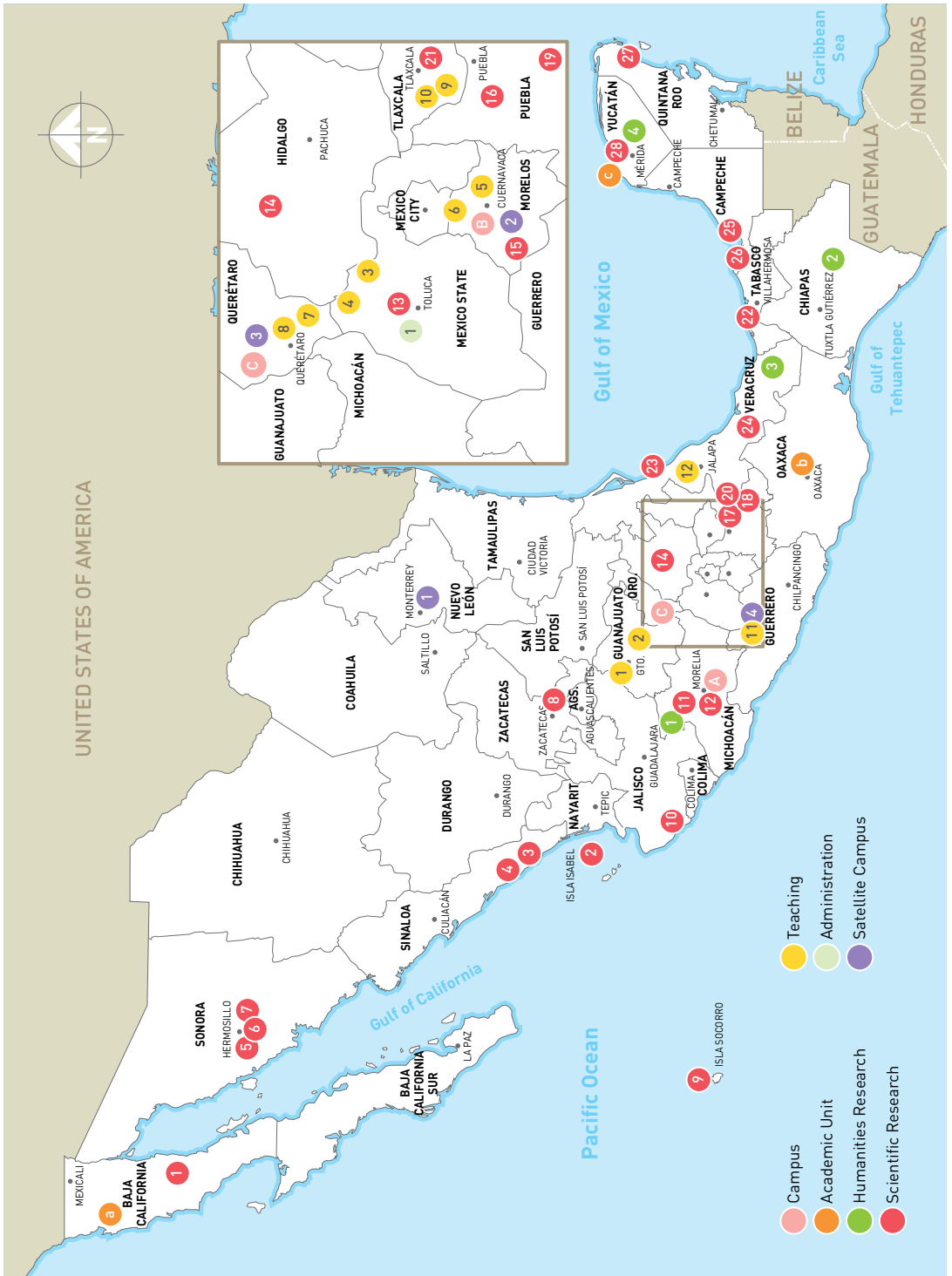
International Students University, Beijing, China



UNAM. SEISMOLOGICAL STATIONS

STATE	LOCATION	STATION	NETWORK	COORDINATES	STATE	LOCATION	STATION	NETWORK	COORDINATES
1 Baja California	Mexicali	MBIG	Geophysics Institute	32.40° N, -115.19° W		Sanalona	SSIG	IG/CCS *	24.82° N, -107.14° W
	San Pedro Martir	SPIG	Geophysics Institute	31.04° N, -115.46° W	9 Zacatecas	Topolobampo	TSIG	IG/CCS *	25.60° N, -109.04° W
	Tijuana	TJIG	Geophysics Institute	32.43° N, -116.67° W		Topolobampo	TSIG	IG/CCS *	25.60° N, -109.04° W
2 Baja California Sur	La Paz	LPIG	Geophysics Institute	24.10° N, -110.30° W	10 Tamaulipas	Zacatecas	ZAIG	Geophysics Institute	22.76° N, -102.56° W
	Santa Rosalía	SRIG	Geophysics Institute	27.31° N, -112.24° W		Gómez Farías	GTIG	Geophysics Institute	23.06° N, -99.16° W
	Hermosillo	HSIG	Geophysics Institute	29.01° N, -110.94° W	11 Nayarit	Ahuacatlán	ANIG	Geophysics Institute	21.05° N, -104.52° W
Nacozari	NZIG	Geophysics Institute	30.37° N, -109.55° W	Ahuacatlán		ANIG	Geophysics Institute	21.05° N, -104.52° W	
3 Sonora	Casas Grandes	CGIG	Geophysics Institute	30.36° N, -107.97° W	12 Aguascalientes	Aguascalientes	AAIG	Geophysics Institute	21.96° N, -102.38° W
	Hidalgo del Parral	HPIG	Geophysics Institute	26.93° N, -105.66° W		Aguascalientes	AAIG	Geophysics Institute	21.96° N, -102.38° W
4 Chihuahua	La Boquilla	BCIG	Geophysics Institute	27.54° N, -105.41° W	13 San Luis Potosí	Rioverde	RPIG	Geophysics Institute	21.88° N, -99.98° W
	Melchor de Múzquiz	MCIG	Geophysics Institute	27.87° N, -101.48° W		Rioverde	RPIG	Geophysics Institute	21.88° N, -99.98° W
5 Coahuila	Papasquiario	PDIG	Geophysics Institute	25.04° N, -105.39° W	14 Jalisco	Chamela	CJIG	Geophysics Institute	19.49° N, -105.04° W
	Linares	LNIG	Geophysics Institute	24.89° N, -99.46° W		Chamela	CJIG	Geophysics Institute	19.49° N, -105.04° W
7 Nuevo León	Monterrey	MNIG	IG/UN *	25.61° N, -100.29° W	15 Colima	Colima	COIG	Geophysics Institute	19.18° N, -103.69° W
	Mazatlán	MAIG	Geophysics Institute	23.18° N, -106.42° W		Colima	COIG	Geophysics Institute	19.18° N, -103.69° W
8 Sinaloa	Presas Huites, Choix	CSIG	Geophysics Institute	24.83° N, -108.37° W	16 Michoacán	Maruata	MMIG	Geophysics Institute	18.28° N, -103.34° W
						Maruata	MMIG	Geophysics Institute	18.28° N, -103.34° W
					17 Guanajuato	Morelia	MOIG	Geophysics Institute	19.64° N, -101.22° W
						Morelia	MOIG	Geophysics Institute	19.64° N, -101.22° W
					18 Querétaro	Juriquilla	JQIR	IG/CGJ *	20.70° N -100.45° W
						Juriquilla	JQIR	IG/CGJ *	20.70° N -100.45° W
					19 Hidalgo	Demacu	DHIG	Geophysics Institute	20.30° N, -99.03° W
						Demacu	DHIG	Geophysics Institute	20.30° N, -99.03° W
					20 Veracruz	Laguna Verde	LVIG	Geophysics Institute	19.72° N, -96.41° W
						Laguna Verde	LVIG	Geophysics Institute	19.72° N, -96.41° W
						Tuzandepetl	TUIG	Geophysics Institute	18.03° N, -94.42° W
						Tuzandepetl	TUIG	Geophysics Institute	18.03° N, -94.42° W

* Agreement between the Geophysics Institute and another institution.



UNAM. ACADEMIC UNITS IN MEXICO

NORTHWEST

1 **Ensenada Academic Unit: Ensenada, Baja California**

2 Center for Nanosciences and Nanotechnology

3 Academic Unit of the Astronomy Institute

Astronomy Institute

4 *San Pedro Mártir National Astronomical Observatory: Ensenada, Baja California

5 Ecology Institute

6 *Field Work Station, Isla Isabel National Park: Santiago Ixcuintla, Nayarit

7 Oceanographic Platforms Department

8 Pacific Oceanographic Platform, *El Puma*: Mazatlán, Sinaloa

9 Academic Unit of the Ocean Sciences and Limnology Institute

10 Mazatlán Station: Mazatlán, Sinaloa

11 Geology Institute

12 *Northwest Regional Station: Hermosillo, Sonora

Ecology Institute

13 *Arid and Semiarid Regions Ecology Laboratory: Hermosillo, Sonora

14 Renewable Energies Institute

15 Heliostat Field Testing Center: Hermosillo, Sonora

NORTH

16 Astronomy Institute

17 *Cerro de la Virgen National Astronomical Observatory: Zacatecas, Zacatecas

NORTHEAST

18 University Advanced Technology Pole, part of the Monterrey Research and Technological Innovation Park: Apodaca, Nuevo León

CENTRAL WEST

19 Biology Institute

*Isla Socorro Reserve, Colima

20 National School of Higher Studies - León, Guanajuato

21 National School of Higher Studies - León, Guanajuato

* San Miguel de Allende Learning Extension

Biology Institute

22 Chamela Research, Experimentation and Education Station: Chamela, Jalisco

23 **Morelia Campus: Morelia, Michoacán**

24 Center for Environmental Geography Research

25 Center for Mathematical Sciences

26 Sustainability and Ecosystems Research Institute

27 Radioastronomy and Astrophysics Institute

28 Morelia Geophysics Unit

29 Morelia Unit of the Materials Research Institute

30 National School of Higher Studies - Morelia, Michoacán

31 Administrative Services Department in Morelia

32 Outreach Unit

33 Outreach Program for UNAM Alumni

34 Humanities Department

35 *Academic Unit for Regional Studies, General Lázaro Cárdenas Museum: Jiquilpan, Michoacán

36 Morelia Geophysics Unit

37 *MEXART Interplanetary Observation Laboratory: Coeneo, Michoacán

38 Engineering Institute

*Morelia Unit: Morelia, Michoacán

* Leased divisions or divisions that do not belong to the UNAM.

CENTRAL EAST		Geology Institute Tlayúa Regional Mixtec Museum: Tepexi de Rodríguez, Puebla	
13	Chemistry Institute * Center for Sustainable Chemistry Research: Toluca, Mexico State	19	Physics Institute National HAWC Laboratory: Sierra Negra, Puebla
3	Faculty of Veterinary Medicine and Zootechnics Center for Teaching, Research, and Outreach in Agricultural Production: Chapa de Mota, Mexico State	20	Juriquilla Campus: Juriquilla, Querétaro
4	Faculty of Veterinary Medicine and Zootechnics Center for Teaching, Research, and Outreach in Porcine Production: Jilotepec, Mexico State	C	Center for Applied Physics and Advanced Technology
1	Procurement Department *Toluca Office: Toluca, Mexico State	C	Center for Geosciences
14	Geophysics Institute *Orizabita Solarmetrics Station: Orizabita, Hidalgo	C	Neurobiology Institute
B	*Morelos Campus: Cuernavaca, Morelos	C	Academic Unit of the Engineering Institute Research Laboratory for Advanced Water Treatment Techniques
B	Regional Center for Multidisciplinary Research	C	Academic Unit of the Mathematics Institute
B	Center for Genomic Sciences	C	The International Human Genome Research Laboratory
B	Biotechnology Institute	C	The Faculty of Sciences Education and Research Unit.
B	Physical Sciences Institute	C	Faculty of Engineering High Technology Unit
B	Academic Unit of the Mathematics Institute	C	Computing and Information and Communications Technologies Department
B	Administrative Services Department in Morelos	C	Administrative Services Department in Juriquilla
B	Outreach Unit Outreach Program for UNAM Alumni	C	Outreach Unit Outreach Program for UNAM Alumni
15	Renewable Energies Institute: Temixco, Morelos	C	Cultural Academic Center
5	Faculty of Engineering *Postgraduate Studies Division: Jiutepec, Morelos	7	Faculty of Veterinary Medicine and Zootechnics Center for Teaching, Research, and Outreach in Animal Production: Altiplano Tequisquiapan, Querétaro
6	Faculty of Veterinary Medicine and Zootechnics Center for Teaching, Research, and Outreach in Ovine Production: Huiztilac, Morelos	8	Faculty of Higher Studies, Cuautitlán Animal Production Research Unit: Ajuichitlán, Querétaro
2	Teopanzolco FUNAM/ENLLT Program. Cuernavaca, Morelos	3	Juriquilla FUNAM/ENLLT Program: Juriquilla, Querétaro
16	Astronomy Institute *Laboratories at the Great Millimetric Telescope: Sierra Negra, Puebla	9	Faculty of Higher Studies - Zaragoza Campus III: Santa Cruz Quilehlla, Tlaxcala
17	Geophysics Institute *Large Scale Mexican Solar Observatory: Atzitzintla, Puebla	10	Distance Learning Department *Center for High Technology Distance Learning: Santa Cruz Quilehlla, Tlaxcala
18		21	Biology Institute Regional Biodiversity and Vegetable Textile Cultivation Laboratory: Santa Cruz Quilehlla, Tlaxcala

SOUTH		YUCATÁN PENINSULA	
2	The Center for Multidisciplinary Research on Chiapas and the Southern Border: San Cristóbal de las Casas, Chiapas	25	*Ciudad del Carmen Station, Ciudad del Carmen, Campeche
11	Faculty of Arts and Design *Taxco Learning Center: Taxco, Guerrero	26	*Justo Sierra Méndez Outreach and Education Unit of the Southeast: Ciudad del Carmen, Campeche
4	Learning Center for Foreigners *Ex Hacienda El Chorrillo: Taxco, Guerrero; Casa Ray C. Ameen: Taxco, Guerrero	27	*Puerto Morelos Station: Benito Juárez, Quintana Roo
b	*Oaxaca Academic Unit: Oaxaca, Oaxaca	c	Sisal Academic Unit: Sisal, Yucatán
b	Academic Unit of the Mathematics Institute	c	Academic Unit of the Engineering Institute: Engineering and Coastal Processes Laboratory
b	Campus of the Aesthetic Research Institute	c	Sciences Unit
b	Campus of the University Cultural Diversity and Interculturality Studies Program	c	Chemistry Unit
c		c	UNAM Academic Sciences and Technology Unit
EAST (GULF)		4	*Peninsular Center for the Humanities and Social Sciences: Mérida, Yucatán
22	Scientific Research Department *Center for Global Change and Sustainability in the Southeast; Adaptation Laboratory: Villahermosa, Tabasco	28	Geology Institute Geophysics Institute Chicxulub Crater Science Museum and Laboratory: Ucú, Yucatán
3	Anthropological Research Institute * Mapachapa Anthropological Research Station: Minatitlán, Veracruz		
23	Oceanographic Platforms Department Gulf of Mexico Oceanographic Platform, Justo Sierra: Tuxpan, Veracruz		
24	Biology Institute Los Tuxtlas Tropical Biology Station: Catemaco, Veracruz		
12	Faculty of Veterinary Medicine and Zootechnics Center for Teaching, Research, and Outreach in Tropical Livestock Production: Martínez de la Torre, Veracruz		

* Leased divisions or divisions that do not belong to the UNAM.

THE UNAM WE WANT

IT IS INCREASINGLY NECESSARY to reflect on the present and future of the UNAM. Indeed, the university is a complex, dynamic, ever-changing institution still marked by problems to solve, innovations to adopt, experiments to undertake, and attitudes to alter, all in the name of improving educational processes within the framework of equity, inclusion, belonging, and quality.

The university that fully responds to contemporary Mexico's cultural, scientific, and educational needs is a constant work in progress. Keeping it a relevant, high-quality, and nationally and internationally renowned institution requires daily efforts from each member of the community.

A desirable future is impossible if we don't begin to imagine it, and work together on building it, right here and right now. The university's march towards the future implies redefining its objectives and its role in society as a whole.

The UNAM's transition into the future calls for technical evaluation. More importantly, though, it calls for self-critique that must be directed toward correcting errors, recognizing deficiencies, and bolstering decisions to preserve what works while innovating at the same time.

A proper transition in the sphere of higher education entails maintaining a balance between tradition and modernity. As set forth by Jacques Delors, this balance means channeling transformations in the space between the global and the local, the universal and the individual, reform and innovation, the long and short term, competitiveness and equality of opportunity. It means, too, the readiness to assimilate knowledge as quickly as it is produced.

Educational changes should be gradual but permanent, experimental but sure, focused but comprehensive, discreet but transcendent. In sum, educational change is conservative and innovative at the same time.

AT THE FOUNDING of the University of Mexico in 1910, within the context of the centenary of Mexico's independence, Justo Sierra said that there was no continuity between the Royal and Pontifical

University of Mexico and the institution that replaced it, which was characterized by tolerance, liberalism, and democracy. By understanding its identity, the UNAM can construct its future.

As it confronts the challenges of the second decade of the century, the UNAM can continue to act with the social responsibility accorded to it by the Mexican people. As an institution, it will continue to be known for its excellence, for producing and expanding knowledge, and for providing young people with the scientific and humanistic education they need to contribute to the country's development.

Our university has always demonstrated its social commitment. Now more than ever, this dedication must be reflected by the incorporation of more young men and women into higher education. Now more than ever, too, Mexico must depend on its institutions to fulfill the potential of its young people—young people who dream of receiving an excellent education at public institutions so they can place their talents and their skills at the service of the country.

The UNAM of the twentieth century will remain an unequivocally public, secular, and pluralistic university, devoted to Mexico's development and well-being.



STATISTICS

UNAM. 2016-2017 UNDERGRADUATE DEGREES

BACHELOR'S DEGREE (120 MAJORS)

PHYSICAL SCIENCES, MATHEMATICS, AND ENGINEERING (35 majors)

MAJOR	ACADEMIC BODY
Actuarial Science	Faculty of Sciences. Faculty of Higher Studies - Acatlán
Architecture	Faculty of Architecture Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Landscape Architecture	Faculty of Architecture
Science of Sustainable Materials	National School of Higher Studies - Morelia
Computer Science	Faculty of Sciences
Earth Sciences	Faculty of Sciences
Industrial Design	Faculty of Sciences Faculty of Higher Studies - Aragón
Physics	Faculty of Sciences
Biomedical Physics	Faculty of Sciences
Geosciences	National School of Higher Studies - Morelia
Civil Engineering	Faculty of Engineering Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Mining Engineering and Metallurgy	Faculty of Engineering
Electronics and Electrical Engineering	Faculty of Engineering Faculty of Higher Studies - Aragón
Renewable Energy Engineering	Renewable Energy Institute
Computer Engineering	Faculty of Engineering Faculty of Higher Studies - Aragón
Biomedical Systems Engineering	Faculty of Engineering
Telecommunications Engineering	Faculty of Engineering
Telecommunications and Electronic Engineering	Faculty of Higher Studies - Cautitlán
Geophysical Engineering	Faculty of Engineering
Geological Engineering	Faculty of Engineering
Geomatics Engineering	Faculty of Engineering
Industrial Engineering	Faculty of Engineering Faculty of Higher Studies - Aragón Faculty of Higher Studies - Cautitlán
Mechanical Engineering	Faculty of Engineering Faculty of Higher Studies - Aragón
Mechanical Electrical Engineering	Faculty of Higher Studies - Cautitlán
Mechanotronics	Faculty of Engineering
Petroleum Engineering	Faculty of Engineering
Chemical Engineering	Faculty of Chemistry Faculty of Higher Studies - Cautitlán Faculty of Higher Studies - Zaragoza

Chemical Metallurgy	Faculty of Chemistry
Mathematics	Faculty of Sciences
Applied Mathematics	Faculty of Sciences
Applied Mathematics and Computing	Faculty of Higher Studies - Acatlán
Nanotechnology	Center for Nanosciences and Nanotechnology
Technology	Faculty of Higher Studies - Cuautitlán. Center for Applied Physics and Advanced Technology
Information Technologies	National School of Higher Studies - Morelia
Urbanism	Faculty of Architecture

BIOLOGICAL, CHEMICAL, AND HEALTH SCIENCES (26 majors)

MAJOR	ACADEMIC BODY
Biology	Faculty of Sciences Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza
Diagnostic Biochemistry	Faculty of Higher Studies - Cuautitlán
Forensic Science	Faculty of Medicine
Agri-genomics	National School of Higher Studies - León
Environmental Sciences	National School of Higher Studies - Morelia
Genomic Sciences	Center for Genomic Sciences Biotechnology Institute
Dental Surgery	Faculty of Dentistry Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza
Ecology	National School of Higher Studies - Morelia
Nursing	National School of Nursing and Obstetrics Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza
Nursing and Obstetrics	National School of Nursing and Obstetrics
Pharmacology	Faculty of Higher Studies - Cuautitlán
Physical Therapy	Faculty of Medicine. National School of Higher Studies - León
Agricultural Engineering	Faculty of Higher Studies - Cuautitlán
Food Engineering	Faculty of Higher Studies - Cuautitlán
Basic Biomedical Research	Faculty of Medicine
Sustainable Management of Coastal Areas	Faculty of Sciences - Multidisciplinary Unit for Teaching and Research (Sisal, Yucatán)
Medical Surgery	Faculty of Medicine Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza
Veterinary Medicine and Zootechnics	Faculty of Medicine Veterinaria y Zootecnia Faculty of Higher Studies - Cuautitlán
Neurosciences	Faculty of Medicine
Dentistry	National School of Higher Studies - León
Optometry	Faculty of Higher Studies - Iztacala
Psychology	Faculty of Psychology Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza

Chemistry	Faculty of Chemistry Faculty of Higher Studies - Cuautitlán
Food Chemistry	Faculty of Chemistry
Pharmaceutical Chemistry	Faculty of Chemistry Faculty of Higher Studies - Zaragoza
Industrial Chemistry	Faculty of Higher Studies - Cuautitlán
SOCIAL SCIENCES (20 majors)	
MAJOR	ACADEMIC BODY
Administration	Faculty of Accounting and Administration Faculty of Higher Studies - Cuautitlán
Anthropology	Faculty of Political and Social Sciences
Agricultural Management	National School of Higher Studies - León
Communication Sciences	Faculty of Political and Social Sciences
Political Science and Public Administration	Faculty of Political and Social Sciences Faculty of Higher Studies - Acatlán
Communication	Faculty of Higher Studies - Acatlán
Communication and Journalism	Faculty of Higher Studies - Aragón
Accounting	Faculty of Accounting and Administration Faculty of Higher Studies - Cuautitlán
Law	Faculty of Law Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Community Development for Old Age	Faculty of Higher Studies - Zaragoza
Territorial Development	National School of Higher Studies - León
Economics	Faculty of Economics Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Industrial Economics	National School of Higher Studies - León
Local Studies and Local Administration	National School of Higher Studies - Morelia
Geography	Faculty of Philosophy and Letters
Information Science	Faculty of Accounting and Administration Faculty of Higher Studies - Cuautitlán
Planning for Agricultural Development	Faculty of Higher Studies - Aragón
International Relations	Faculty of Political and Social Sciences Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Sociology	Faculty of Political and Social Sciences Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Social Work	National School of Social Work
HUMANITIES AND ARTS (39 majors)	
CARRERA	ACADEMIC BODY
Documentary and Archive Management	National School of Higher Studies - Morelia
Arts and Design	Faculty of Arts and Design National School of Higher Studies - Morelia

Visual Arts	Faculty of Arts and Design
Library Science and Information Studies	Faculty of Philosophy and Letters
Film Studies	Faculty of Arts and Design University Center for Film Studies
Intercultural Development and Management	Faculty of Philosophy and Letters Peninsular Center for Social Sciences and the Humanities National School of Higher Studies - León
Graphic Design	Faculty of Higher Studies - Acatlán
Design and Visual Communication	Faculty of Arts and Design Faculty of Higher Studies - Cautitlán
Teaching German as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching Spanish as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching French as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching English as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching Italian as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching English	Faculty of Higher Studies - Acatlán
Latin American Studies	Faculty of Philosophy and Letters
Ethnomusicology	Faculty of Music
Philosophy	Faculty of Philosophy and Letters Faculty of Higher Studies - Acatlán
Geohistory	National School of Higher Studies - Morelia
History	Faculty of Philosophy and Letters Faculty of Higher Studies - Acatlán
Art History	National School of Higher Studies - Morelia
Hispanic Languages and Literatures	Faculty of Philosophy and Letters Faculty of Higher Studies - Acatlán
Modern Languages and Literatures (German)	Faculty of Philosophy and Letters
Modern Languages and Literatures (French)	Faculty of Philosophy and Letters
Modern Languages and Literatures (English)	Faculty of Philosophy and Letters
Modern Languages and Literatures (Italian)	Faculty of Philosophy and Letters
Modern Languages and Literatures (Portuguese)	Faculty of Philosophy and Letters
Classical Languages and Literatures	Faculty of Philosophy and Letters
Applied Linguistics	National School of Languages, Linguistics, and Translation
Dramatic Literature and Theater	Faculty of Philosophy and Letters
Intercultural Literature	National School of Higher Studies - Morelia
Music (Voice)	Faculty of Music
Music (Composition)	Faculty of Music
Music (Education)	Faculty of Music
Music (Instrumental)	Faculty of Music
Music (Piano)	Faculty of Music
Music and Artistic Technology	National School of Higher Studies - Morelia
Pedagogy	Faculty of Philosophy and Letters Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Theater and Acting	Faculty of Music
Translation	National School of Languages, Linguistics, and Translation

Source: Academic Administration Department, UNAM.

UNAM. 2016-2017 UNDERGRADUATE DEGREES OFFERED OUTSIDE THE UNAM

BACHELOR'S DEGREE (24 MAJORS)

PHYSICAL SCIENCES, MATHEMATICS, AND ENGINEERING (6 majors)

MAJOR	ACADEMIC BODY
Science of Sustainable Materials	National School of Higher Studies - Morelia
Geosciences	National School of Higher Studies - Morelia
Renewable Energy Engineering	Renewable Energy Institute
Nanotechnology	Center for Nanosciences and Nanotechnology
Technology	Center for Applied Physics and Advanced Technology
Technologies for Information Sciences	National School of Higher Studies - Morelia

BIOLOGICAL, CHEMICAL, AND HEALTH SCIENCES (7 MAJORS)

MAJOR	ACADEMIC BODY
Agrigenomics	National School of Higher Studies - León
Environmental Science	National School of Higher Studies - Morelia
Genomics	Center for Genomic Sciences Biotechnology Institute
Ecology	National School of Higher Studies - Morelia
Physical Therapy	Faculty of Medicine. National School of Higher Studies - León
Sustainable Management of Coastal Areas	Faculty of Sciences - Multidisciplinary Unit for Teaching and Research (Sisal, Yucatán)
Dentistry	National School of Higher Studies - León

SOCIAL SCIENCES (4 majors)

MAJOR	ACADEMIC BODY
Agricultural Management	National School of Higher Studies - León
Territorial Development	National School of Higher Studies - León
Industrial Economics	National School of Higher Studies - León
Local Studies and Local Management	National School of Higher Studies - Morelia

HUMANIDADES Y ARTES (7 majors)

MAJOR	ACADEMIC BODY
Documentary and Archive Management	National School of Higher Studies - Morelia
Art and Design	National School of Higher Studies - Morelia
Development and Intercultural Management	Peninsular Center for Social Sciences and the Humanities. National School of Higher Studies - León
Geohistory	National School of Higher Studies - Morelia
Art History	National School of Higher Studies - Morelia
Intercultural Literature	National School of Higher Studies - Morelia
Music and Artistic Technology	National School of Higher Studies - Morelia

Source: Academic Administration Department, UNAM.

UNAM. 2016-2017 UNDERGRADUATE DEGREES OFFERED DISTANCE LEARNING SYSTEM

BACHELOR'S DEGREE (26 MAJORS)

BIOLOGICAL, CHEMICAL AND HEALTH SCIENCES (3 majors)

MAJOR	ACADEMIC BODY
Nursing	National School of Nursing and Obstetrics
Nursing and Obstetrics	National School of Nursing and Obstetrics
Psychology	Faculty of Psychology Faculty of Higher Studies - Iztacala

SOCIAL SCIENCES (11 majors)

MAJOR	ACADEMIC BODY
Administration	Faculty of Accounting and Administration
Communication	Faculty of Political and Social Sciences
Political Science and Public Administration	Faculty of Political and Social Sciences
Accounting	Faculty of Accounting and Administration
Law	Faculty of Law Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Economics	Faculty of Economics Faculty of Higher Studies - Aragón
Geography	Faculty of Philosophy and Letters
Information Science	Faculty of Accounting and Administration
International Relations	Faculty of Political and Social Sciences Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón
Sociology	Faculty of Political and Social Sciences
Social Work	National School of Social Work

HUMANITIES AND ARTS (12 majors)

MAJOR	ACADEMIC BODY
Library Science and Information Studies	Faculty of Philosophy and Letters
Design and Visual Communication	Faculty of Higher Studies - Cuautitlán
Teaching German as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching Spanish as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching French as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching English as a Foreign Language	Faculty of Higher Studies - Acatlán
Teaching Italian as a Foreign Language	Faculty of Higher Studies - Acatlán
Philosophy	Faculty of Philosophy and Letters
History	Faculty of Philosophy and Letters
Hispanic Languages and Letters	Faculty of Philosophy and Letters
Modern Languages and Letters (English)	Faculty of Philosophy and Letters
Pedagogy	Faculty of Philosophy and Letters

Source: Academic Administration Department, UNAM.

UNAM. 2016-2017 POSTGRADUATE, MASTER'S, AND DOCTORAL PROGRAMS

MASTER'S AND DOCTORAL PROGRAMS (41 PROGRAMS / 92 PLANS)

PHYSICAL SCIENCES, MATHEMATICS, AND ENGINEERING (7 programs / 15 plans)

PROGRAM / STUDY PLAN	ACADEMIC BODY
Astrophysics Postgraduate Program	
MA in Science (Astrophysics)	Faculty of Sciences
Ph.D. in Science (Astrophysics)	Astronomy Institute Nuclear Sciences Institute Radioastronomy and Astrophysics Institute
Earth Sciences Postgraduate Program	
MA in Earth Sciences	Faculty of Sciences
Ph.D. in Earth Sciences	Faculty of Engineering Geophysics Institute Geography Institute Geology Institute Applied Mathematics and Systems Research Institute Center for Atmospheric Sciences Center for Geosciences
Physical Sciences Postgraduate Program	
MA in Science (Physics)	Faculty of Sciences
MA in Science (Medical Physics)	Astronomy Institute
Ph.D. in Science (Physics)	Physical Sciences Institute Nuclear Sciences Institute Physics Institute Materials Research Institute Center for Applied Sciences and Technological Development Renewable Energies Institute Center for Nanosciences and Nanotechnology
Computer Science and Engineering Postgraduate Program	
MA in Computer Science and Engineering	Faculty of Sciences
Ph.D. in Computer Science and Engineering	Faculty of Engineering Faculty of Higher Studies - Cuautitlán Engineering Institute Applied Mathematics and Systems Research Institute Mathematics Institute Center for Applied Sciences and Technological Development

Materials Science and Engineering Postgraduate Program

MA in Materials Science and Engineering	Faculty of Sciences
Ph.D. in Materials Science and Engineering	Faculty of Engineering Faculty of Chemistry Faculty of Physics Materials Research Institute Center for Applied Sciences and Technological Development Center for Applied Physics and Advanced Technology Renewable Energies Institute Center for Nanosciences and Nanotechnology

Mathematics Master's and Doctoral Programs

MA in Mathematics	Faculty of Sciences
Ph.D. in Mathematics	Applied Mathematics and Systems Research Institute Mathematics Institute Center for Mathematical Sciences

Engineering Master's and Doctoral Programs

MA in Engineering	Faculty of Engineering
Ph.D. in Engineering	Faculty of Chemistry Engineering Institute Applied Mathematics and Systems Research Institute Renewable Energies Institute Center for Applied Sciences and Technological Development External Institution: Mexican Water Technology Institute

BIOLOGICAL, CHEMICAL, AND HEALTH SCIENCES (11 programs / 20 plans)

PROGRAM / STUDY PLAN	ACADEMIC BODY
Ph.D. in Biomedical Sciences	
Ph.D. in Biomedical Sciences	Faculty of Medicine Faculty of Higher Studies - Iztacala Ecology Institute Cellular Physiology Institute Biomedical Research Institute Neurobiology Institute Chemistry Institute Center for Genomic Sciences

Animal Production and Health Master's and Doctoral Programs

MA in Animal Production and Health	Faculty of Veterinary Medicine and Zootechnics
MA in Veterinary Medicine and Zootechnics	Faculty of Higher Studies - Cuautitlán
Doctorate in Animal Production and Health	Biomedical Research Institute

Biochemical Sciences Master's and Doctoral Programs

MA in Biochemical Sciences	Faculty of Chemistry
Ph.D. in Biochemical Sciences	Biotechnology Institute Cellular Physiology Institute Biomedical Research Institute

Chemical Sciences Master's and Doctoral Programs

MA in Chemical Sciences	Faculty of Chemistry
Ph.D. in Chemical Sciences	Faculty of Higher Studies - Cuautitlán Nuclear Sciences Institute Materials Research Institute Chemistry Institute

Biological Sciences Postgraduate Program

MA in Biological Sciences	Faculty of Sciences
Ph.D. in Biological Sciences	Faculty of Medicine Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza Biology Institute Ecology Institute Cellular Physiology Institute Geology Institute Biomedical Research Institute Sustainability and Ecosystems Research Institute National School of Higher Studies - Morelia

Ocean Sciences and Limnology Postgraduate Program

MA in Ocean Sciences and Limnology	Faculty of Sciences
Ph.D. in Ocean Sciences and Limnology	Faculty of Chemistry Faculty of Higher Studies - Iztacala Ocean Sciences and Limnology Institute Geophysics Institute

Psychology Master's and Doctoral Programs

MA in Psychology	Faculty of Psychology
Ph.D. in Psychology	Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza Neurobiology Institute

	<p>External Institution: Dr. Ramón de la Fuente Muñiz National Psychiatry Institute Manuel Velasco Suárez National Neurology and Neurosurgery Institute</p>
Neurobiology Master's Program	
MA in Science (Neurobiology)	Faculty of Psychology Faculty of Higher Studies - Iztacala Neurobiology Institute
Nursing Master's Program	
MA in Nursing	National School of Nursing and Obstetrics Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza
Medicine, Dentistry, and Health Sciences Master's and Doctoral Programs	
MA in Medicine, Dentistry and Health Sciences	Faculty of Philosophy and Letters
Ph.D. in Medicine, Dentistry and Health Sciences	Faculty of Medicine Faculty of Dentistry Faculty of Psychology Faculty of Chemistry Faculty of Higher Studies - Iztacala Faculty of Higher Studies - Zaragoza National School of Higher Studies - León Biomedical Research Institute External Institutions: General Hospital of Mexico Federico Gómez Children's Hospital of Mexico National Rehabilitation Institute Conde de Valencia Ophthalmology Foundation Ignacio Chávez National Cardiology Institute Salvador Zubirán National Medicine and Nutrition Institute Manuel Velasco Suárez National Neurology and Neurosurgery Institute National Pediatric Institute Isidro Espinosa de los Reyes National Perinatology Institute Dr. Ramón de la Fuente Muñiz National Psychiatric Institute National Social Security Institute National Genomic Medicine Institute

Sustainability Sciences Postgraduate Program

MA in Sustainability Sciences	Faculty of Sciences
Ph.D. in Sustainability Sciences	National School of Higher Studies - León National School of Higher Studies - Morelia Ecology Institute Ocean Sciences and Limnology Institute Biology Institute Economic Research Institute Social Research Institute Engineering Institute Renewable Energies Institute Sustainability and Ecosystems Research Institute

SOCIAL SCIENCES (8 programs / 25 plans)**PROGRAM / STUDY PLAN****ACADEMIC BODY****Economics Postgraduate Program**

MA in Economics	Faculty of Economics
Ph.D. in Economics	Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón Economic Research Institute

Anthropology Postgraduate Program

MA in Anthropology	Faculty of Philosophy and Letters
Ph.D. in Anthropology	Social Research Institute Social Research Institute

Administration Sciences Postgraduate Program

MA in Administration	Faculty of Accounting and Administration
MA in Business Administration	Faculty of Chemistry
MA in Auditing	Faculty of Higher Studies - Cuautitlán
MA in Finance	Faculty of Higher Studies - Zaragoza
MA in Information Management	Legal Research Institute
Ph.D. in Administration Sciences	Social Research Institute

Law Postgraduate Program

MA in Law	Faculty of Law
MA in Criminal Law	Faculty of Higher Studies - Acatlán
Doctorate in Law	Faculty of Higher Studies - Aragón Legal Research Institute

Geography Postgraduate Program

MA in Geography	Faculty of Philosophy and Letters
Ph.D. in Geography	Geography Institute Center for Environmental Geography Research

Political and Social Sciences Postgraduate Program

MA in Communication	Faculty of Political and Social Sciences
MA in Social Demography	Faculty of Higher Studies - Acatlán
MA in International Relations	Social Research Institute
MA in Mexican-American Affairs	Center for Research on North America
MA in Political and Social Studies	Regional Center for Multidisciplinary Research
MA in Government and Public Affairs	
Ph.D. in Political and Social Sciences	

Latin American Studies Postgraduate Program

MA in Latin American Studies	Faculty of Political and Social Sciences
Ph.D. in Latin American Studies	Faculty of Philosophy and Letters Economic Research Institute Center for Research on Latin America and the Caribbean Center for Interdisciplinary Research on Science and the Humanities

Social Work Master's Program

MA in Social Work	National School of Social Work Faculty of Political and Social Sciences Faculty of Medicine Faculty of Higher Studies - Zaragoza Center for Interdisciplinary Research on Science and the Humanities Peninsular Center for Social Sciences and the Humanities Regional Center for Multidisciplinary Research
-------------------	--

HUMANITIES AND ARTS (15 programs / 32 plans)

PROGRAM / STUDY PLAN	ACADEMIC BODY
----------------------	---------------

Philosophy Master's and Doctoral Programs

MA in Philosophy	Faculty of Philosophy and Letters
Ph.D. in Philosophy	Philosophical Research Institute

Philosophy of Science Master's and Doctoral Programs

MA in the Philosophy of Science	Faculty of Sciences
Ph.D. in the Philosophy of Science	Faculty of Philosophy and Letters Philosophical Research Institute Science Popularization Department

Library Science and Information Studies Master's and Doctoral Programs

MA in Library Science and Information Studies ^a	Faculty of Philosophy and Letters
Ph.D. in Library Science and Information Studies	Library Science and Information Research Institute

History Master's and Doctoral Programs	
MA in History	Faculty of Philosophy and Letters
Ph.D. in History	Historical Research Institute
Art History Master's and Doctoral Program	
MA in Art History	Faculty of Philosophy and Letters
Ph.D. in Art History	Aesthetic Research Institute
Letters Master's and Doctoral Programs	
MA in Letters	Faculty of Philosophy and Letters
Ph.D. in Letters	Philological Research Institute
Linguistics Master's and Doctoral Programs	
MA in Applied Linguistics	Faculty of Philosophy and Letters
MA in Hispanic Linguistics	Philological Research Institute
Ph.D. in Linguistics	National School of Languages, Linguistics, and Translation
Architecture Master's and Doctoral Programs	
MA in Architecture	Faculty of Architecture
Ph.D. in Architecture	Faculty of Higher Studies - Aragón Historical Research Institute
Pedagogy Master's and Doctoral Programs	
MA in Pedagogy	Faculty of Philosophy and Letters
Ph.D. in Pedagogy	Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Aragón Educational Research Institute
Mesoamerican Studies Master's and Doctoral Programs	
MA in Mesoamerican Studies	Faculty of Philosophy and Letters
Ph.D. in Mesoamerican Studies	Philological Research Institute
Urbanism Master's and Doctoral Programs	
MA in Urbanism	Faculty of Architecture
Ph.D. in Urbanism	Faculty of Higher Studies - Acatlán Geography Institute Engineering Institute Social Research Institute
Music Master's and Doctoral Programs	
MA in Music	Faculty of Music
Ph.D. in Music ^a	Social Research Institute Center for Applied Sciences and Technological Development

Industrial Design Postgraduate Program

MA in Industrial Design	Faculty of Architecture Social Research Institute
-------------------------	--

Arts and Design Postgraduate Program

MA in Visual Arts	Faculty of Art and Design
MA in Documentary Film	Faculty of Architecture
MA in Design and Visual Communication	Aesthetic Research Institute
MA in Teaching Arts and Design	University Center for Film Studies

Arts and Design Doctoral Program

MA in Teaching	
MA in Teaching ^b	Faculty of Sciences Faculty of Political and Social Sciences Faculty of Philosophy and Letters Faculty of Psychology Faculty of Chemistry Faculty of Higher Studies - Acatlán Faculty of Higher Studies - Cuautitlán Faculty of Higher Studies - Iztacala National School of Higher Studies - Morelia Philological Research Institute Educational Research Institute Mathematics Institute National Preparatory School National College of Science and the Humanities

^a Also offered as a distance learning program.

^b This program covers the fields of biology, social sciences, Spanish, philosophy, physics, French, geography, history, mathematics, chemistry, classical literature, English, and psychology. On April 10, 2015, the fields of biology, Spanish, French, English, and mathematics were adapted for distance learning courses.

Source: Postgraduate Studies Division, UNAM.

UNAM. 2016-2017 POSTGRADUATE PROGRAMS, SPECIALIZATIONS

SPECIALIZATIONS (40 PROGRAMS / 240 STUDY PLANS)

ACADEMIC BODY	DIPLOMA
Faculty of Architecture	
Architecture Specialization Program	Specialist in Industrialized Construction Components Specialist in the Design of Light Coverings Specialist in Architectural Lighting Design Specialist in Project Management Specialist in Real Estate Valuation Specialist in Housing
Faculty of Sciences	
Electronic Microscopy for the Biological Sciences Specialization Program	Specialist in Electronic Microscopy for the Biological Sciences
Biology, Physics, and Mathematics Specialization Program	Specialist in Biology for High School Specialist in Physics for High School Specialist in Mathematics for High School Specialist in Pensions
Applied Statistics Specialization Program	Specialist in Applied Statistics
High Performance Computing Specialization Program	Specialist in High Performance Computing
Faculty of Political and Social Sciences	
Political and Social Sciences Specialization Program	Specialist in Public Security Specialist in Political Analysis Specialist in Negotiation and Political and Social Conflict Management Specialist in Public Opinion Specialist in Communication and Political Campaigns
Faculty of Accounting and Administration	
Administration Sciences Specialization Program	Specialist in Gerontological Management Specialist in Business Administration Specialist in Public Spending Specialist in Human Resources Specialist in Taxes Specialist in Market Research Specialist in Quality Systems Administration Specialist in Business Creation and Development Specialist in Operations Specialist in International Market Research Specialist in Auditing

ACADEMIC BODY	DIPLOMA
	Specialist in Domestic and International Accounting Specialist in Costs Specialist in Stock Finances Specialist in Corporate Finances Specialist in Government Auditing Specialist in Networks and Telecommunications Specialist in Information Systems Specialist in Business Technology
Faculty of Law Law Specialization Program	Specialist in Administrative Law Specialist in Environmental Law Specialist in Civil Law Specialist in Constitutional Law Specialist in the Administration and Prosecution of Justice Specialist in Computer Law Specialist in Intellectual Property Specialist in Child Law Specialist in Foreign Trade Specialist in the Public Service Accountability System Specialist in Electoral Law Specialist in Corporate Law Specialist in Family Law Specialist in Financial Law Specialist in Tax Law Specialist in Private International Law Specialist in Public International Law Specialist in Labor Law Specialist in Notarial Law Specialist in Criminal Law Specialist in Social Law Specialist in Human Rights Specialist in Gender and Law
Faculty of Economics Economics Specialization Program	Specialist in Social Development Specialist in Applied Econometrics Specialist in Environmental and Ecological Economics Specialist in Monetary and Financial Economics Specialist in Gender and the Economy Specialist in Economic History Specialist in the History of Economic Thought Specialist in Microfinances Specialist in Economic Theory

ACADEMIC BODY	DIPLOMA
Faculty of Philosophy and Letters	
Art History Specialization Program	Specialist in Art History
Faculty of Engineering	
Engineering Specialization Program	Specialist in Electrical Energy Specialist in Construction Specialist in Structures Specialist in Geotechnics Specialist in Hydraulics Specialist in Sanitary Engineering Specialist in Roads Specialist in Energy Efficiency Specialist in Automatic Control and Instrumentation ^d
High Performance Computing Specialization Program ^b	Specialist in High Performance Computing
Faculty of Medicine	
Medical Specialization Program	Specialist in Allergies and Clinical Immunology Specialist in Allergies and Pediatric Clinical Immunology Specialist in Anatomical Pathology Specialist in Anesthesiology Specialist in Pediatric Anesthesiology Specialist in Angiology and Vascular Surgery Specialist in Audiology, Otoneurology, and Phoniatriy Specialist in Reproductive Biology Specialist in Cardiology Specialist in Pediatric Cardiology Specialist in Cardiac Surgery Specialist in Pediatric Cardiac Surgery Specialist in General Surgery Specialist in Oncological Surgery (Adults) Specialist in Pediatric Surgery Specialist in Reconstructive Plastic Surgery Specialist in Proctology Specialist in Dermatology Specialist in Pediatric Dermatology Specialist in Dermatopathology Specialist in Endocrinology Specialist in Pediatric Endocrinology Specialist in Epidemiology Specialist in Gastroenterology Specialist in Pediatric Gastroenterology and Nutrition Specialist in Medical Genetics Specialist in Geriatrics

ACADEMIC BODY	DIPLOMA
	Specialist in Oncological Gynecology
	Specialist in Gynecology and Obstetrics
	Specialist in Hematology
	Specialist in Pediatric Hematology
	Specialist in Medical Imaging
	Specialist in Infectious Diseases
	Specialist in Sports Medicine
	Specialist in Rehabilitation
	Specialist in Emergency Medicine
	Specialist in Intensive Care
	Specialist in Pediatric Intensive Care
	Specialist in Occupational Medicine
	Specialist in Family Care
	Specialist in Internal Medicine
	Specialist in Legal Medicine
	Specialist in Prenatal Care
	Specialist in Nuclear Medicine
	Specialist in Nephrology
	Specialist in Pediatric Nephrology
	Specialist in Neonatology
	Specialist in Pulmonology
	Specialist in Pediatric Pulmonology
	Specialist in Neuroanesthesiology
	Specialist in Neurosurgery
	Specialist in Pediatric Neurosurgery
	Specialist in Clinical Neurophysiology
	Specialist in Neurology
	Specialist in Pediatric Neurology
	Specialist in Neurotology
	Specialist in Neuropathology
	Specialist in Neuroradiology
	Specialist in Clinical Nutrition
	Specialist in Ophthalmology
	Specialist in Neurological Ophthalmology
	Specialist in Medical Oncology
	Specialist in Pediatric Oncology
	Specialist in Orthopedics
	Specialist in Otorhinolaryngology and Head and Neck Surgery
	Specialist in Pediatric Otorhinolaryngology
	Specialist in Clinical Pathology
	Specialist in Pediatric Pathology
	Specialist in Pediatrics
	Specialist in Psychiatrics
	Specialist in Child and Adolescent Psychiatrics

ACADEMIC BODY	DIPLOMA
	Specialist in Radiation Oncology Specialist in Rheumatology Specialist in Pediatric Rheumatology Specialist in Neurological Endovascular Therapy Specialist in Pediatric Urgent Care Specialist in Urology Specialist in Gynecological Urology
Faculty of Veterinary Medicine and Zootechnics Veterinary Medicine and Zootechnics Specialization Program	Specialist in Veterinary Medicine and Zootechnics (Animal Production) ^c Specialist in Veterinary Medicine and Zootechnics (Veterinary Medicine and Surgery) Specialist in Veterinary Medicine and Zootechnics (Veterinary Diagnostics)
Faculty of Dentistry Dental Specialization Program	Specialist in Oral and Maxillofacial Surgery Specialist in Endodontics Specialist in Implantology Specialist in Dental Materials Specialist in Advanced Restorative Dentistry Specialist in Pediatric Dentistry Specialist in Orthodontics Specialist in Oral Pathology Specialist in Periodontology and Implantology Specialist in Oral Prosthesis and Implantology Specialist in Maxillofacial Prosthetics Specialist in Public Dental Health
Faculty of Psychology Psychology Specialization Program	Specialist in Communication, Criminology, and Power Specialist in Educational Design and Evaluation Specialist in Diversity Education and Human Development Specialist in Cognitive Development and Comprehensive Learning Specialist in Clinical Interventions with Adults and Groups Specialist in Clinical Interventions in Children and Adolescents Specialist in Behavioral Neurobiology Specialist in Neuropsychology Specialist in Health Education and Disease Prevention Specialist in Health Education and Addiction Prevention Specialist in Psychophysiology

ACADEMIC BODY	DIPLOMA
	Specialist in Consumer Psychology Specialist in School Psychology and Psychoeducational Consulting Specialist in Organizational and Occupational Health
Faculty of Chemistry	
Clinical Biochemistry Specialization Program	Specialist in Clinical Biochemistry
Faculty of Higher Studies - Acatlán	
Construction Costs Specialization Program	Specialist in Construction Costs
Geotechnics Specialization Program	Specialist in Geotechnics
Art History Specialization Program	Specialist in Art History
Public Finance Administration Specialization Program	Specialist in Public Finance Administration
Quality Systems Specialization Program	Specialist in Quality Systems
Digital Technology for Math Education Specialization Program	Specialist in Digital Technology for Math Education
Law Specialization Program	Specialist in Administrative Law Specialist in Civil Law Specialist in Tax Law Specialist in Human Rights Specialist in Criminal Law
Faculty of Higher Studies - Aragón	
Law Specialization Program	Specialist in Civil Law Specialist in Criminal Law Specialist in Constitutional Law
Bridge Specialization Program	Specialist in Bridges
Faculty of Higher Studies - Cuautitlán	
Hospital and Clinical Pharmacology Specialization Program	Specialist in Hospital and Clinical Pharmacology Program
Ovine and Caprine Production Specialization Program	Ovine and Caprine Specialization Program
Rural Valuation Specialization Program	Specialist in Rural Valuation
High Performance Computing Specialization Program ^b	Specialist in High Performance Computing
Faculty of Higher Studies - Iztacala	
Endoperiodontology Specialization Program	Specialist in Endoperiodontology
Nephrological Nursing Specialization Program	Specialist in Nephrological Nursing
Pediatric Stomatology Program	Specialist in Pediatric Stomatology
Dentistry Specialization Program	Specialist in Dentistry
Faculty of Higher Studies - Zaragoza	
Child and Adolescent Stomatology Specialization Program	Specialist in Child and Adolescent Stomatology Program
Primary Care Stomatology Specialization Program	Specialist in Primary Care Stomatology
Occupational Health Specialization Program	Specialist in Occupational Health
Industrial Pharmacology Specialization Program	Specialist in Industrial Pharmacology

ACADEMIC BODY	DIPLOMA
National School of Higher Studies - León	
Dentistry Specialization Program	Specialist in Oral and Maxillofacial Surgery Specialist in Oral and Maxillofacial Pathology Specialist in Dental Materials and Biomaterials Specialist in Pediatric Dentistry Specialist in Endodontics Specialist in Oral Rehabilitation and Implantology Specialist in Orthodontics Specialist in Periodontology and Oral Implantology
National School of Nursing and Obstetrics	
Nursing Specialization Program	Specialist in Cardiovascular Nursing Specialist in Home Care Specialist in Intensive Care Nursing Specialist in Elderly Care Specialist in Neonatal Care Specialist in Sports Medicine Nursing Specialist in Rehabilitation Care Specialist in Mental Health Nursing Specialist in Pediatric Nursing Specialist in Nephrological Nursing Specialist in Neurological Nursing Specialist in Oncological Nursing Specialist in Perioperative Nursing Specialist in Perinatal Nursing Specialist in Public Health Nursing
National School of Social Work	
Social Work Specialization Program	Specialist in Social Work (Youth Interventions) Specialist in Social Work (Interventions with Women) Specialist in Social Work (Interventions with Senior Citizens)
National School of Languages, Linguistics, and Translation	
Teaching Spanish as a Foreign Language Specialization Program ^d	Specialist in Teaching Spanish as a Foreign Language
Learning Center for Foreigners	
Teaching Spanish as a Foreign Language Specialization Program ^d	Specialist in Teaching Spanish as a Foreign Language

ACADEMIC BODY	DIPLOMA
Mathematical Sciences Master's and Doctoral and Applied Statistics Specialization Program^a	Specialist in Applied Statistics
High Performance Computing Specialization Program ^b	Specialist in High Performance Computing

^a Offered at the following facilities: the Faculty of Sciences, the Center for Mathematical Sciences - Morelia, the Applied Mathematics and Systems Research Institute, the Mathematics Institute -University City, and the Mathematics Institute - Cuernavaca.

^b This program includes the participation of the Faculty of Science, the Faculty of Engineering, and the Faculty of Higher Studies - Cuautitlán, as well as the Engineering Institute, the Mathematics Institute, the Applied Mathematics and Systems Research Institute, and the Center for Applied Sciences and Technological Development.

^c Also offered as a distance learning course.

^d Offered as a distance learning course.

Source: Postgraduate Studies Division, UNAM.

UNAM. STUDENT POPULATION

UNIVERSITY CITY CAMPUS, 2016-2017*

ACADEMIC BODY	UNDERGRADUATE	
	BACHELOR'S	
Faculty of Architecture	7 096	
Faculty of Sciences	8 616	
Faculty of Political and Social Sciences	11 499	
Faculty of Accounting and Administration	15 933	
Faculty of Law	12 068	
Faculty of Economics	5 600	
Faculty of Philosophy and Letters	11 678	
Faculty of Engineering	13 033	
Faculty of Medicine	6 765	
Faculty of Veterinary Medicine and Zootechnics	3 319	
Faculty of Dentistry	2 862	
Faculty of Psychology	3 916	
Faculty of Chemistry	7 136	
National School of Languages, Linguistics, and Translation		
National School of Social Work	3 028	
Center for Applied Sciences and Technological Development		
Center for Atmospheric Sciences		
Astronomy Institute		
Biology Institute		
Ocean Sciences and Limnology Institute		
Nuclear Sciences Institute		
Ecology Institute		
Physics Institute		
Cellular Physiology Institute		
Geophysics Institute		
Geology Institute		
Engineering Institute		
Biomedical Research Institute		
Economic Research Institute		
Applied Mathematics and Systems Research Institute		
Materials Research Institute		
Legal Research Institute		
Mathematics Institute		
Chemistry Institute		
TOTAL		112 549

* Includes distance learning courses.



	POSTGRADUATE			TOTALS	
	SPECIALIZATION	MASTER'S	DOCTORATE	POSTGRADUATE TOTAL	TOTAL
	168	333	94	595	7 691
	20	237	104	361	8 977
	85	190	216	491	11 990
	375	1 976	74	2 425	18 358
	1 058	960	134	2 152	14 220
	96	108	99	303	5 903
	31	888	1 080	1 999	13 677
	355	804	266	1 425	14 458
	10 701	474	596	11 771	18 536
	128	201	103	432	3 751
	321	18	22	361	3 223
	42	176	160	378	4 294
	14	878	418	1 310	8 446
	54			54	54
	102	72		174	3 202
		7	1	8	8
		29	35	64	64
		35	23	58	58
		74	76	150	150
		194	64	258	258
		38	27	65	65
		138	122	260	260
		67	40	107	107
		5	90	95	95
		102	64	166	166
		108	65	173	173
		126	68	194	194
		19	133	152	152
		22	41	63	63
	39	81	68	188	188
		100	133	233	233
			55	55	55
		63	68	131	131
			21	21	21
	13 589	8 523	4 560	26 672	139 221

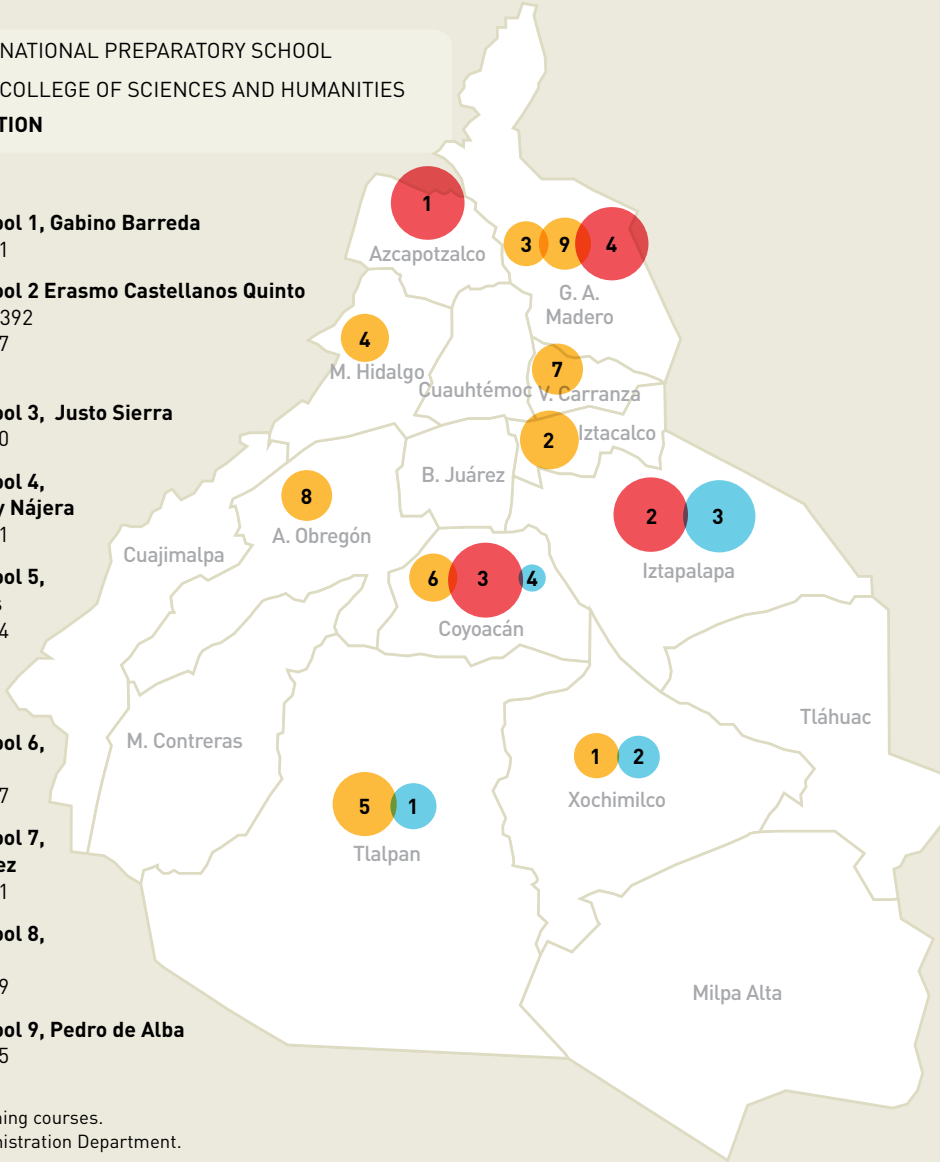
Source: Academic Administration Department, UNAM.

UNAM. STUDENT POPULATION IN MEXICO CITY

OUTSIDE THE UNIVERSITY CITY CAMPUS 2016-2017*

- **HIGH SCHOOL:** NATIONAL PREPARATORY SCHOOL
- **HIGH SCHOOL:** COLLEGE OF SCIENCES AND HUMANITIES
- **HIGHER EDUCATION**

- 1 Preparatory School 1, Gabino Barreda**
High School: 4 541
- 2 Preparatory School 2 Erasmo Castellanos Quinto**
Junior College: 2 392
High School: 5 307
Total: 7 699
- 3 Preparatory School 3, Justo Sierra**
High School: 4 690
- 4 Preparatory School 4, Vidal Castañeda y Nájera**
High School: 5 221
- 5 Preparatory School 5, José Vasconcelos**
High School: 9 004
- 6 Preparatory School 6, Antonio Caso**
High School: 5 177
- 7 Preparatory School 7, Ezequiel A. Chávez**
High School: 5 881
- 8 Preparatory School 8, Miguel E. Schulz**
High School: 5 759
- 9 Preparatory School 9, Pedro de Alba**
High School: 6 065



* Includes distance learning courses.
Source: Academic Administration Department.

TOTAL PER LEVEL	Prerequisite Courses	Junior College	High School	BA	Specialization	MA	Ph.D.
	904	2 392	99 055	19 609	503	455	189

- 1 Azcapotzalco Campus**
High School: 11 634
- 2 East Campus**
High School: 12 216
- 3 South Campus**
High School: 11 855
- 4 Vallejo Campus**
High School: 11 705

1 National School of Nursing and Obstetrics
BA: 4 324
Specialization: 375
MA: 92
Total Postgraduate: 467
Total: 4 791

2 Faculty of Arts and Design
BA: 3 495
MA: 282
Ph.D.: 104
Total Postgraduate: 386
Total: 3 881

3 Faculty of Higher Studies - Zaragoza
BA: 11 170
Specialization: 128
MA: 41
Ph.D.: 40
Total Postgraduate: 209
Total: 11 379

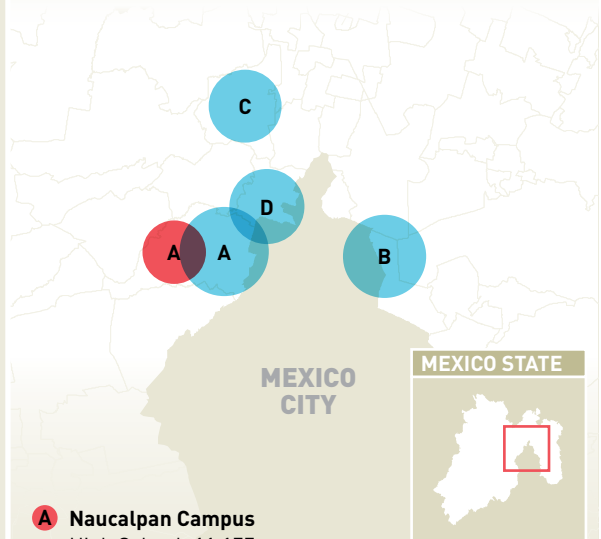
4 Faculty of Music
Prerequisite Courses: 904
BA: 620
MA: 40
Ph.D.: 38
Total Postgraduate: 78
Total: 1 602

5 Alternate Campuses for the Faculties of Engineering and Medicine
Ph.D.: 7

Total Postgraduate	GENERAL TOTAL
1 147	123 107

STUDENT POPULATION IN MEXICO STATE

2016-2017*



A Naucalpan Campus
High School: 11 177

A Faculty of Higher Studies - Acatlán
BA: 21 787
Specialization: 128
MA: 450
Ph.D.: 43
Total Postgraduate: 621
Total: 22 408

B Faculty of Higher Studies, Aragón
BA: 18 968
Specialization: 33
MA: 335
Ph.D.: 49
Total Postgraduate: 417
Total: 19 385

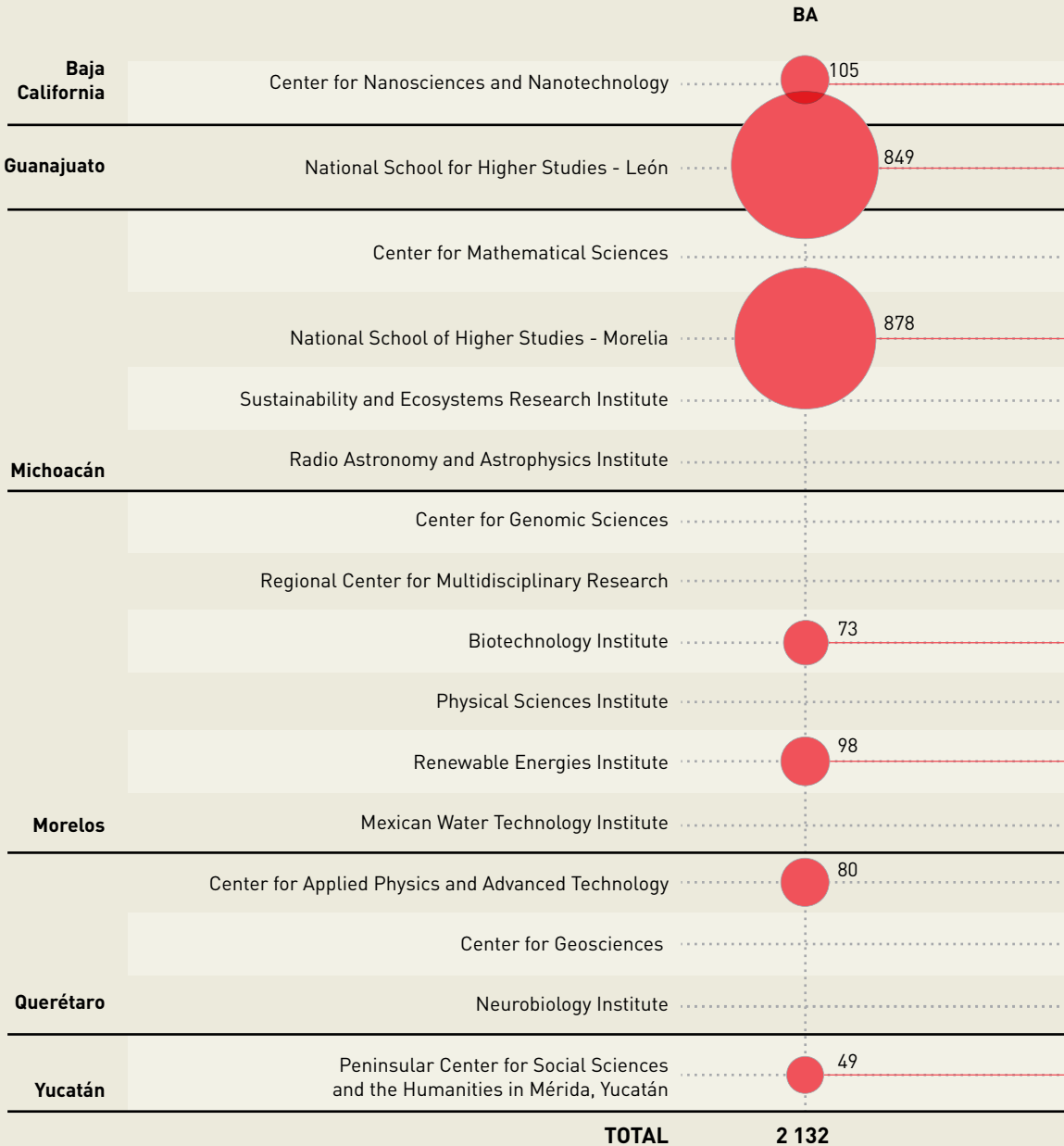
C Faculty of Higher Studies, Cuautitlán
BA: 15 077
Specialization: 47
MA: 89
Ph.D.: 32
Total Postgraduate: 168
Total: 15 245

D Faculty of Higher Studies, Iztacala
BA: 15 526
Specialization: 72
MA: 236
Total Postgraduate: 107
Ph.D.: 415
Total: 15 941

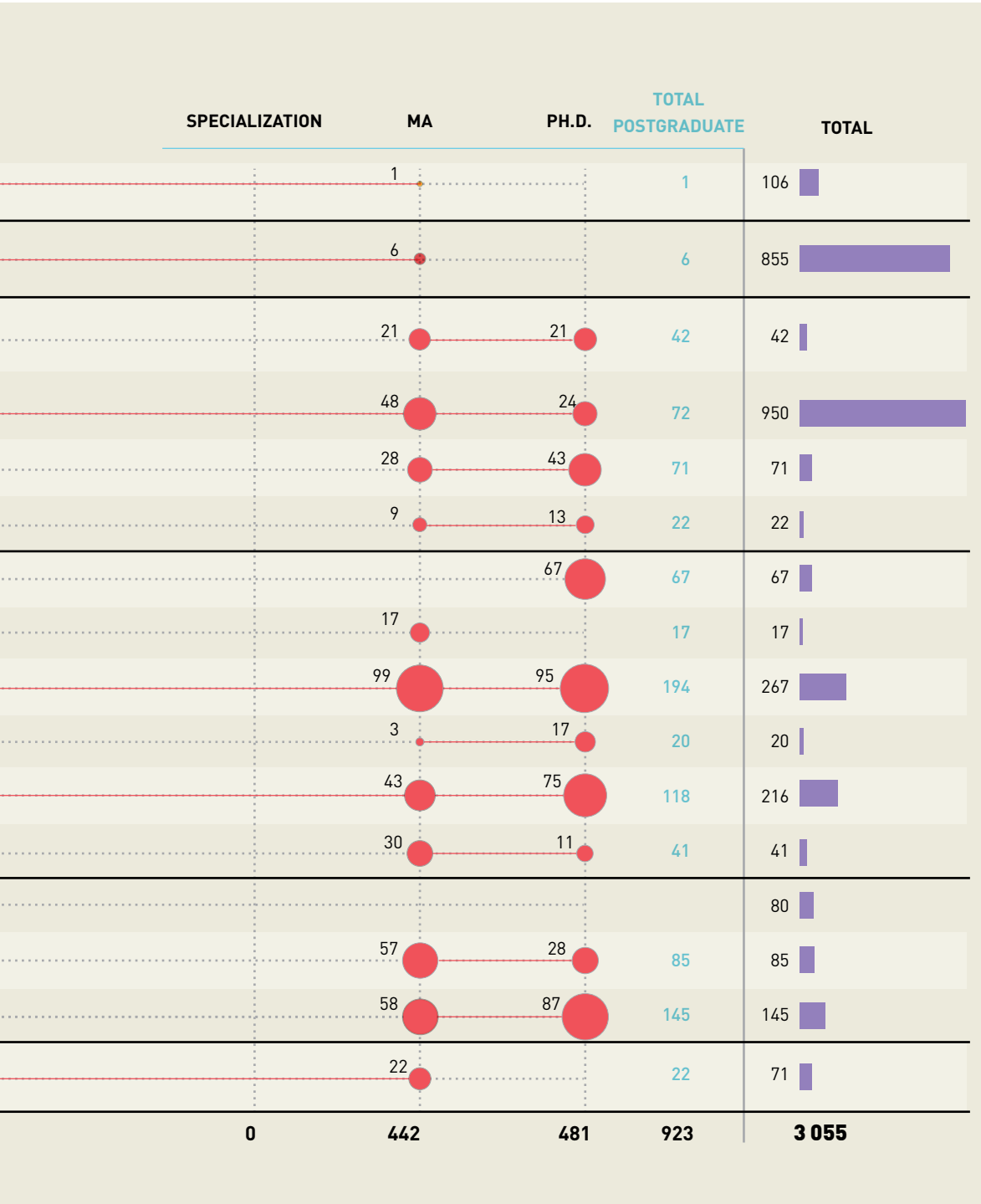
High School	11 177
BA	71 358
Specialization	280
MA	1 110
Ph.D.	231
Total Postgraduate	1 621
TOTAL	84 156

UNAM. STUDENT POPULATION ELSEWHERE IN MEXICO

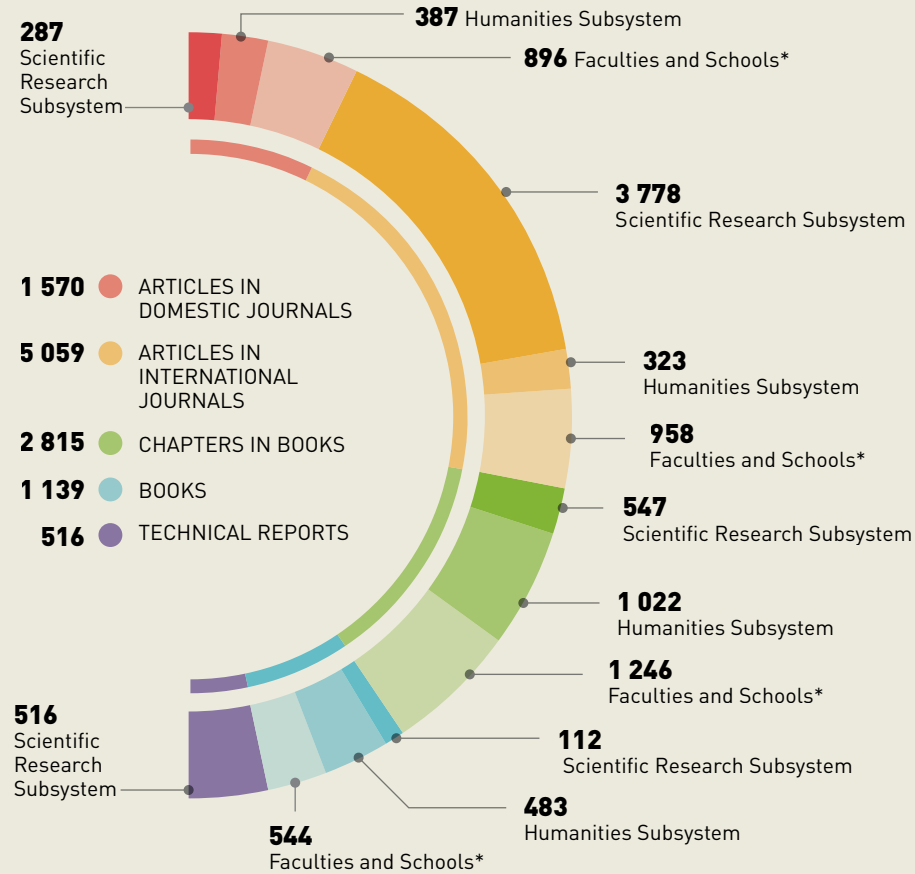
2016-2017*



*Includes distance learning courses.
Source: Academic Administration Department, UNAM.



UNAM. RESEARCH OUTPUT 2016



*Data on Faculties and Schools estimated by DGPL, UNAM.
 Source: Scientific Research Department, UNAM. Humanities Department, UNAM.

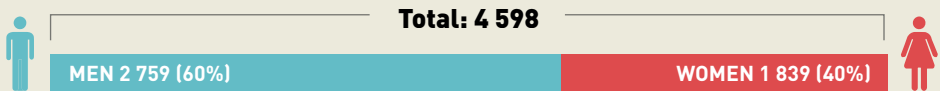
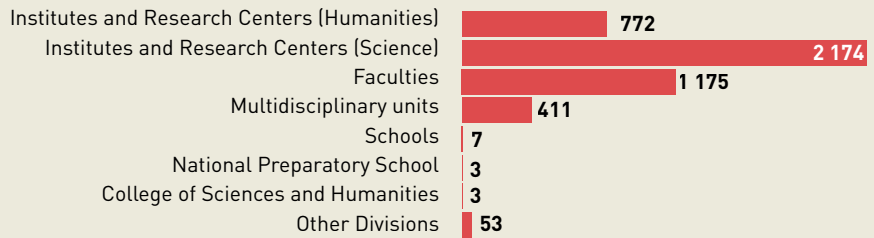
SCIENTIFIC ARTICLES

registered in the International Science Indicator (ISI) 2015 and 2016*



*Preliminary Data
 Prepared by: Social Media Laboratory, IIMAS, UNAM, January 2017
 Source: ISI-Web of Knowledge, Web of Science, Thomson Reuters, January 2017.

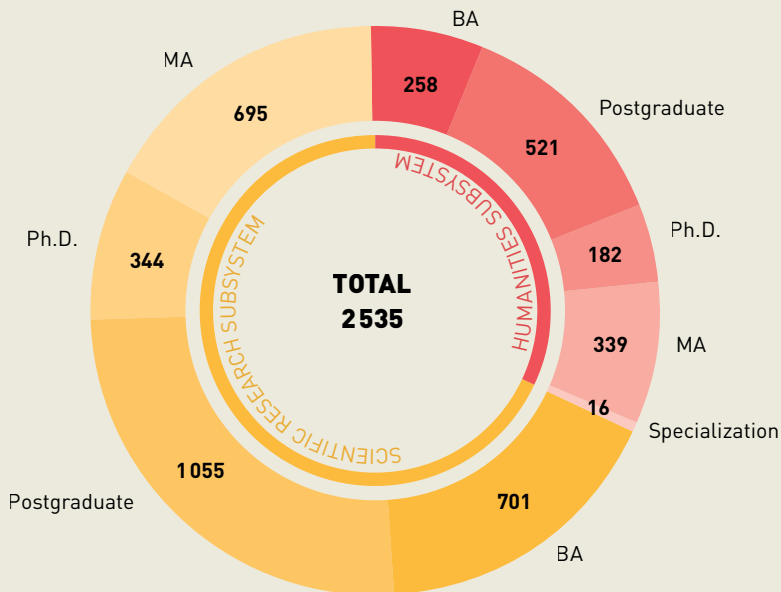
ACADEMIC STAFF IN THE NATIONAL SYSTEM OF RESEARCHERS 2016



Source: SNI, Conacyt.

DISSERTATIONS DIRECTED BY RESEARCHERS*

Number of Academics in 2016



*Completed, directed dissertations and other graduation options offered by technical and academic boards.
Source: Scientific Research and Humanities Departments, UNAM.

INTERNET DIRECTORY

UNAM: INTERNET DIRECTORY

NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO

National Autonomous University of Mexico	http://www.unam.mx
--	---

HIGH SCHOOLS

College of Sciences and Humanities	http://www.cch.unam.mx/
------------------------------------	---

National Preparatory School	http://dgenp.unam.mx/
-----------------------------	---

FACULTIES

Faculty of Architecture	http://arquitectura.unam.mx/
-------------------------	---

Faculty of Arts and Design	http://www.fad.unam.mx/
----------------------------	---

Faculty of Sciences	http://www.fcencias.unam.mx/
---------------------	---

Faculty of Political and Social Sciences	http://www.politicas.unam.mx/
--	---

Faculty of Accounting and Administration	http://www.fca.unam.mx/
--	---

Faculty of Law	http://www.derecho.unam.mx/
----------------	---

Faculty of Economics	http://www.economia.unam.mx/
----------------------	---

Faculty of Philosophy and Letters	http://www.filos.unam.mx/
-----------------------------------	---

Faculty of Engineering	http://www.ingenieria.unam.mx/
------------------------	---

Faculty of Medicine	http://www.facmed.unam.mx/
---------------------	---

Faculty of Veterinary Medicine and Zootechnics	http://www.fmvz.unam.mx/
--	---

Faculty of Music	http://www.fam.unam.mx/
------------------	---

Faculty of Dentistry	http://www.odonto.unam.mx/
----------------------	---

Faculty of Psychology	http://www.psicologia.unam.mx/
-----------------------	---

Faculty of Chemistry	http://www.quimica.unam.mx/
----------------------	---

NATIONAL SCHOOLS

National School of Nursing and Obstetrics	http://www.eneo.unam.mx/
---	---

National School of Higher Studies - León	http://www.enes.unam.mx/
--	---

National School of Higher Studies - Morelia	http://www.enesmorelia.unam.mx/
---	---

National School of Languages, Linguistics, and Translation	http://www.enalt.unam.mx/
--	---

National School of Social Work	http://www.trabajosocial.unam.mx/
--------------------------------	---

MULTIDISCIPLINARY UNITS

Faculty of Higher Studies - Acatlán	http://www.acatlan.unam.mx/
Faculty of Higher Studies - Aragón	http://www.aragon.unam.mx/
Faculty of Higher Studies - Cuautitlán	http://www.cuautitlan.unam.mx/
Faculty of Higher Studies - Iztacala	http://www.iztacala.unam.mx/
Faculty of Higher Studies - Zaragoza	http://www.zaragoza.unam.mx/

SCIENTIFIC RESEARCH

Scientific Research Department	http://www.cic-ctic.unam.mx/
Science Popularization Department	http://www.dgdc.unam.mx/

INSTITUTES

Astronomy Institute	http://www.astroscu.unam.mx/
Biology Institute	http://www.ibiologia.unam.mx/
Biotechnology Institute	http://www.ibt.unam.mx/
Ocean Sciences and Limnology Institute	http://www.icmyl.unam.mx/
Physical Sciences Institute	http://www.fis.unam.mx/
Nuclear Sciences Institute	http://www.nucleares.unam.mx/
Ecology Institute	http://www.ecologia.unam.mx/
Renewable Energies Institute	http://www.ier.unam.mx/
Physics Institute	http://www.fisica.unam.mx/
Cellular Physiology Institute	http://www.ifc.unam.mx/
Geophysics Institute	http://www.geofisica.unam.mx/
Geography Institute	http://www.igeograf.unam.mx/
Geology Institute	http://www.geologia.unam.mx/
Engineering Institute	http://www.iingen.unam.mx/
Biomedical Research Institute	http://www.biomedicas.unam.mx/
Sustainability and Ecosystems Research Institute	http://www.ies.unam.mx/
Applied Mathematics and Systems Research Institute	http://www.iimas.unam.mx/
Materials Research Institute	http://www.iim.unam.mx/
Mathematics Institute	http://www.matem.unam.mx/
Neurobiology Institute	http://www.inb.unam.mx/

Chemistry Institute	http://www.iquimica.unam.mx/
Radio Astronomy and Astrophysics Institute	http://www.iryia.unam.mx/
CENTERS	
Center for Applied Sciences and Technological Development	http://www.ccadet.unam.mx/
Center for Atmospheric Sciences	http://www.atmosfera.unam.mx/
Center for Genomic Sciences	http://www.ccg.unam.mx/
Center for Mathematical Sciences	http://www.matmor.unam.mx/
Center for Applied Physics and Advanced Technology	http://www.fata.unam.mx/
Center for Geosciences	http://www.geociencias.unam.mx/
Center for Environmental Geography Research	http://www.ciga.unam.mx/
Center for Nanosciences and Nanotechnology	http://www.cnyn.unam.mx/
PROGRAMS	
Climate Change Research Program	http://www.pincc.unam.mx/
University Space Program	
University Food Program	http://www.alimentos.unam.mx/
Sustainability Strategy Program	http://www.pues.unam.mx/
University Health Research Program	http://www.puis.unam.mx/
HUMANITIES RESEARCH	
Humanities Department	http://www.humanidades.unam.mx/
INSTITUTES	
Anthropological Research Institute	http://www.iaa.unam.mx/
Bibliographic Research Institute	http://www.iib.unam.mx/
Library and Information Research Institute	http://iibi.unam.mx/
Economic Research Institute	http://www.iiec.unam.mx/
Aesthetic Research Institute	http://www.esteticas.unam.mx/
Philological Research Institute	http://www.iifilologicas.unam.mx/
Philosophical Research Institute	http://www.filosoficas.unam.mx/
Historical Research Institute	http://www.iih.unam.mx/
Legal Research Institute	http://www.juridicas.unam.mx/
Educational Research Institute	http://www.iisue.unam.mx/
Social Research Institute	http://www.iis.unam.mx/
CENTERS	
Center for Interdisciplinary Research on Science and the Humanities	http://www.ceiach.unam.mx/
Center for Multidisciplinary Research on Chiapas and the Southern Border	http://cimsur.unam.mx/

Center for Research on North America	http://www.cisan.unam.mx/
Center for Research on Latin America and the Caribbean	http://www.cialc.unam.mx/
Peninsular Center for Social Sciences and the Humanities	http://www.cephcis.unam.mx/
Regional Center for Multidisciplinary Research	http://www.crim.unam.mx/
PROGRAMS	
University Bioethics Program	http://www.bioetica.unam.mx/
University Human Rights Program	http://www.pudh.unam.mx/
University Cultural Diversity and Interculturality Studies Program	http://www.nacionmulticultural.unam.mx/
University Development Studies Program	http://www.pued.unam.mx/
University Asian and African Studies Program	http://www.suea.unam.mx/
University Urban Studies Program	http://www.puec.unam.mx/
CULTURAL PROMOTION	
Cultural Promotion Department	http://cultura.unam.mx/
Cinematographic Activities Department	http://www.filmoteca.unam.mx/
Visual Arts Department	
Music Department	http://www.musica.unam.mx/
Publication and Editorial Promotion Department	http://www.libros.unam.mx/
Radio UNAM	http://www.radiounam.unam.mx/
University Television Department	http://tv.unam.mx/
Dance Department	http://www.danza.unam.mx/
University Magazine Department	http://www.revistadelauniversidad.unam.mx/
Literature Department	http://www.literatura.unam.mx/
Theater Department	http://www.teatro.unam.mx/
Tlatelolco University Cultural Center	http://www.tlatelolco.unam.mx/
University Film Studies Center	http://www.cuec.unam.mx/
University Theater Center	http://www.cut.unam.mx/
Juan José Arreola Casa del Lago	http://www.casadellago.unam.mx/
El Chopo University Museum	http://www.chopo.unam.mx/
INNOVATION AND DEVELOPMENT DEPARTMENT	
Innovation and Development Department	http://www.innovacion.unam.mx/

TRANSPARENCY DEPARTMENT

UNAM Transparency Department	http://www.transparencia.unam.mx/
------------------------------	---

SECRETARY GENERAL

Secretary General	http://www.sa.unam.mx/
Educational Development and Curricular Innovation Department	http://www.codeic.unam.mx/
Postgraduate Studies Department	http://www.posgrado.unam.mx/
University Council Outreach Department	https://consejo.unam.mx/cvic-main
Academic Administration Department	https://www.dgae.unam.mx/
Academic Staff Affairs Department	http://dgapa.unam.mx/
Libraries Department	http://www.dgbiblio.unam.mx/
Credit Incorporation and Revalidation Department	http://www.dgire.unam.mx/

ADMINISTRATIVE SECRETARY

Administrative Secretary	http://www.sa.unam.mx/
Construction and Conservation Department	http://www.obras.unam.mx/
Staff Department	http://www.personal.unam.mx/
Budget Department	https://presupuesto.unam.mx/
Procurement Department	http://www.proveeduria.unam.mx/
Administrative Services Department	http://www.dgsa.unam.mx/

INSTITUTIONAL DEVELOPMENT SECRETARY

Institutional Development Secretary	http://www.sdei.unam.mx/
Digital Collections Department	http://www.ccud.unam.mx/
Distance Learning Department	http://www.cuaed.unam.mx/
Institutional Outreach Department	http://www.cvi.unam.mx/
Computing and Information and Communications Technologies Department	http://www.tic.unam.mx/
Institutional Evaluation Department	http://www.dgei.unam.mx/
Planning Department	http://www.planeacion.unam.mx/
INTERNATIONAL RELATIONS AND AFFAIRS DEPARTMENT	http://crai.unam.mx/
Internationalization and Cooperation Department	http://www.global.unam.mx/
Learning Center for Foreigners	http://www.cepe.unam.mx/

SEMINARS

Institutional and Social Performance Analysis Seminar	
Higher Education Seminar	http://www.ses.unam.mx/
Youth Research Seminar	http://www.sij.unam.mx/
Interdisciplinary Biomedical Research Seminar	http://www.posgrado.unam.mx/seminariobiomedicina/
History and National Memory Research Seminar	http://www.seminariohistoriamemoria.unam.mx/
Medicine and Health Seminar	http://www.medicinaysalud.unam.mx/
Information Society and Cultural Diversity Research Seminar	http://www.sociedadconocimiento.unam.mx/
University Seminar on Middle Eastern Cultures	http://sucumo.unam.mx/
University Seminar on Forensic Discourses	http://discursoforense.unam.mx/
University Seminar on the Study of Society, Institutions, and Resources	http://suesir.unam.mx/
University Seminar on the Study of Society, the Environment, and Institutions	http://susmai.unam.mx/
University Seminar on Governability and Auditing	http://sug.unam.mx/
University Research Seminar on Cultural Heritage	http://www.seminariopatrimonio.unam.mx/
University Research Seminar on Artistic Creation	
University Research Seminar on Hydrocarbons	http://seminariohidrocarburos.unam.mx/
University Seminar on Transparency	http://investigacion.politicas.unam.mx/sut/
Interdisciplinary University Seminar on Aging and the Elderly	http://seminarioenvejecimiento.unam.mx/
University Seminar on Modernity	http://www.seminariomodernidad.unam.mx/
Interdisciplinary University Seminar on School Violence	http://suive.com.mx/
University Seminar on Improving Mathematical Education at UNAM	http://www.sumem.unam.mx/
University Seminar on Affection and Emotions	http://www.filosoficas.unam.mx/sitio/suafem

SECRETARY OF UNIVERSITY COMMUNITY RELATIONS

Secretary of University Community Relations	http://www.serviciosalacomunidad.unam.mx/
Community Relations Department	http://www.tucomunidad.unam.mx/
Healthcare Department	http://www.dgsm.unam.mx/
Educational Orientation Department	http://www.dgoae.unam.mx/
Crime Prevention and Civil Protection Department	http://www.seguridadyproteccion.unam.mx/
General Services and Mobility Department	http://unam.ga/
University Athletic Department	http://www.deportes.unam.mx/
Alumni Outreach Department	http://www.pve.unam.mx/

LEGAL DEPARTMENT

Legal Department	http://www.abogadogeneral.unam.mx/
Legal Affairs Department	http://dgaj.unam.mx/
University Bylaws Department	http://www.dgelu.unam.mx/

UNIVERSITY COUNCIL

University Council	https://consejo.unam.mx/
--------------------	---

GOVERNING BOARD

Governing Board	http://www.juntadegobierno.unam.mx/
-----------------	---

BOARD OF TRUSTEES

Board of Trustees	http://www.patronato.unam.mx/
-------------------	---

Treasury

Budget Oversight Department	http://www.dgcp.unam.mx/
Finance Department	http://www.patronato.unam.mx/direccionfinanzas.html
University Heritage Department	http://www.patrimonio.unam.mx/
Comptroller	http://www.contraloria.unam.mx/
Internal Auditing	http://www.contraloria.unam.mx/areas-de-la-contraloria/auditoria-interna
Institutional Management and Improvement Department	http://www.contraloria.unam.mx/areas-de-la-contraloria/prevencion-y-mejora
Responsibilities, Grievances, and Patrimonial Records Department	http://www.contraloria.unam.mx/areas-de-la-contraloria/responsabilidades

STUDENT RIGHTS DEPARTMENT

Student Rights Department	http://www.defensoria.unam.mx/
---------------------------	---

ACADEMIC BOARDS

Academic Boards	http://www.caa.unam.mx/
Academic Board for Physics, Mathematics, Chemistry, and Health Sciences	http://www.caacfmi.unam.mx/
Academic Board for the Social Sciences	http://www.caabqys.unam.mx/
Academic Board for the Humanities and the Arts	http://www.caacs.unam.mx/
Academic Board for Preparatory Schools	http://www.caahya.unam.mx/
Preparatory School Academic Council	http://www.cab.unam.mx/

COMMUNICATIONS DEPARTMENT

Communications Department	http://www.dgcs.unam.mx/
---------------------------	---

RECTOR

Rector	http://www.rector.unam.mx/
--------	---

CREDITS

General Coordination

Dr. Francisco José Trigo Tavera

Publishing Coordination

Elsa Botello López

Roberto Sepúlveda Amor

Editorial Coordination

Alejandro Soto Valladolid

Photo Editor

Roberto Sepúlveda Amor

Footnotes

Camilo Ayala Ochoa

Design

Rocío Mireles

Development

Bruno Contreras

Fernando Villafán

Infographics

Alets Klamroth

Maps

Construction and Conservation Department

Support from Other Divisions

SCIENTIFIC RESEARCH DEPARTMENT

Executive Coordinators

Julio Solano González

Angélica Pino Farías

Technical support

Sandra Vázquez Quiroz

HUMANITIES DEPARTMENT

Executive Coordinators

Malena Mijares

Jonathan López Romo

CULTURAL PROMOTION DEPARTMENT

Executive Coordinator

Dora Luz Haw

All photographs were provided by
the Communications Department except for the following:

Michael Calderwood, pp. 6-7, 13, 63, 69, 71 (lower), 177.

Learning Center for Foreigners, pp. 269, 271.

Scientific Research Department, p. 109.

Barry Domínguez, Verónica Rosales Flores, pp. 213, 217, 219, 221, 223, 225, 227,
229, 231, 232, 233, 235, 237, 239.

Faculty of Economics, pp. 57.

Vicente Guijosa Aguirre, pp. 17.

Astronomy Institute, pp. 105, 155.

Geophysics Institute, p. 139.

Hugo Daniel Narváez Clemente, p. 71 (upper).

Sandra Vázquez Quiroz, pp. 103, 113.

Acknowledgements:

Benjamín Chaires de Luna, Antonio Sierra, Jonathan López Romo, Augusto A. García Rubio, Mireya Tijerina González, Carlos Navarro Rojas, Ignacio Maldonado, Jesús D. Martínez Gómez, Rocío Gamiño Ochoa.

UNAM **THE NATION'S UNIVERSITY** edited by the Publication and Editorial Promotion Department, was printed on February 28, 2018, at the printing press Offset Rebosan, S.A. de C.V., located at Acueducto No. 115, Colonia San Lorenzo Huipulco, Delegación Tlalpan, C. P. 14380, Mexico City. An 11-point Electra font was used. The print run was 750 copies, printed in offset. Design: Rocío Mireles. Editing: Alejandro Soto Valladolid. Coordinators: Elsa Botello L. and Roberto Sepúlveda Amor.



NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO

