Oaxaca State University System

Facts 2022

Oaxaca

April 2022

Alejandro Murat Hinojosa
Governor of the State of Oaxaca

Modesto Seara Vazquez
Rector of the Oaxaca State University System

Universidad Tecnológica de la Mixteca
Huajuapan de León

Universidad de la Sierra Sur
Miahuatlán

Universidad del Mar
Pto. Escondido, Pto. Ángel, Huatulco

Universidad de la Cañada
Universidad de la Cañada
Teotitlán del Camino

Universidad del Istmo
Tehuantepec, Ixtepec, Juchitán

Universidad de la Sierra Juárez
Ixtlán

Universidad del Papaloapan
Tuxtepec, Loma Bonita

NovaUniversitas
Campus central: Ocotlán

Universidad de Chalcatongo
Chalcatongo de Hidalgo

Universidad de la Costa
Pinotepa Nacional

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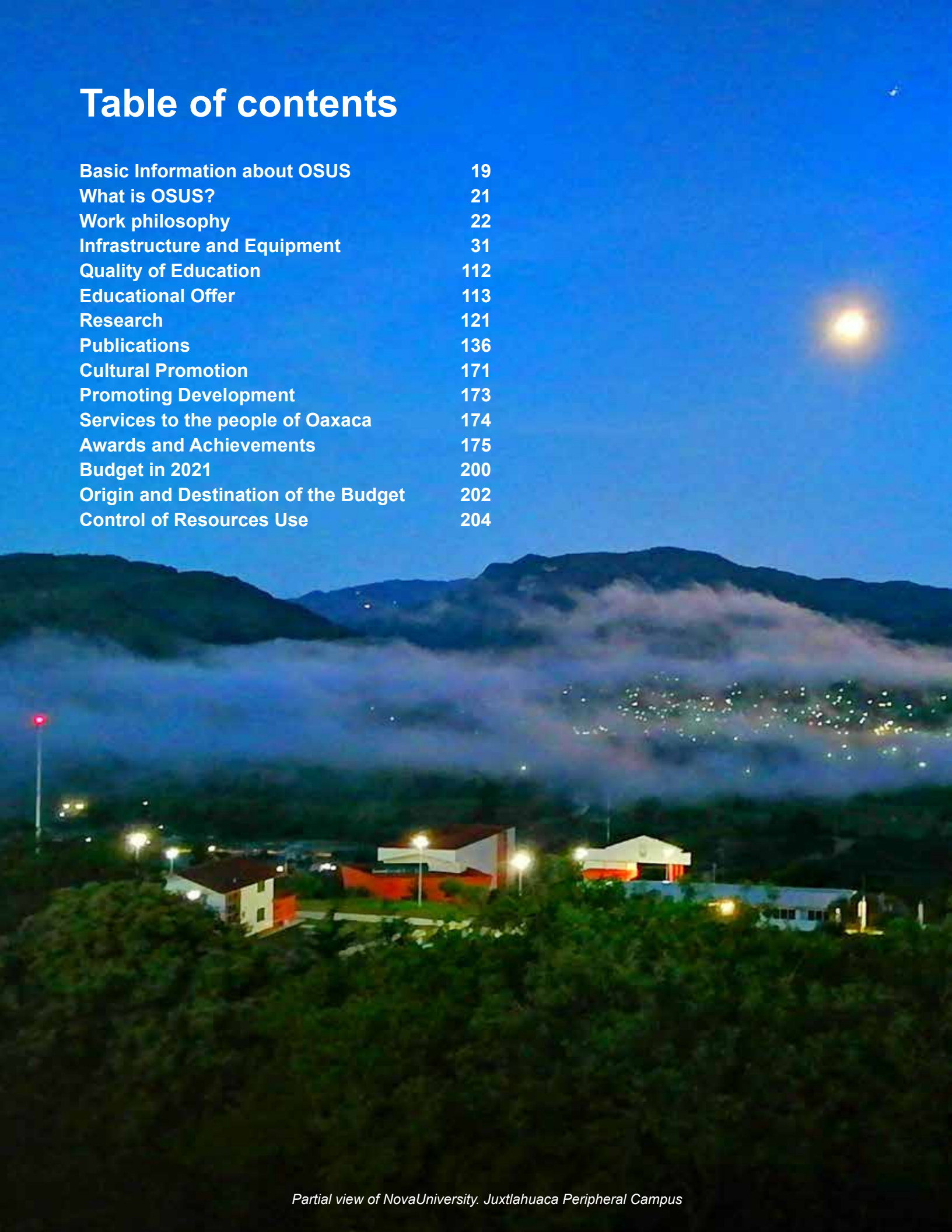


Partial view of NovaUniversity. Juxtlahuaca Peripheral Campus

Flora at OSUS

Framboyan from Madagascar “Delonix regia”. UNSIS, Miahuatlán de Porfirio Díaz.

Astromelia “Alstroemeriaceae”. UMAR, Puerto Escondido campus.

Eastern Cactus “Opuntia humifusa”. UMAR, Puerto Ángel campus.

Purple bell “convolvulaceae ipomoea”. UNSIJ, Ixtlán de Juárez.

Orchid “Prosthechea cochleata”. UNSIJ, Ixtlán de Juárez.

Mexican tulip “hibiscus”. NovaUniversity, Juxtlahuaca campus.

Chamal “Dioon edule”. UMAR, botanical garden Puerto Escondido campus.

Ceiba “Ceiba pentandra L. (Gaertn)”. UMAR, Puerto Escondido campus.

Plumeria “Plumeria rubra”. UNSIS, Miahuatlán de Porfirio Díaz.

Golden rain “Laburnum anagyroides”. UNISTMO, Ixtepec campus.

Agapando “Agapanthus”. UNSIJ, Ixtlán de Juárez.

Cardon “Pachycereus weberi”. UNCA, Teotitlán de Flores Magón.

Orchid “Epidendrum stamfordianum”. UNSIJ, Ixtlán de Juárez.

Fire Star Orchid “Epidendrum radicans”. UNSIJ, Ixtlán de Juárez.

Bamboos “Bambusoideae”. UMAR, Huatulco campus.

Bugambilia “Bougainvillea glabra”. UNSIS, Miahuatlán de Porfirio Díaz.

Plumeria “Plumeria rubra”. UMAR, Puerto Escondido campus.

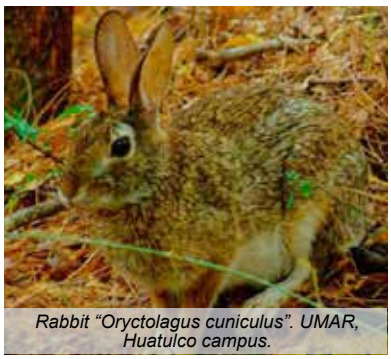
President of Mexico, Andres Manuel López Obrador and the Governor of the State of Oaxaca, Alejandro Murat, at University of Papaloapan, Loma Bonita Campus with Modesto Seara, Rector of the Oaxaca State University System. March 22nd, 2021.

Fauna at OSUS

Pichiches ducks “Dendrocygna autumnalis”. UNPA, Loma Bonita campus.

Merlin hawk “Falco columbarius”. UNPA, Loma Bonita campus.

Russet-crowned Motmot “Momotus mexicanus”. UMAR, Huatulco campus.



Rabbit “Oryctolagus cuniculus”. UMAR, Huatulco campus.

Orange-fronted parakeet “Eupsittula canicularis”. UMAR, Huatulco campus.

White heron “Ardea alba”. UNPA, Loma Bonita campus.

Boa sigma “Boa Constrictor”. UNISTMO, Ixtepec campus.

Beetle “Zopherinae”. UNISTMO, Ixtepec campus.

White-tailed deer “Odecoileus virgianus”. UMAR, Huatulco campus.

Pale chachalaca “Ortalis poliocephalia”. UMAR, Huatulco campus.

American picamakers “Dryocopus pileatus”. UMAR, Huatulco campus.

Black Iguana (Ctenosaura pectinata). UNISTMO, Ixtepec campus.

Tiger heron “Tigrisoma mexicanus”. UNPA, Loma Bonita campus.

Northern Jacana “Jacana Spinosa”. UNPA, Loma Bonita campus.

Northern Stake Bird “Nyctibius jamaicensis”. UNPA, Loma Bonita campus.

Swamp turtle “Kinosternon leucostomum”. UNPA, Loma Bonita campus.

Tropical Porcupine “Coendou mexicanus”. UNPA, Loma Bonita campus.

Message from Rector Modesto Seara Vázquez

Two more years of progress, despite everything.

The period covered by this report on Oaxaca's State Universities, from mid-2020 to mid-2022, is best described as challenging: beginning with some quite alarming news about an epidemic apparently coming from China, which was hoped to be temporary and of limited effect, and concludes in the midst of a local war, initiated by Putin's Russia, against Ukraine, which could follow the path of the epidemic and turn into a global crisis with unpredictable effects. These crises are added to a long list of difficulties that we have had to overcome in the development of this project: from hurricanes, such as Paulina (level 5) in 1997 which destroyed the Puerto Angel campus of the UMAR, to other less violent but similarly destructive hurricanes; or the multiple earthquakes that have forced us to carry out repair or reconstruction work, and the continuous social conflicts that difficult or impede mobility between the Universities.

In our universities, we made the decisions we believed were right and proved to be so in practice. On February 28, 2020, the first known case of Coronavirus in Mexico was reported. On the following March 3, a meeting was held at the University of the Sierra Sur of all those responsible for the health areas of OSUS. The State Health Secretariat and the Civil Protection Coordination, represented by its Coordinator, Heliodoro Díaz Azcárraga, were invited. At that meeting a report was presented on the global status of the epidemic and the measures we would take, which began at the end of the same month. A list of the resources available to the state universities to deal with the medical crisis was also presented. It included space in the six automated clinics distributed throughout the state, as well as medical equipment and medical and nursing staff. Entry to university campuses was controlled, the temperature of those entering was checked, the use of masks was made compulsory, limits were placed on the use of common areas, random tests were carried out to identify contagions, and with all this we were able to have a relatively controlled environment. All actions taken were in accordance with state and federal regulation.

The academic activities were now carried out virtually, through computer networks, in which we already had a long experience, with the hybrid system of NovaUniversity. In April 2021, the health authorities administered the Cansino vaccine to all university staff, and subsequently various types of vaccines would also be given to students. Subsequently, booster vaccines would also be applied (January 2022).

In the summer of 2021, we had to do some serious thinking about the negative consequences of this isolation of young people on their mental health. We also considered the very serious impact of the interruption of normal academic activities on their education, which endangered their professional future and also had economic and social consequences for the future of the country. At the end of the day, we had to take stock of costs and benefits and came to the conclusion that the emergency situation could not be prolonged any longer and that measures towards the normalisation of academic life had to be gradually introduced. Therefore, on Monday October 4th, we decided to break the general inertia and gave instructions to restart face-to-face classes on all campuses; with due precautions in terms of the largest capacity spaces (auditoriums, libraries, cafeterias) and limiting the number of students in classrooms, etc.

In January, we postponed our return from holiday for three days, to avoid the crowds on public transport that are typical at this time of year. This also gave time for the contagions caused by the social activities in December to manifest themselves and to make clear the origin of these contagions, which could no longer be attributed to living and working together at the university.

To avoid manipulation of information, we started publishing a report every Tuesday on the situation of infections (almost all of them of external origin) on university campuses: cumulative number of cases, recoveries, hospitalisations and deaths. Since the beginning of the year, there have been no hospitalisations due to Covid19 and no deaths. At the same time, the number of returns has been outpacing the number of new cases, and as of 22 March, eight of the ten universities are free of infection.

In these circumstances, the number of activities will increase, as well as the use of spaces; but we are aware that, in the absence of an intelligent decision by those responsible in many countries to achieve universal vaccination, there will still be the possibility of outbreaks or new variants, which may force us to take new precautionary measures.

However, the health emergency did not impede the further development of the universities, both in terms of infrastructure and equipment and the expansion of academic activities, teaching at undergraduate and postgraduate level, as well as scientific research, in which we have already reached a high level, as explained elsewhere in this publication.

From the beginning, we have maintained our ambition to create high quality universities, in all the functions of a true university, which cannot be limited to being simply a school. As a fundamental instrument of development and social change, universities must play their part in this task, with full responsibility, assuming the various functions that correspond to them and always giving priority to national interests over individual interests. This is our responsibility towards the new generations, who come to us in search of a future, and it would not be loyal or dignified to respond with the deception of an easy enterprise; it is not. Knowledge must be acquired by the students themselves through disciplined and hard work. We cannot give it to them, but we must provide them with the right environment and the means to achieve it and guide them in this task of education. This is how the future is forged.

All of us who work in this great public enterprise, made up of all the State Universities of Oaxaca, are proud of the work we have done. From the initial draft, which outlined the main guidelines in December 1988, to the present day, we have come a long way. We have worked with six governors, each with his own personality and political preferences, but all have supported this project. We have been respected, even when there have been some differences of opinion. Faced with society in general, we have maintained the necessary position of political neutrality and within the universities we have tried to prevent the teaching profession from becoming a political tribune or religious pulpit, and we have defended, in all cases, the right of each person to have their own ideas and political or religious allegiances. We have also imposed, by whatever means necessary, respect among all members of the university community, strictly following the rules and procedures that have been approved by the Academic Councils. In this respect, all attempts to interfere with the institutional functioning of university bodies have been rejected. On the sensitive issue of the management of economic resources, a total policy of transparency and total collaboration with internal auditing bodies, as well as with the State of Oaxaca and federal auditing bodies, has been maintained.

In return for these policies of accountability and transparency, we have gained the absolute respect of society, in all its representative manifestations, and have been able to concentrate on the pursuit of the fundamental objective of serving as instruments of material progress and social transformation for Oaxaca and for Mexico.

UMAR-Huatulco, March 2022

Oaxaca State Universities
A journey of 33 years

The great university adventure began in December 1988, when the Governor of Oaxaca, Heladio Ramírez López, asked Modesto Seara Vázquez to develop a university project for the at that time small town of Huajuapan de León, in the Mixtec Region of Oaxaca, and subsequently commissioned him to carry it out.

The Technological University of the Mixteca became active in the spring of 1990, although the official inauguration was postponed until February 1991, in the presence of President Carlos Salinas de Gortari, together with the President of Costa Rica, Rafael Ángel Calderón Fournier, the State Governor Heladio Ramírez López and the Secretary of Education, Manuel Bartlett. The newly established university, which occupied a campus of some 100 hectares, had only 48 students, five professors and two classrooms at the beginning. It was established on land belonging to the Ministry of Agriculture, about two kilometres from the nearest road, and access was difficult.

The University of the Sea was the second, also inaugurated by President Salinas de Gortari together with Governor Heladio Ramírez and Secretary of Education Ernesto Zedillo Ponce de León, in Puerto Ángel, on the coast, in facilities previously occupied by a Technical Fishing High School.

In 2022, thirty-three years have passed since the decision of Governor Heladio Ramírez López (1986-1992) for the project of the Oaxaca State Universities and today it is a set of ten universities with a total of 19 campuses. It covers more than 500 hectares. It has more than 700 buildings, more than 1100 professors (all full-time), some 11,000 students, an educational offer of 84 bachelor's degrees, 34 master's degrees and ten doctorates. It also has a solid scientific research structure, made up of 31 research institutes, supported by 200 laboratories; in addition to the team of 1,100 professors-researchers, of which nearly 500 have doctoral degrees and 203 belong to CONACyT's National System of Researchers.

The next governor, Diódoro Carrasco Altamirano (1992-1998), decided to maintain support for these two universities, despite numerous calls for their closure. This support was decisive for the consolidation of the project.

When José Murat came to power (1998-2004), the two state universities had already been consolidated, but the prospect of creating new ones seemed distant. However, from the beginning of his term in office Governor José Murat announced the construction of new universities in the state, with a list that was expanded throughout his term in office. These were his own initiatives, outside of the State Universities but, for various reasons, he decided to place the entire project under the direction of the Rector of UTM and UMAR, who applied the same model to them.

One of them, the University of Sierra Sur, had started with a different model, but later, the Governor incorporated them into the rest of the State Universities.

During his term, six universities were created: University of the Isthmus, University of Papaloapan, University of Sierra Juárez, University of La Cañada, University of Sierra Sur, University of the Coast and also two additional campuses, of the University of the Sea (Puerto Escondido and Huatulco). Two campuses of the University of the Sea (Puerto Escondido and Puerto Ángel), the University of the Isthmus with the Tehuantepec and Ixtepec campuses, the University of Papaloapan with the Loma Bonita Campus, and the University of Sierra Sur began operating. Progress was made on the University of the Coast, the Juchitán Campus of the UNISTMO, the Tuxtepec campus of the Papaloapan, the University of la Cañada and the University of Sierra Juárez.

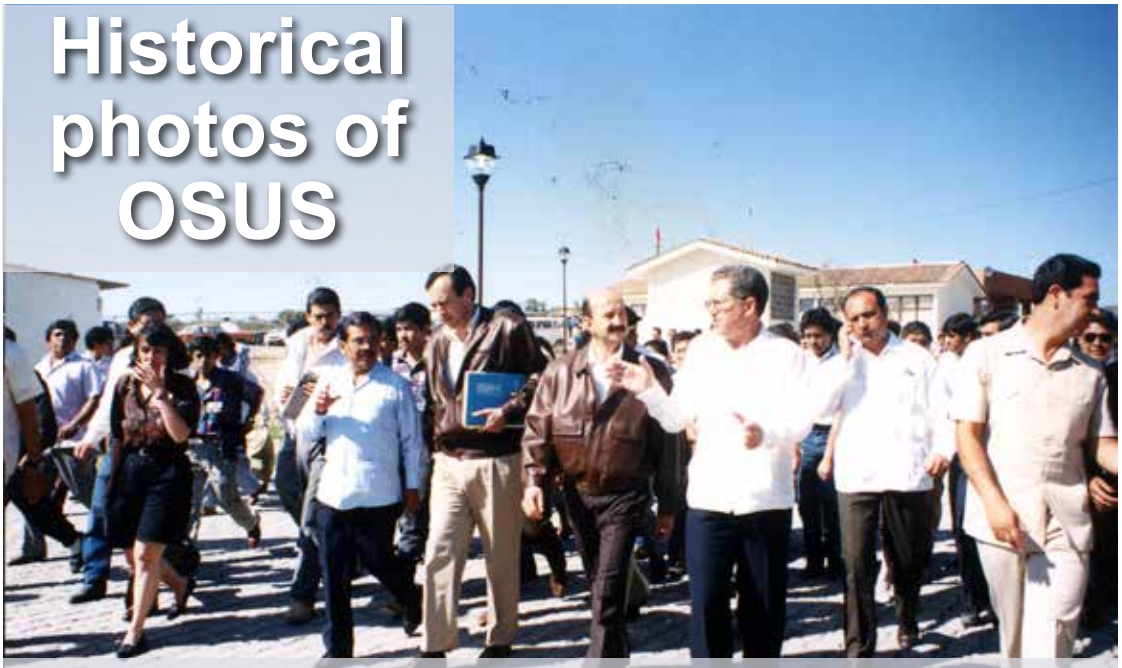
During the government of Ulises Ruíz (2004-2010), the universities of Chalcatongo and NovaUniversity (with the two campuses in Ocotlán and San Jacinto, with the Juxtlahuaca campus still under construction) were created, and the Universities of Sierra Juárez and La Cañada were completed and inaugurated. Work was also completed on the University of the Coast and Chalcatongo, as well as on the Juchitán Campus, but they were not put into service.

Governor Gabino Cué (2010-2016) opened the Universities of the Coast and Chalcatongo, which were already completed, and the Juchitán campus of the University of the Isthmus. In all cases, complementary works were carried out and the necessary equipment was acquired.

Under Governor Alejandro Murat (2016-2022), the Santos Reyes Nopala campus was opened in the Chatina region, which will begin academic activities in the spring of 2022. During his term, there has been an extraordinary growth in the infrastructure and equipment of the state universities, as well as in the academic offerings.

The current situation of the Oaxaca State Universities is explained in detail in this publication. By any measure, they are universities of high quality, both in the fields of teaching and scientific research, dissemination of culture, and promotion of development; in addition to a series of services provided to the people of Oaxaca.

Historical photos of OSUS



Inauguration of UTM, February 1991. From left to right: Heladio Ramírez López, Governor of the State of Oaxaca; Rafael Ángel Calderón Fournier, President of Costa Rica; Carlos Salinas de Gortari, Presidentof Mexico; and Modesto Seara Vázquez, Rector of UTM.

Governor Heladio Ramírez and Secretary of Education Manuel Bartlett visit UTM, 1990

UTM is granted the honour of hoisting the national flag in the Plaza de la Constitución in Oaxaca de Juárez, for the 1990 National Holidays.

Citizens of Huajuapan who supported the project, 1991

First Academic Council of UTM, 1992

UTM. First meeting on artificial intelligence, 1992

Inauguration UMAR-Puerto Ángel Campus, President Carlos Salinas de Gortari and Secretary of Education, Ernesto Zedillo, August 21st, 1992.

UMAR-Campus Puerto Angel, Governor Diódoro Carrasco and Guillermo Jiménez Morales, Secretary of Fisheries, 1993.

UMAR- Puerto Angel Campus, Governor Diódoro Carrasco, Undersecretary of Higher Education, Antonio Gago, 1993

Architect Pedro Ramírez Vázquez, in a lecture at UTM, March 29th, 1996

UTM, Fernando Solana at the meeting on History and Prospects of International Relations, AMEI International Seminar, 1996.

UTM. Visit of the Director General of ISSSTE, José Antonio González Fernández, 1997

Visit of President Ernesto Zedillo to the UMAR-Puerto Ángel Campus in October 1997 (Hurricane Paulina)

Daniel Reséndiz, Under-Secretary of Higher Education with Sr. Miguel Limón, 1997

Visit of the Director General of CONACyT, Carlos Bazdresch Parada, UTM, September 18th, 1998.

Visit of the Director General of the Spanish National Research Council, César Nombela, and Jaume PortaCasanellas. Rector of the University of Lleida, 1998.

UTM, Visit of CONALEP Director General Héctor Argüelles, 1998.

Governor José Murat at the presentation of OSUS's 10 Year Report, June 1999

UTM, Governor José Murat at UTM's 10th Anniversary Ceremony, 1999

INFONAVIT Director General, Luis de Pablo, visits UTM, 1999

Visit of Domingo Docampo, Rector of the University of Vigo, 1999

President of Motorola Latin America, Omar Villarreal visits UTM, 2000

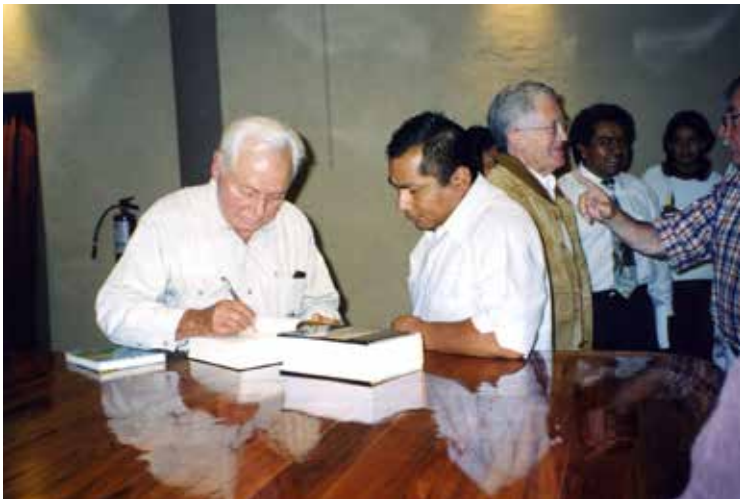
Governor José Murat at the UTM Graduation Ceremony, July 2000

Governor José Murat at the Inauguration of the Institute of Design, Language Centre and Audiovisual Room, UTM, July 2000

Lila Downs concert opens the First Mixtec Culture Week in the new UTM auditorium, 2001

Visit of the Undersecretary of Higher Education, Julio Rubio, to UTM, 2002.

President Vicente Fox and Governor José Murat at UMAR-Huatulco Campus, 2002



Enrique González Pedrero presents his book País de un solo Hombre, at the UTM, 2003

II Zapotec Culture Week, UNISTMO- Tehuantepec Campus,June 8th, 2003

Triqui children who attended a computer course at UTM, June 25th, 2004

UTM, Mixtec Culture Week, 2005

UNCA, visit of Governor Ulises Ruiz, July 2006

Visit of the Director General of CONACyT, Gustavo Chapela Castañares, at UTM, 2006

Governor Diódoro Carrasco. Secretary of Education Miguel Limón, visit UTM, 2007

Jadranka Mihalic, Director of the United Nations Information Centre in Mexico, at UMAR-Huatulco Campus, 2008

Delegation from Rutgers University (New Jersey, USA) visit to UTM, January 2008

UNSIS 2nd. Week of the Cultures of the Sierra Sur, 2009

Week of the Cultures of the Sierra Juárez (UNSIJ). With the children's rondalla, 2009

Official inauguration of NovaUniversity, Governor Ulises Ruiz, February 3rd, 2010

Manuel López Quero, Vice-rector of the Polytechnic University of Madrid, and Alberto Gago, Rector of the University of Vigo, attend the opening of the Papaloapan Cultures Week at the UNPA, June 6th, 2010.

Rafael Vidal, Director of CENEVAL, at the Ninth Educational Evaluation Forum, UMAR-Huatulco Campus, November 3rd, 2010.

Visit to several OSUS universities by a Spanish delegation: Julio Lage, President of AEGAMA (Association of Galician Businessmen in Madrid), Senén Barro, former Rector of the University of Santiago de Compostela, and Enrique Beotas, distinguished social communicator, a great friend of our universities. At the University of Sierra Sur, 2011

Lecture by José Antonio Meade at UMAR-Huatulco Campus, XXVII Annual Congress of the AMEI, October 10th, 2013

Lecture by the Ambassador of India, Sujan R. Chinoy, at UMAR- Huatulco Campus, May 8th, 2014

UNISTMO, Governor Gabino Cué, Secretary of Energy, Pedro Joaquín Coldwell and Secretary General of the Government of Oaxaca Alfonso Gómez Sandoval, 2015

Conference at UMAR- Huatulco Campus by Enrique de la Madrid, Secretary of Tourism, November 25th, 2015.

Lecture by Richard Stallman (founder of Free Software) at UTM, December 8th, 2015

Ambassador of Korea, Chun Bee Ho, at the University of the Sea, Huatulco Campus, shows the Dictionary of the Mixtec Language, published by UTM. 2017

President of the Xunta de Galicia visits OSUS (UTM, UNSIS, UMAR). Here, at the University of the Sierra Sur, 2018

Visit of Antonio Ávila, General Director of CENEVAL, and Rafael Vidal, former General Director of CENEVAL, UNSIS June 17, 2021

Basic information about OSUS

10 Universities with 19 Campuses

Technological University of the Mixteca (UTM)
Huajuapan de León

University of the Sea (UMAR)
Puerto Escondido Campus, Puerto Ángel Campus, Huatulco Campus and Oaxaca Campus

University of the Isthmus (UNISTMO)
Tehuantepec Campus, Ixtepec Campus and Juchitán Campus

University of Papaloapan (UNPA)
Loma Bonita Campus and Tuxtepec Campus

University of Sierra Sur (UNSIS)
Miahuatlán de Porfirio Díaz

University of Sierra Juárez (UNSIJ)
Ixtlán de Juárez

University of La Cañada (UNCA)
Teotitlán de Flores Magón

NovaUniversity (NU)
Central Campus Ocotlán, San Jacinto Peripheral Campus, Juxtlahuaca Peripheral Campus, Santos Reyes Nopala Peripheral Campus

University of the Coast (UNCOS)
Pinotepa Nacional

University of Chalcatongo (UNICHA)
Chalcatongo de Hidalgo

University Size

UTM: 104 Ha	UMAR: 74.43 Ha
UNISTMO: 121.02 Ha	UNPA: 54.66 Ha
UNSIS: 20 Ha	UNSIJ: 43.67 Ha
UNCA: 15.75 Ha	NU: 50.5 Ha
UNCOS: 12.26 Ha	UNICHA: 20 Ha

Total: 516 Ha

Buildings per University

UTM: 115	UMAR: 154
UNISTMO: 113	UNPA: 80
UNSIS: 63	UNSIJ: 42
UNCA: 45	NU: 37
UNCOS: 22	UNICHA: 23

Total: 694 Buildings*

Patents

28 have been registered (UTM, UMAR, UNISTMO, UNSIS, UNPA UNSIJ y UNCA).

Research

31 Research Institutes
200 Laboratories
30 Workshops

Educational offer

85 Undergraduate Studies, 73% of them are classified as STEM (Science, Technology, Engineering and Mathematics. Including Health Science careers).

47 Graduate studies: 12 Doctorates and 35 Masters.

University-community

- More than **11,000** students
- Around **1,150** full-time professors

OSUS, an example of environment friendly universities:

- More than 5 km2 of forest, tropical or HighAltitude, where the endemic flora and fauna are preserved.
- Wastewater treatment
- Energy saving measures such as passive and isothermal systems, photovoltaic solar parks at UTM, UNISTMO, UNPA and UNCA. The UTM is now self-sufficient in electrical energy.
- Roads lit with photovoltaic systems.
- Houses with solar thermal systems.
- Permanent measures to prevent forest fires, etcs.

*There are more buildings under construction that are being put into service throughout the year.

Walkway UMAR, Huatulco Campus

Walkway UMAR, Huatulco Campus

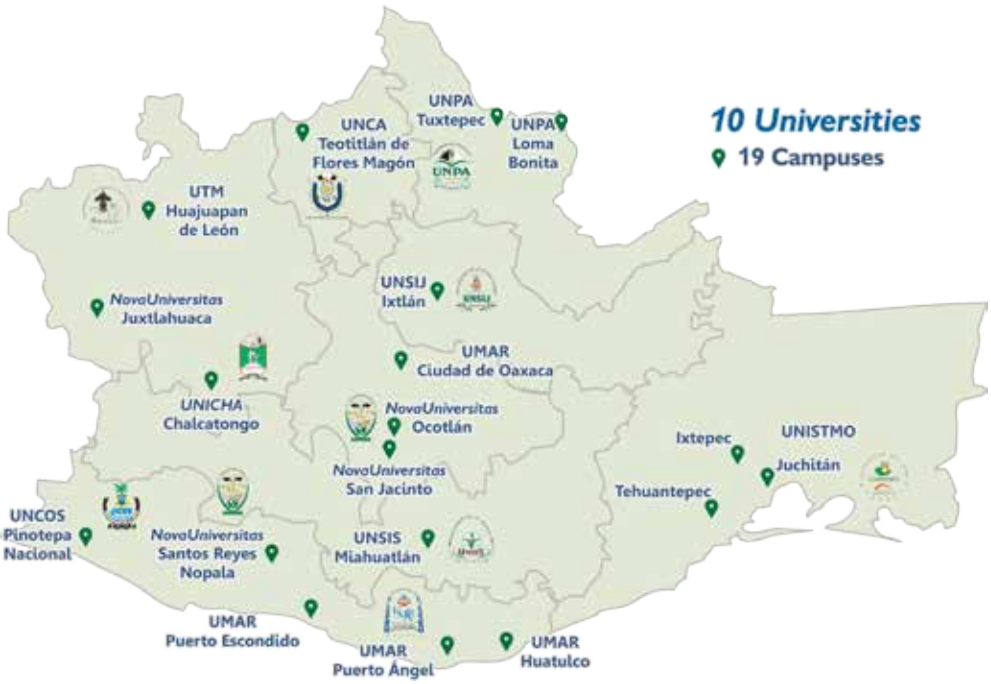
Walkway. NovaUniversity. Ocotlán Central Campus

Walkway. UMAR, Puerto Escondido Campus

Walkway. UNISTMO. Ixtepec Campus

Oaxaca State University System OSUS

What is OSUS?



The university model of the Oaxaca State University System (OSUS) was created to serve as a cultural instrument for the transformation of the social environment.

This can be achieved through high – performance universities, which create a comparative advantage for the State of Oaxaca and make it attractive for productive investments.

It is aimed at contributing to the decentralization of high quality higher education services in the following substantive functions:

●Teaching ●Research ●Cultural Promotion ●Promoting Development

The entire university community has a full-time schedule, working a total of **1854 hours per year.** The academic-administrative organisation is of a matrix type: for teaching, the professors are grouped into departments coordinated by career heads, and for research, into institutes with the corresponding director.

At the beginning of 1990, activities began with the Technological University of the Mixteca. In 1992, the UMAR was created with a campus in Puerto Angel, extending the project to a new socio-cultural and environmental reference point in Oaxaca: the Oaxacan coast, with the aim of promoting the culture of the sea.

Since 2000, the project has spread throughout the state, expanding the educational offer in the field of science and technology, developing scientific and technological research and creating many services for the people of Oaxaca.

OSUS is made up of ten universities on nineteen campuses distributed throughout all regions of Oaxaca. The universities are scalable to meet demand: UTM (Huajuapan), UMAR (Puerto Escondido, Puerto Ángel, Huatulco and Oaxaca), UNISTMO (Tehuantepec, Ixtepec, Juchitán), UNPA (Tuxtepec and Loma Bonita), UNSIJ (Ixtlán), UNSIS (Miahuatlán), UNCA (Teotitlán de Flores Magón), NovaUniversity (Ocotlán, San Jacinto, Juxtlahuaca and Santos Reyes Nopala), UNCOS (Pinotepa Nacional) and UNICHA (Chalcatongo de Hidalgo).

Other services: 13 bookstores, one public library, one university clinic, two botanical gardens, three experimental farms, two seismological stations, twenty-two meteorological stations, one Technology Park with a software development company (Kadasoftware), State Mining Historical Archive, Tourism Training Centre, Wind Training Centre and an Agavetum.

High Quality Education

Research in Science and Advanced Technology

Work Philosophy

Results require Work Discipline

At OSUS we work 1,854 hours a year with discipline and perseverance.

PROFESSORS

2,116,704 Hours/professor a year
1,100 professors

- All of them full-time.
- Tutorials to guide students in the personal problems they have.
- Mentoring system, with which students have access to any of the teachers for consultations on their respective subjects.
- Internal events, providing a space for teachers, students and the population in general in order to promote their cultural and professional training process and the updating of knowledge.
- Distribution of their time in Teaching, Research, Cultural Promotion and Promoting Development.
- For teaching purposes, professors are assigned to a career headquarter.
- For research they are assigned to an Institute
- Cooperation agreements with other Higher Education Institutions, public and private, national and international.

STUDENTS

15,759,000 Hours/students a year
More than 11,000 Students

- Admission exams before and after the propaedeutic courses.
- Propaedeutic courses during the year, to choose: short, with duration of 2 months and long, of 7 months.
- Responsibility and constant work.
- Reading one novel a month and writing a four-page summary.
- Full-time students, with free access to computer labs, libraries, workshops and laboratories.
- Scholarships to students to facilitate their stay at the university.
- Interships at the end of the sixth and eighth semesters. Two months every summer.
- Travel practices, combined with classes.
- Languages: English (mandatory), Mandarin Chinese, French and German as options.
- Academic title, with thesis or General Examination of knowledge of CENEVAL.
- Sports and artistic activities.

Exclusive Dedication with Service Readiness

8 hours per day of formal activities, classes and research.

Library. UNSIS. Miahuatlán de Porfirio Díaz

Libraries are open on some campuses until midnight and on Saturdays.

Computer lab. UNSIS. Miahuatlán de Porfirio Díaz

Computer labs are available to students 24 hours a day.

Some of the professors live on campus (houses and apartments).

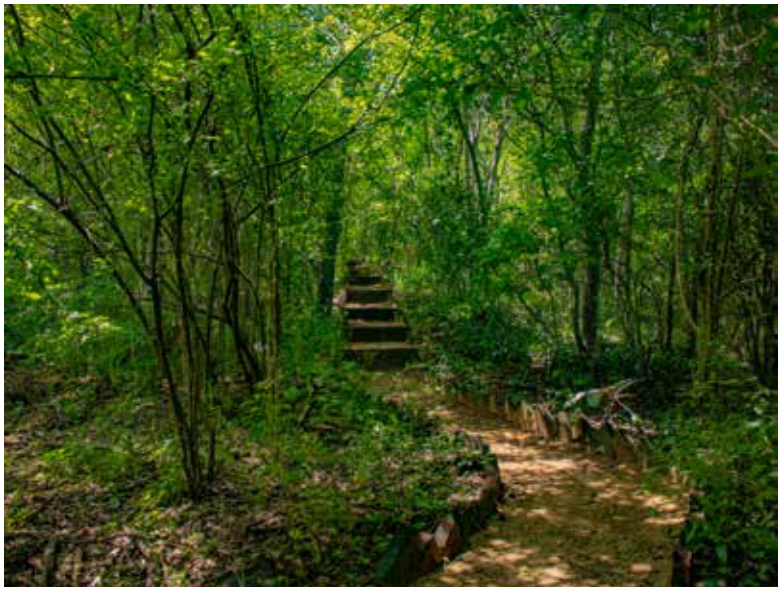
The Rector lives on campus.

The Vice-Rectors also live on the campuses, in houses or apartments.

From 7 p.m. there are cultural, sports and recreational activities for students.

Saturday, computer classes on all campuses are offered, for primary or secondary school children from nearby towns (four Saturdays, two or three hours each; two groups of twenty- five children).

Cultural and Recreational Center. UNSIS. Miahuatlán de Porfirio Díaz


Partial views of the Botanical Garden
UMAR, Puerto Escondido Campus

Completed Works in 2021 and 2022

Clinical Pathology Centre. UNSIS. Miahuatlán de Porfirio Díaz

Partial view of the Water Dispenser Area. H2O. UNSIS. Miahuatlán de Porfirio Díaz

Partial view of H2O (Water Purification Plant). UNSIS. Miahuatlán de Porfirio Díaz

Professor's Offices. UNSIS. Miahuatlán de Porfirio Díaz

Computer labs. UNPA. Tuxtepec Campus.

Centre for Scientific Research. UNPA. Tuxtepec Campus.

Partial view of equipment in Computer Labs. UNPA. Tuxtepec Campus.

Tourism Laboratory. UNSIJ. Ixtlán de Juárez

Partial view inside the Suite. Tourism Laboratory. UNSIJ. Ixtlán de Juárez

Partial view of the Photovoltaic Solar Park. UNISTMO. Tehuantepec Campus.

Automotive Mechanical Engineering Laboratory. UTM. Huajuapan de León

Gym. UTM. Huajuapan de León

Main entrance. NovaUniversity. Santos Reyes Nopala Peripheral Campus

Dean´s Building. NovaUniversity. Santos Reyes Nopala Peripheral Campus

Classrooms building. NovaUniversity. Santos Reyes Nopala Peripheral Campus

Acces road. NovaUniversity. Santos Reyes Nopala Peripheral Campus

Partial interior view of a classroom. NovaUniversity. San Jacinto Peripheral Campus

Institute of Food Technology. UNCA. Teotitlán de Flores Magón

Conditioning of the Pharmacology Laboratory work area. UNCA. Teotitlán de Flores Magón

Multipurpose Hall. UNCA. Teotitlán de Flores Magón

Food and Nutrition Research Center (CINA). UNCA. Teotitlán de Flores Magón

Partial interior view of the kitchen equipment at CINA. UNCA. Teotitlán de Flores Magón

Aquaculture Laboratories. UMAR. Puerto Ángel Campus

Partial interior view of the Laboratory equipment at the CINA. UNCA. Teotitlán de Flores Magón

Computer labs and outbuildings. UNICHA. Chalcatongo de Hidalgo

Classroom building and outbuildings. UNICHA. Chalcatongo de Hidalgo

Classroom building. UNCOS. Pinotepa Nacional

Robotic Clinic. UNCOS. Pinotepa Nacional

Partial view of the Water Dispenser Area. H2O. UMAR, Huatulco Campus

Institute of Mathematics and Actuarial Science. UMAR, Huatulco Campus

Partial view of H2O (Water Purification Plant). UMAR, Huatulco Campus

Adaptation of the Auditorium. UNCA. Teotitlán de Flores

Partial view of the Photovoltaic Solar Park. UNISTMO. Ixtepec Campus

Paraninfo. UNCA. Teotitlán de Flores Magón

Partial view of the Photovoltaic Solar Park. UNCA. Teotitlán de Flores Magón

Classroom. UNCA. Teotitlán de Flores Magón

Library Extension. UNCA. Teotitlán de Flores Magón

Ichthyology Laboratory. UMAR, Puerto Angel Campus

Solar Park 1. UNPA. Tuxtepec Campus

Solar Park 2. UNPA. Tuxtepec Campus.

Paving with hydraulic concrete from the main access to the heliport. UTM. Huajuapan de León

Vehicular and civilian access road. UTM. Huajuapan de León

Infrastructure and Equipment

Technological University of the Mixteca

Institute of Electronics and Mecatronics. UTM. Huajuapan de León

Scanning Electron Microscope. Electron Microscopy Laboratory. UTM. Huajuapan de León

Technological University of the Mixteca

Campus Map

University Campus

1.- Security booth
2.- Emergency Plant
3.- Parking lot booth
4.- Interior parking lot
5.- Internal audit
6.- Campus Service Center
7.- Monument to Don Benito Juárez
8.- Office of the Academic Vice-Rector
9.- Network Department
10.-Caseta de bomba y tanque elevado: Pump house and elevated tank
11.-Vice-Rectoría Administrativa: Office of the Vice-Rector of Administration
12.-Rectoría: Rector's Office
13.-Asta Bandera: Flag Pole
14.-Sanitarios: Bathrooms
15. Interior parking lot
16.- Computer Labs 1-2
17.- Computer Labs 3-6
18.- Assembly Hall
19.- Institute of Industrial and Automotive Engineering
20.- External parking lot
21.- Basketball courts
22.- Soccer Field
23.- Football stands
24.- Infirmary
25.- Laboratory of Food Science
26.- Institute of Social Sciences and Humanities
27.- Temporary Exhibition Hall
28.- Advanced Electronic Laboratories
29.- Center for Strategic Business Studies
30.- Cafeteria
31.- Language Center
32.- Enlargement of the language center
33.- Language Laboratory
34.- Self-access Room
35.- Screen printing Workshop
36.- Chemistry Laboratory
37.- Computer Lab 7
38.- Bathrooms
39.- Computer Lab 8
40.- Applied Mathematics Laboratory
41.- Applied Physics Laboratory
42.- Electronics Workshop
43.- Systems Laboratory
44. Audiovisual Room
45.- Classroom Module I with classrooms 1 to 5
46.- Classroom Module II with classrooms 6 to10
47.- Classroom Module III with classrooms 11 to 14
48.- Classroom Module IV with classrooms 15 to 19
49.- Emergency Plant
50.- Surveillance
51.- Classroom Module V with classrooms 20 to 24
52.- Classroom Module V with classrooms 25 to 29
53.- Classroom Module VII with classrooms 30 to 34
54.- Classroom Module VIII with classrooms 35 to 39
55.- Classroom Module IX with classrooms 40 to 44
56.- Bathrooms
57.- Classrooms Modules X with classrooms 45 to 50
58.- Bathrooms
59.- Wastewater Treatment Plant
60.- Vehicle Access and Surveillance
61.- Acquisitions and Material Resources Department
62.- Bathrooms
63.- Food Processing Plant
64.- Mixing Historical Archive
65.- Flood Control Pump
66.- Institute of Mining
67.- University Cultural Center
68.- Institute of Agribusiness
69.- Institute of Hydrology
70.- Chemical-Biological Laboratory
71.- Emergency plant
72.- Reagent Room
73.- Advanced Manufacturing Technology Laboratory
74.- Postgraduate Laboratories
75.- Natural Products and Food Laboratory
76.- Institute of Mechatronics and Electronics
77.- Plastic and textile workshop
78.- Compressor Shed
79.- New Materials Research Laboratory
80.- Bathrooms
81.- Digital Media Lab
82.- Institute of Design
83.- Ceramic Workshop
84.- Mechanical Metal Workshop
85.- Wood Workshop
86.- Emergency Plant
87.- Institute of Computer Science
88.- Usability Lab-USALAB
89.- Institute of Physics and Applied Mathematics
90.- Postgraduate Studies Division
91.- Auditorium
92.- Security Booth
93.- Residential Parking Lot
94.- Professors' Residences 1-15
95.- Library
96.- Extension of the library; Reading Room
97.- Expansion of the Library, the Collection
98.- Apartments of Professors I
99.- Apartments of Professors II
100.- Laundry Room for Apartments
101.- General Services
102.- Warehouse
103.- Heliport
104.- Seismological Unit
105.- Greenhouse
106.- Nursery
107.- Agavetum
108.- Photovoltaic Solar Park
109.- Automotive Mechanics Laboratory
110.- Emergency Plant Shelter North Zone
111.- University Gymnasium

Technology Park

112. Entry and Surveillance
113. Kadasoftware Building I
114. Kadasoftware Building II
115. Emergency Plant

Institutes
Laboratories
Services
Workshops
Centers
Administration
Classrooms

Walkways
Buildings
Total Area

University Total Area
104 Hectares
Built Area 29.244.49 m²

University of the Sea

Graduate Studies Center. UMAR. Puerto Escondido Campus

Delivery room. Robotic Clinic. UMAR. Puerto Escondido Campus

University of the Sea

Puerto Escondido Campus - Campus Map

Buildings
Walkways
Total Area

University Campus

1.- Institute of Genetics
2.- Genetics Laboratory
3.- Biology Laboratory
4.- Chemistry Laboratory
5.- Electronics Laboratory
6.- Livestock Products Laboratory
7.- Laboratory of Geographic Information System –GIS.
8.- Laboratory of Biological Collections
9.- Workshop for Wood and Seed Technologies
10.- Rector's Office
11.- Office of the Vice-Rector of Administration
12.- Office of the Academic Vice-Rector and Campus Service Center
13.- Professors' offices
14.- Rector's House
15.- Parking Lot (Housing Unit)
16.- Apartments for Professors
17.- Laundry Room
18.- Library
19.- Language Center
20.- Self - Access Room
21.- Computer Labs
22.- Classrooms
23.- Audio-Visual Rooms
24.- Warehouse and Maintenance
25.- Gate Access and Security Booth 1
26.- Gate Access and Security Booth 2
27.- Auditorium
28.- Cafeteria
29.- Internal Parking Lot
30.- External Parking Lot
31.- Multi-Purpose Hall
32. Drinking Water Reservoir
33.- Electrical Substation and Emergency Power System
34.- Monument to Benito Juárez
35.- Cistern
36.- UMAR Meteorological Station
37.- Robotic Clinic
38.- CONAGUA Meteorological Station
39. Septic Tank
40.- Postgraduate Studies Division
41.- Wastewater Treatment Plant

Total represented area 100%

University total area:
13.3 Hectares

University of the Sea

Puerto Ángel Campus - Campus Map

Campus Universitario

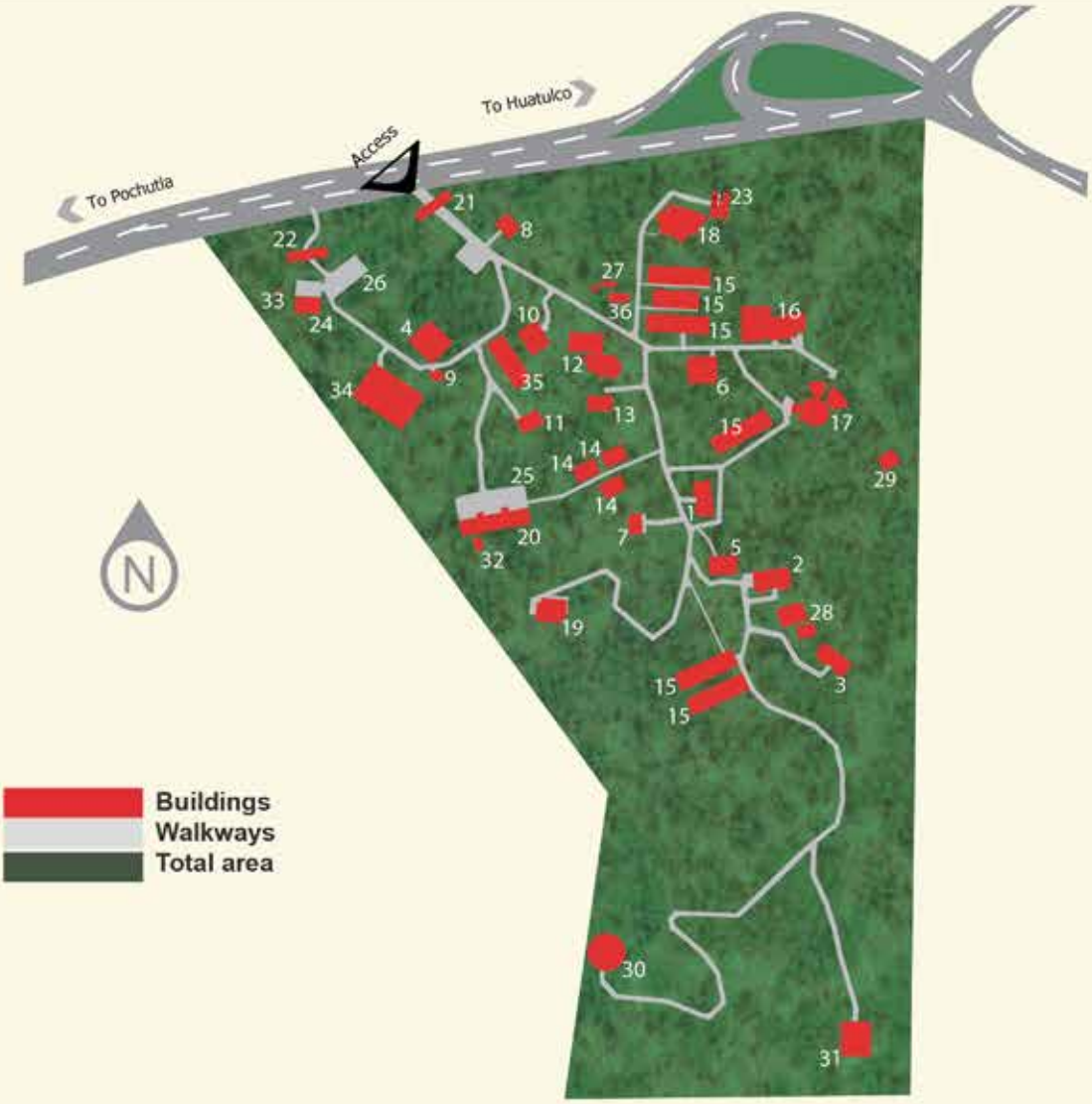
1.- Institute of Ecology and Industry
2.- Institute of Resources
3.- Institute of Social Sciences and Humanities
4.- Program Directors Department
5.- Laboratories (Dynamics of Fish Stocks, Carbon Biogeochemistry Lab., Oceanography, Geology, Mass Calculation)
6.- Laboratorio de Alimentos: Food Laboratory
7.- Aquaculture Laboratory
8.- Research Laboratory (Microbiology, Chemistry, Biology and Genetics)
9.- Chemical Oceanography and Biogeochemistry Laboratories.
10: Laboratory (Biological Oceanography and Ecology of Bentos).
11.- Marine Invertebrate Systematics Laboratory, Histology Laboratory.
12.- Laboratories (Ichthyology and Fisheries Biology, Coastal Dynamics).
13.- Physical Oceanography and Fish Collection Laboratory.
14.- Language Laboratory.
15.- Projects, Construction and Maintenance Department
16.- Environmental Engineering Laboratory (Biotechnology, Electrochemistry, Chemical Analysis, Organic Chemistry Simulation and Instrumentation)
17.- Pilot Plant (Microbiology, Processes and Water Laboratory)
18.- Saltwater Cistern, Developmental Ecology and Larvatron Laboratory
19.- General Maintenance Workshop
20.- Carpentry Workshop
21.- Mechanical Workshop
22.- Postgraduate Studies Division
23.- Rector's Office
24.- Campus Service Center
25.- Promotion and Image Department - UMAR
26.- Infirmary
27.- Electrical Substation and Emergency Plant 1
28.- Electrical Substation and Emergency Plant 2
29.- Wastewater Treatment Plant
30.- Cistern
31.- Elevated tank
32.- Rector's house
33.- Houses for professors
34.- Apartments for professors
35.- General Warehouse 1
36.- General Warehouse 2 and Dead File
37.- Access Gate and Guard House 1
38.- Access gate and Guard House 2
39.- Cafeteria
40.- Library
41.- Auditorium
42.- Classrooms
43.- Cultural and Recreational Center
44.- Hall and Seminar Room
45.- Computer Labs and Geographic Information Systems Laboratory
46.- Suite and Guest Apartments
47.- Semi Olympic Pool
48.- Outdoor Parking Lot 1
49.- Outdoor Parking Lot 2
50.- Reagent Warehouse 1
52.- Computer Network and Electrical Maintenance
53.- Diving Room and Laundry Room
54.- Multi-Purpose Hall
55.- Audiovisual Classroom
56.- Self-Access room
57.- Elevated tank
58.- Expansion of the Ichthyology, Fishery Biology and Coastal Dynamics Laboratories

Total Area= 7.4 Ha

University Total Area: 7.4 Hectares

University of the Sea

Huatulco Campus - Campus Map



University Campus

1. Institute of Economics
2.- Tourism Institute
3.- Institute of Communication
4.- Institute for International Studies Isidro Fabela
5.- Communication Sciences Laboratory
6.- Tourism Laboratory
7.-:Multimedia Lab
8.- Rector's Office
9.- Office of the Vice-Rector of Administration
10.- Office of the Academic Vice-Rector and Campus Service Center
11.- Network Department and Maintenance
12.- Language Center
13.- Self-Access Room
14.- Computer Labs
15.- Classrooms
16.- Cefeteria
17.- Library
18.- Auditorium
19.- Rector's house
20.- Apartments for Professors
21.- Gate and Guard House 1
22.- Access Gate and Guard House 2
23.- Civic Square
24.- Warehouse
25.- Parking Lot 1 (Housing Unit)
26.- Parking Lot 2
27.- Electrical Substation 1 and Emergency Plant 1
28.- Electrical Substation 2 and Emergency Plant 2
29.- Elevated Tank
30.- Heliport
31.- Wastewater Treatment Plant
32.- Laundry Room
33.- Meteorological Station
34.- Multi-Purpose Hall
35. Institute of Mathematics and Actuarial Science
36. Purification Plant

Total area represented 100%

University Total Area: 20 hectares

University of the Sea

Botanical Garden. Puerto Escondido Campus – Campus Map

Services

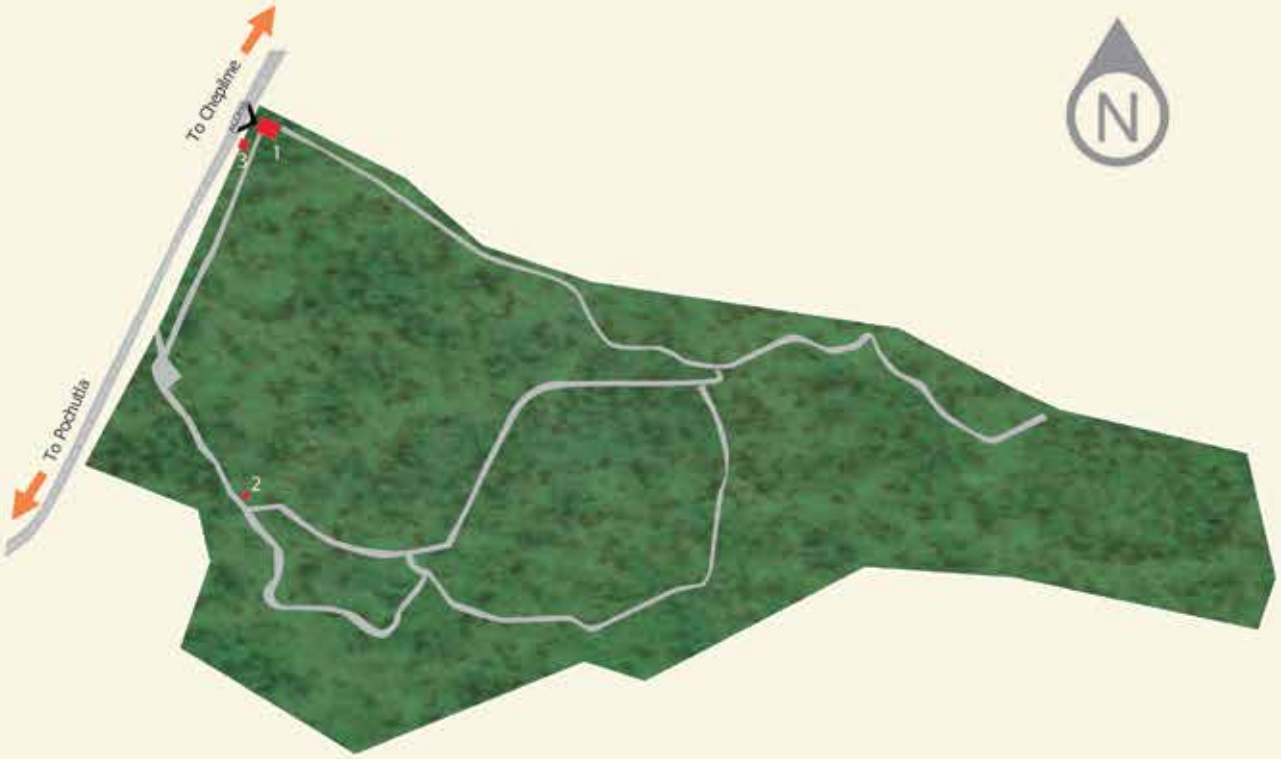
1.- Security Booth
2.- Orchidarium
3.- Cistern
4.- Septic Tank

Total area represented 100%

TOTAL AREA OF THE UNIVERSITY
16.7 HECTARE S

University of the Sea

Chepilme Botanical Garden, Puerto Ángel Campus – Campus Map



Buildings
Walkways
Total area

Total area represented 100%

Services

1.- Security Booth
2.- Water Well
3.- Septic Tank

TOTAL AREA OF THE UNIVERSITY
8.6 HECTARES

University of the Sea

Experimental Field – Puerto Escondido Campus – Campus Map.

Buildings

1.- Multipurpose Laboratory for Animal Science (Reproduction, Surgery, Anatomy, Pathology, Microbiology, Nutrition and Biochemistry)
2.- Main Access
3.- Warehouse
4.- Iguana Cage
5.- Baby Iguanas Cage
6.- Incubation Building
7.- Water Well
8.- Plantation of timber trees
9.- Nursery
10.-Turkey Cage
11.- Cage for sheeps
12.- Ostrich Area
13.-Area for cows
14.-Planting Area
15.-Rabbits Cage
16.- Greenhouse
17.-Area for bulls
18.-Area for calves
19.-Area for Silo
20.-Grazing area
21.-Area of forage trees
22.-Septic Tank
23.- Water Pump for Greenhouse

Total area represented 100%

TOTAL AREA OF THE UNIVERSITY 8 HECTARES

University of the Sea

Palotada – Campus Map

Total area represented 100%

Facilities

1.- Security Booth Area
2.- Internet Link Tower

TOTAL AREA OF THE UNIVERSITY
0.16 HECTARES

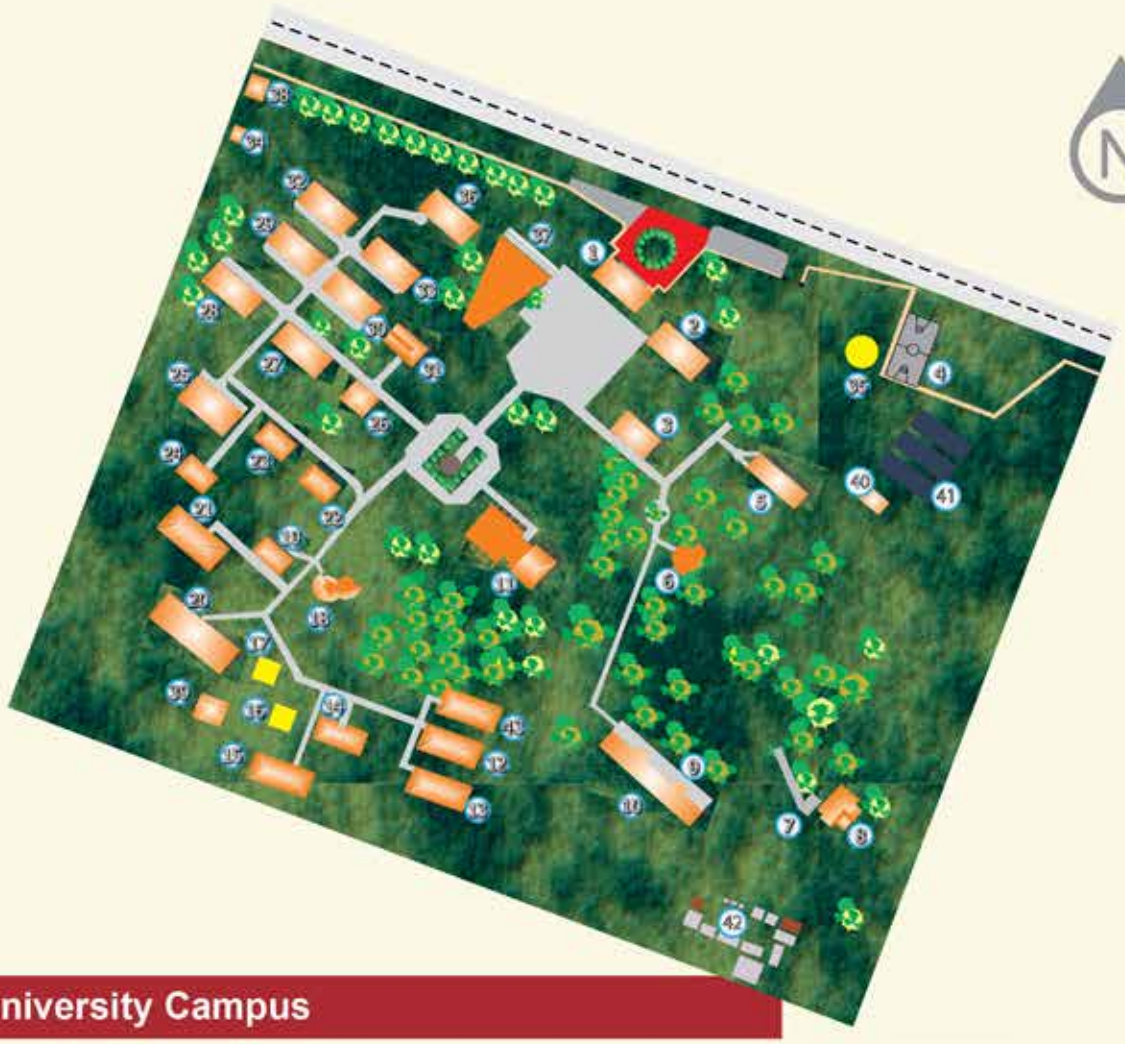
University of the Isthmus

Food and Nutrition Research Center (CINA). UNISTMO. Juchitán Campus

Interior partial view of the CINA. UNISTMO. Juchitán Campus

University of the Isthmus

Tehuantepec Campus- Campus Map



University Campus

1. Gate Access and Security Booth
2. Rector's office
3. Office of the Vice-Rector of Administration
4. Basketball court
5. Material Resources
6. Cafeteria
7. Parking Lot
8. Rector's House
9. Housing Unit Parking Lot
10. Apartments for Professors
11. Biblioteca: Library
12. Classrooms 25-29, Computer Labs, Posgraduate Studies Lab, Audiovisual Room, Multi-Purpose Hall
13. Electronics Laboratory
14. Institute for Energy Studies
15. Energy Studies Laboratory
16. Solar panels
17. Wind Turbine
18. Language Center
19. Self - Access Room
20. Design Workshops
21. Engineering Laboratory
22. Chemistry Laboratory
23. Organic Chemistry Laboratory
24. Computer Lab
25. Professor's offices
26. Bathrooms
27. Classrooms A1-A4
28. Classrooms A5-A8
29. Classrooms A9-A12
30. Classrooms A13-A16
31. Office of the Academic Vice-Rector
32. Classrooms A17-A20
33. Classrooms A21-A24
34. Elevated Tank
35. Deep Water Well
36. Classrooms and Applied Mathematics Computer Lab
37. Auditorium
38. Emergency Plant 1
39. Emergency Plant 2
40. Solar Inverter House
41. Solar Park
42. Wastewater Treatment Plant
43. Classrooms A30-A38

Buildings
Walkways
Total area

Total represented area 100%

Total University area: 12.5 Hectares

University of the Isthmus

Ixtepec Campus- Campus Map

University Campus

1. Gate Access and Security Booth
2. Rector's office
3. Professor's offices
4. Auditorium
5. Elevated Tank and Cistern
6. Electrical Substation
7. Computer Lab 1
8. Computer Lab 2
9. Office of the Vice-Rector of Administration
10. Bathrooms
11. Classrooms 1-4
12. Classrooms 5-8
13. Indoor Parking
14. Cafeteria
15. Outdoor Parking Lot
16. Gate Access and Security Booth
17. Material Resources
18. Classrooms 9-12
19. Classrooms 13-16
20. Language Center
21. Self-Access Room
22. Emergency Plant
23. Wood workshop
24. Classrooms 17-20
25. Classrooms 21-24
26. Classrooms 25-29, Audiovisual Room, Teamwork Room
27. Institute for Constitutional and Administrative Studies
28. Software Development Room, Networking Room, Computer Lab 3
29. Electronics Laboratory
30. Library
31. Apartments for professors
32. Rector's House
33. Deep Water Well
44. Wastewater Treatment Plant
34. Solar Park
35. Solar Inverter House

Total represented area 100%

Total University area: 12.5 Hectares

University of the Isthmus

Juchitán Campus- Campus Map

University Campus

1. Gate Access and Security Booth
2. Emergency Plant
3. Parking Lot
4. Material Resources
5. Office of the Vice-Rector of Administration
6. Auditorium
7. Rector's office
8. Deep Water Well
9. Elevated Tank
10. Office of the Academic Vice-Rector
11. Cafeteria
12. Library
13. Professors' offices
14. Classrooms 1-5
15. Classrooms 6-10
16. Classrooms 11-15
17. Language Center
18. Computer Lab
19. Self-Access Room
20. Chemistry Laboratory
21. Biology Laboratory
22. Septic tank
23. Apartments for professors
24. Nutrition Laboratory
25. Wind Energy Training Center
26. Robotic Clinic

Buildings
Walkways
Total area

Total represented area 100%

TOTAL AREA OF THE UNIVERSITY
94.4 HECTARES

University of Papaloapan

Centre for Scientific Research. UNPA. Tuxtepec Campus

Interactive 3D Anatomy Table. Anatomy Laboratory UNPA, Tuxtepec

University of Papaloapan

Loma Bonita Campus- Campus Map

University Campus

1. Zootechnical Post
2. Emergency Plant
3. Security Booth
4. Gate Access
5. Warehouse
6. Infirmary
7. Office of the Academic Vice-Rector
8. Campus Service Center
9. Office of the Vice-Rector of Administration
10. Cafeteria
11. Design Workshops (Screen Printing, Ceramics, Metals and Wood)
12. Aquaculture Ponds
13. Lagoon
14. Rector's office
15. Bathrooms
16. Classrooms (14-15)
17. Multimedia Lab
18. Computer Labs 1&2
19. Classrooms (1-4)
20. Classrooms (5-8)
21. Classrooms (9-12)
22. Department
23. Language Center
24. Bathrooms located on the second floor of classroom
25. Two Story Classroom Building
26. Institute of Agro-Engineering
27. Professors' Offices
28. Elevated Tank
29. Biological Chemical Laboratory
30. Library
31. Electrical Circuits Laboratory
32. Mechatronics Laboratory
33. Physics Laboratory
34. Auditorium
35. Apartments for Professors
36. Rector's House
37. Heliport
38. Laboratory of Experiments and Physical Tests
39. Maintenance and Gardening

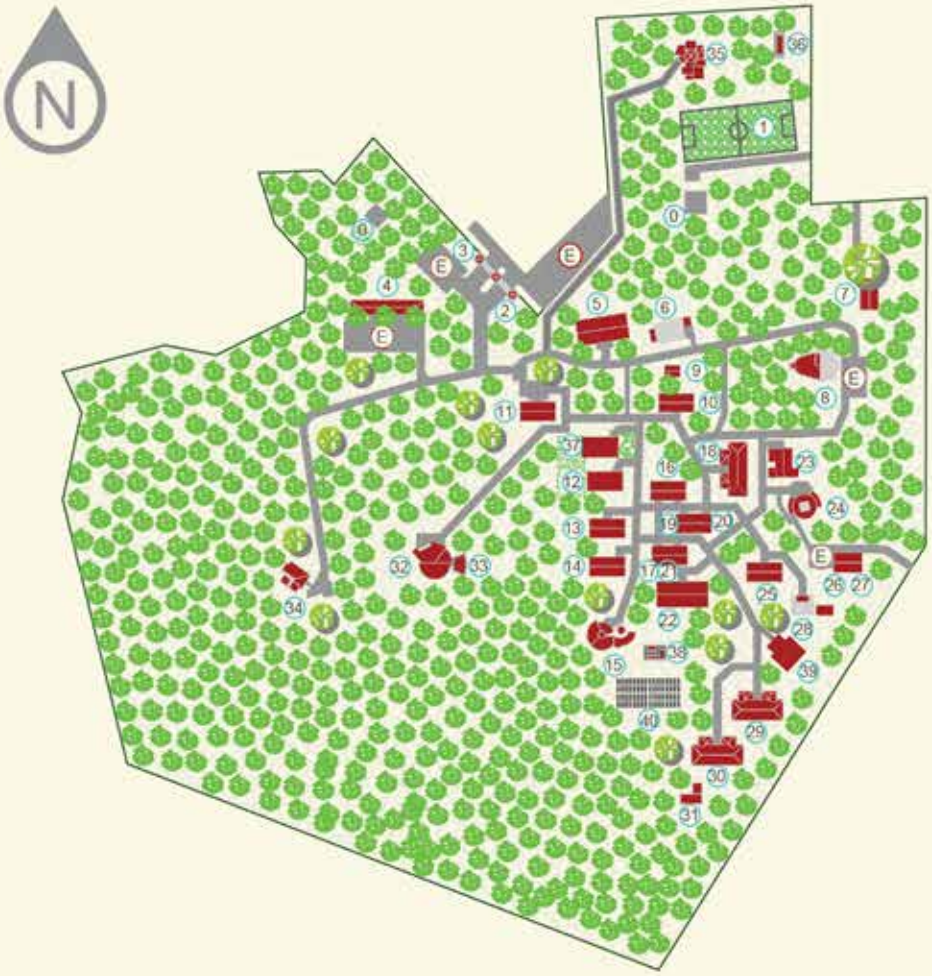
Buildings
Andadores
Total area

Total represented area 100%

TOTAL AREA OF THE UNIVERSITY
25.07 HECTARES

University of Papaloapan

Tuxtepec Campus- Campus Map



University Campus

1. Soccer Field
2. Gate Access
3. Security Booth
4. Apartments for professors
5. Two Story Classroom Building
6. Food Workshop
7. Maintenance
8. Auditorium
9. Emergency Plant 1
10. Office of the Academic Vice-Rector
11. Rector's office
12. Two Story Classroom Building
13. Computer Lab 1
14. Computer Lab 2
15. Language Center
16. Classrooms (1-5)
17. Network Department
18. Institute of Applied Chemistry
19. Classrooms (6-9)
20. Bathrooms
21. Classrooms (10-14)
22. Two Story Classroom Building
23. Office of the Vice-Rector of Administration
24. Cafeteria
25. Microbiology and Bioreactor Laboratory
26. Warehouse
27. Infirmary
28. Chemistry Laboratory
29. Institute of Biotechnology
30. Professors' offices
31. Bioterium Laboratory
32. Library
33. Reading Room
34. Rector's House
35. Robotic Hospital
36. Substation
37. Two Story Computer Lab
38. Emergency Plant- Substation 2
39. Centre for Scientific Research
40. Solar Park

Buildings
Walkways
Total area

Total represented area 100%

Total university area: 31.17 Hectares

University of Sierra Sur

Graduate Studies Center. UNSIS. Miahuatlán de Porfirio Díaz

Partial view of the Dental Center. UNSIS. Miahuatlán de Porfirio Díaz

University of Sierra Sur

Miahuatlán-Campus Map

University Campus

1. Rector's office
2. Office of the Academic Vice-Rector
3. Office of the Vice-Rector of Administration
4. Postgraduate Studies Division
5. Institute of Municipal Studies
6. Institute for Public Health Studies
7. Professor's offices
8. Institute of Nutrition
9. Institute of Computer Science
10. Language Center
11. Self-Access Room
12. Computer and Electronics Laboratory
13. Chemistry Laboratory
14. Laboratory of Biology
15. Food and Nutrition Research Center
16. Robotic Clinic
17. Nursing Practice Room
18. Information Technology Center
19. Dentistry Center
20. Clinical Pathology Center
21. Center for Anatomy and Dissection
22. Government and Business Development Center
23. Auditorium
24. Assembly Hall
25. Library 1
26. Library 2
27. Center for Multidisciplinary Development
28. Computer Lab 1
29. Computer Lab 2
30. Computer Labs 3&4
31. Computer Labs 5&6
32. Computer Labs 8&9
33. Classrooms A
34. Classrooms B
35. Classrooms C
36. Classrooms D
37. Classrooms E
38. Classrooms F
39. Classrooms G
40. Classrooms H
41. Classrooms I
42. Water Purification Plant (H_2O)
43. Cafeteria 1
44. Cafetaria 2
45. University Clinic
46. Bathrooms
47. Warehouse
48. General Services Warehouse
49. Liaison Unit
50. Rector's House
51. Apartments for professors
52. Laundry Center
53. Cultural and Recreational Center
54. Soccer Field 7
55. Basketball court
56. Electrical Substation with Emergency Plant 1
57. Electrical Substation with Emergency Plant 2
58. Wastewater Treatment Plant 1
59. Wastewater Treatment Plant 2
60. Heliport
61. Gate Access
62. Parking Lot
63. Deep Water Well
64. Meteorological Station
65. Elevated Drinking Water Tank
66. Elevated Treated Water Tank 1 and 2

Buildings
Walkways
Total area

Total represented area 100%

TOTAL AREA OF THE UNIVERSITY 20 HECTARES

University of Sierra Juárez

Institute of Environmental Studies. UNSIJ. Ixtlán de Juárez

Environmental Analysis Laboratory. UNSIJ. Ixtlán de Juárez

University of Sierra Juárez

Ixtlán de Juárez- Campus Map

Buildings
Walkways
Total area

University Campus

1.- External parking lot
2.- Gate Access
3.- Auditorium
4.- Electrical Substation
5.- Cafeteria
6.- Microbiology Laboratory
7.- Network Department
8.- Rector's Office
9.- Office of the Academic Vice-Rector
10.- Interior parking lot
11.- Office of the Vice-Rector of Administration
12.- Infirmary
13.- Warehouse
14.- Classroom module A
15.- Classroom module B
16.- Classroom module C
17.- Two-Story Building, classrooms D
18.- Environmental Analysis Laboratory
19.- Pollutants Waste Hut
20.- Institute of Environmental Studies
21.- Electronics and Networking Laboratory
22.- Computer Lab 1
23.- Computer lab 2 and 3
24. Language Center
25.- Self Access Room
26.- Library
27.- Parking Lot for the Apartments
28.- Professor's apartment
29.- Rector's house
30.- Gas Hut
31.- Chemical-Biological Laboratory
32.- Two Story Building for Computer Labs Building E
33.- Two Story Building for Classrooms Building F
34.- Maintenance Workshops
35.- Multi-Purpose Hall
36.- Herbarium and plant knowledge and conservation unit
37.- Postgraduate Division
38.- Plant Propagation area
39.- Wood Technology Workshop
40.- Wood Technology Laboratory
41.- Heliport
42. Tourism Laboratory
43. Postgraduate Division

Total area represented 100%.

University total area: 43.67 Hectares

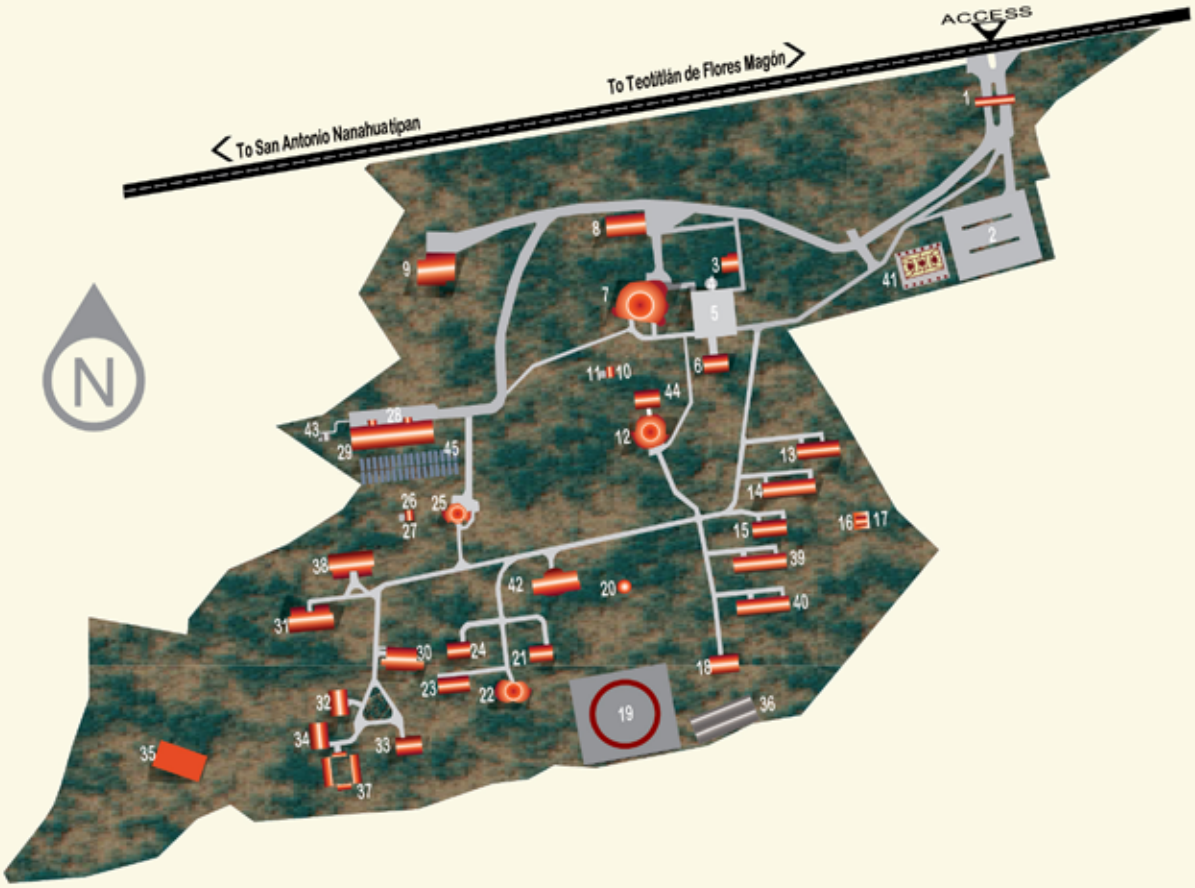
University of La Cañada

Food and Nutrition Research Center (CINA). UNCA. Teotitlán de Flores Magón

Partial view of the Bromatology Laboratory. CINA. UNCA. Teotitlán de Flores Magón

University of La Cañada

Teotitlán de Flores Magón- Campus Map



University Campus

1.- Security Booth
2.- General Parking Lot
3.- Office of the Vice-Rector of Administration
4.- Flagpole
5.- Civic Square
6.- Rector's Office
7.- Auditorium
8.- General Warehouse
9.- Rector's House
10.- Emergency Plant
11.- Electrical Substation
12.- Library
13.- Classrooms 1-4
14.- Classrooms 5-8
15-. Classrooms 9 - 11
16.- Pumping Station
17.- Elevated Tank
18.- Office of the Academic Vice-Rector
19.- Heliport
20.- Deep Water Well
21.- Self-Access Room
22. Language Center
23.- Computer lab
24.- Computer Center
25.- Cafeteria
26.- Emergency Plant
27.- Electrical substation
28.- Parking Lot for Apartments
29. Apartments for Professors
30.- Food Workshop
31.- Institute of Pharmacobiology
32.- Pharmacobiology Laboratory
33.- Chemistry Laboratory
34.- Biology Laboratory
35.- Sewage Treatment Plant
36.- Greenhouse
37.- Research laboratory
38.- Institute of Food Technology
39.- Classrooms 12-19
40.- Classrooms 20 -27
41.- Basketball court
42.- Food and Nutrition Research Center (CINA)
43.- Laundry Room
44. Expansion of the Library
45: Solar Park

Buildings
Walkways
Total area

Total area represented 100%

University total area: 15.753 Hectares

NovaUniversity

Auditorium. NovaUniversity, Juxtlahuaca Peripheral Campus

Chemical-Biological Laboratory. NovaUniversity, Juxtlahuaca Peripheral Campus

NovaUniversity

Ocotlán Central Campus and San Jacinto Peripheral Campus, Campus Map

Ocotlán Central Campus

1.- Gate Access
2-. Auditorium
3.- Civic Square
4.- Rector's Office
5.- Warehouse
6.- Office of the Vice-Rector of Administration
7.- Office of the Academic Vice-Rector
8.- Cafeteria
9.- Recording and Transmission Rooms and Multimedia Department
10.- Library
11.- Professor's Office
12.- Professors' Apartments Module 1
13.- Professors' Apartments Module 2
14.- Rector's House
15.- Drinking water tank

San Jacinto Campus

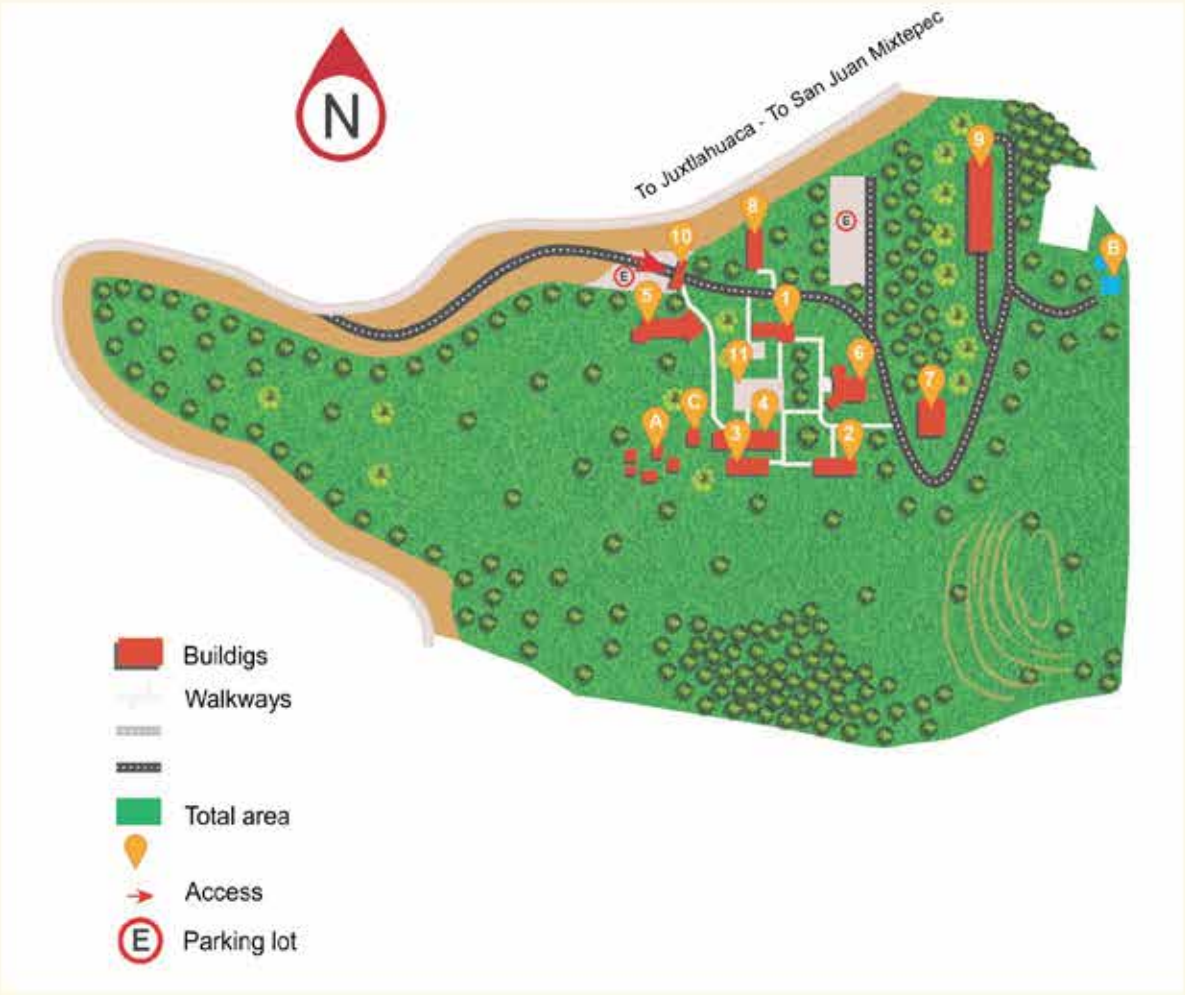
A.- Gate
B.- Electrical Substation
C.- Wastewater Treatment Plant
D.- Director's Office
E.- Sports Facilities
F: Classrooms
H. Teaching Assistants Offices

Total area represented 100%

Total area of the university 9.6 hectares

NovaUniversity

Juxtlahuaca Peripheral Campus -Campus Map



Juxtlahuaca Peripheral Campus

1.- Director's Office
2.- Teaching Assistants Offices
3.- Biological Chemical Laboratory
4.- Classrooms
5.- Auditorium
6.- Library
7.- Cafeteria
8.- Warehouse
9.- Departments for professors' assistants
10.- Gate Access
11.- Civic Square

A.- Wastewater Treatment Plant
B.- Drinking water tank
C.- Electrical Sub-Station

Total area represented 100%

Total area of the university
16 hectares

NovaUniversity

Santos Reyes Nopala Peripheral Campus -Campus Map

Total area represented 100%

Santos Reyes Nopala Peripheral Campus

1. Gate Access
2. Director's Office
3. Classrooms
4. Electrical Sub-Station
5. Drinking water tank
6. Parking Lot
7. Identification wall
8. House
9. Redes: Networks
   - 9.1. Power grid
   - 9.2. Voice and data network
   - 9.3. Hydraulic network
10. Teaching Assistants Offices
11. Wastewater Treatment Plant

To be built

12. Auditorium
13. Warehouse
14. Biological Chemical Laboratory
15. Library
16. Cafeteria
17. Departments for professors' assistants

- Buildigs
- Buildigs under constructions
- Walkways
- Buildigs
- To Buildigs
- Access

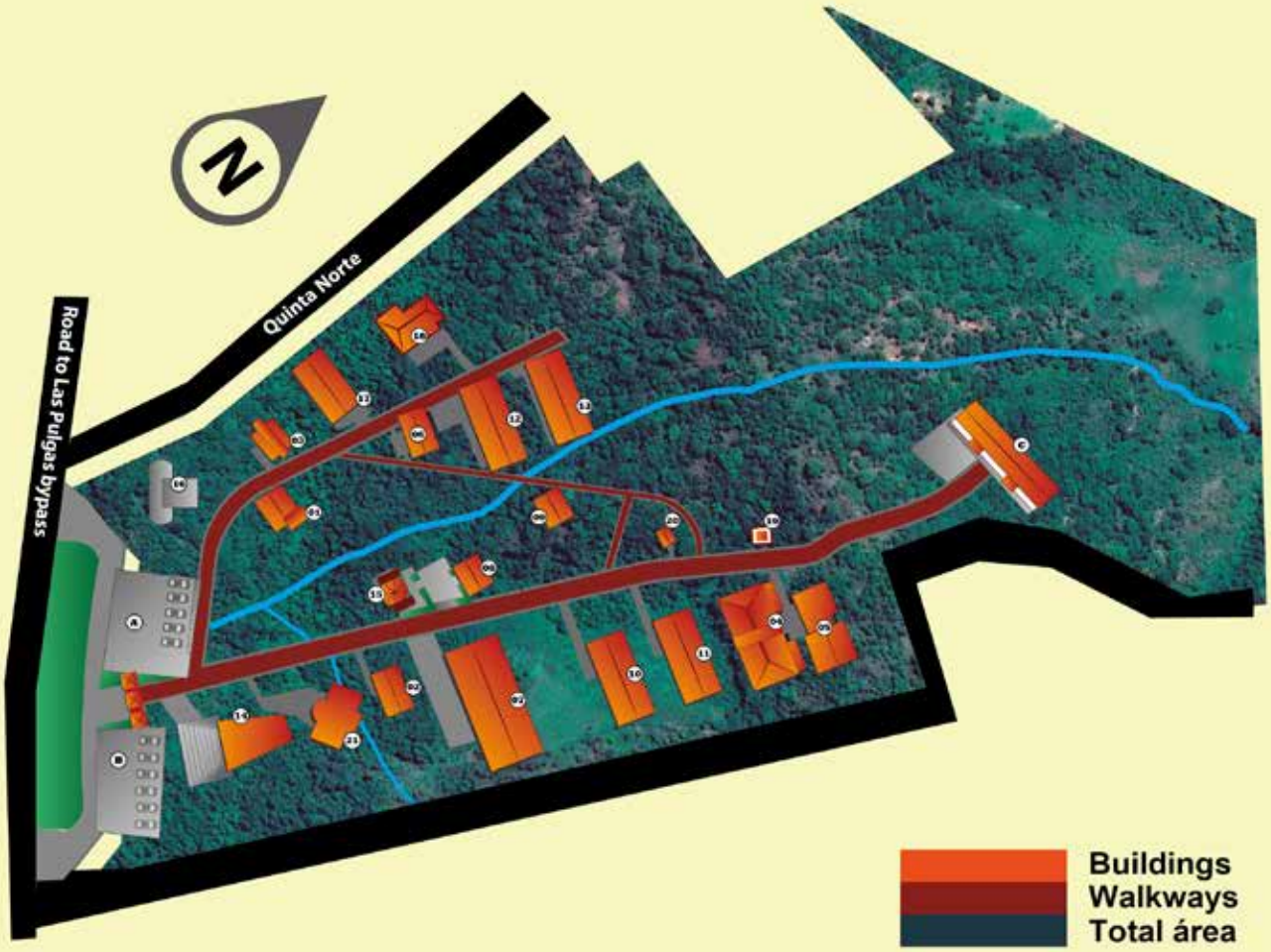
Total area of the university
18.40 hectares

University of the Coast

Robotic Clinic. UNCOS. Pinotepa Nacional

Partial view of the Hospitalization Area. Robotic Clinic. UNCOS. Pinotepa Nacional

University of the Coast
Pinotepa Nacional - Campus Map



Buildings
Walkways
Total área

University Campus

1.- Rector's Office
2.- Office of the Vice-Rector of Administration
3.- Office of the Academic Vice-Rector
4.- Professors' Offices
5.- Library
6.- Computer Labs
7.- Design Workshops
8.- Self-Access Room
9.- Chemistry Laboratory
10.- Classrooms A1-A4
11.- Classrooms A1-A9
12.- Classrooms A10-A19
13.- Classrooms A20-A29
14.- Auditorium
15.- Cafeteria
16.- Treatment Plant
17.- Warehouse
18.- Rector's House
19.- Elevated Tank
20.- Machine Room
21.- Robotic Clinic
A.- Interior parking lot
B.- External parking lot
C.- Apartments for professors

Total area represented 100%

University total area: 12.26 Hectares

University of Chalcatongo

Food and Nutrition Centre. UNICHA. Chalcatongo de Hidalgo.

Computer Lab. UNICHA. Chalcatongo de Hidalgo.

University of Chalcatongo

Chalcatongo-Campus Map

University Campus

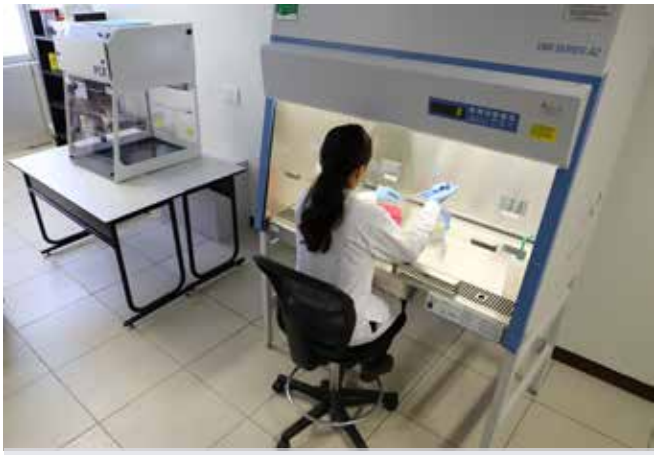
1.- Main Access
2.- Office of the Vice-Rector of Administration
3.- Material Resources Office
4.- Interior parking lot
5.- Auditorium
6.- Rector's Office
7.- Office of the Academic Vice-Rector
8.- Chemistry Laboratory
9.- Emergency Plant
10.- Cafeteria
11.- Computer Lab 1
12.- Classrooms A1-A9
13.- Classrooms A10-A19
14.- Library
15.- Computer Lab 2
16.- Language Center
17.- Professors' Offices
18.- Apartments for professors. Building A
19.- Apartments for professors. Building B
20.- Parking Lot for Residential Area
21.- Maintenance Workshops
22.- Heliport
23.- Rector's House
24.- Robotic Clinic
25.- Food and Nutrition Research Center
26.- Classrooms s A20-A28
27.- Module of 4 Rooms

Buildings
Walkways
Total area

Total area represented 100%

University total area: 20 Hectares

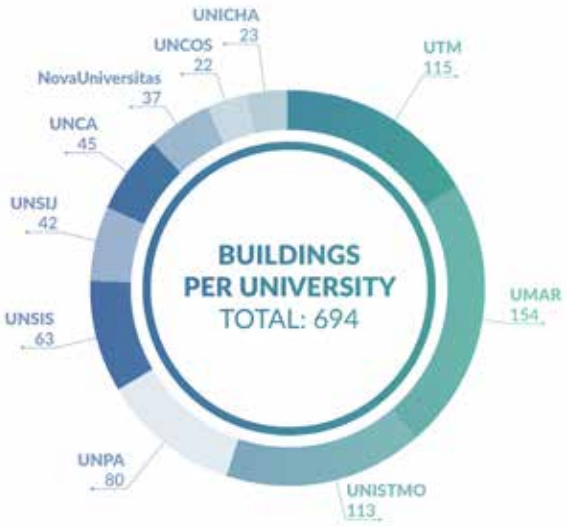
OSUS infrastructure and equipment are a very valuable asset for Oaxaca, allowing us to offer high quality educational opportunities in first class facilities.



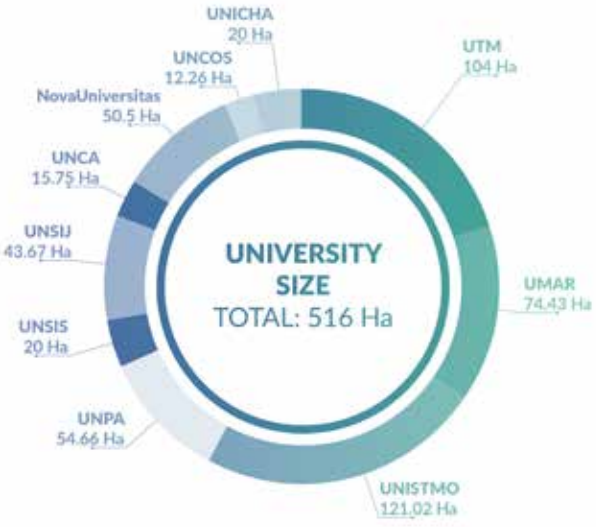
Class II Laminar Flow Safety Hood. Public Health Laboratory. UNSIS, Miahuatlán de Porfirio Díaz

Even more valuable, is the opportunity for quality higher education for low- income youth who can not travel elsewhere.

694 Buildings



516 Ha.
Total Area



OSUS has 31 Research Institutes With 200 Laboratories and 30 Workshops

The State Universities of Oaxaca have a scientific research dimension that places our State at the forefront, both in terms of the volume and the level of research carried out, as explained below. Besides the State Universities of Oaxaca, there are other research institutions.

The quality of scientific research is defined by the combination of four factors: Infrastructure, Equipment, Personnel, Results. The (Ten) State Universities of Oaxaca meet those requirements:

1. Infrastructure.

1.1. 31 Research Institutes:

Institute of Genetics (UMAR- Puerto Escondido Campus)

Tourism Institute (UMAR- Huatulco Campus)

Institute of Economics (UMAR- Huatulco Campus)

Institute of Communication (UMAR- Huatulco Campus)

Institute for International Studies "Isidro Fabela" (UMAR- Huatulco Campus)

Institute of Mathematics and Actuarial Science (UMAR- Huatulco Campus)

Institute of Resources (UMAR- Puerto Ángel Campus)

Institute of Industries and Institute of Ecology (UMAR- Puerto Ángel Campus)

Institute of Social Sciences and Humanities (UMAR- Puerto Ángel Campus)

Institute of Constitutional and Administrative Studies (UNISTMO- Ixtepec Campus)

Institute for Energy Studies (UNISTMO- Tehuantepec Campus)

Institute of Informatics (UNSIS)

Institute of Nutrition (UNSIS)

Public Health Research Institute (UNSIS)

Institute of Municipal Studies (UNSIS)

Institute of Electronics and Mechatronics (UTM)

Institute of Computer Science (UTM)

Institute of Design (UTM)

Institute of Mining (UTM)

Institute of Agribusiness (UTM)

Institute of Social Sciences and Humanities (UTM)

Institute of Hydrology (UTM)

Institute of Industrial and Automotive Engineering (UTM)

Institute of Physics and Applied Mathematics (UTM)

Institute of Environmental Studies (UNSIJ)

Institute of Pharmacobiology (UNCA)

Institute of Food Technology (UNCA)

Institute of Agroengineering (UNPA- Loma Bonita Campus)

Institute of Biotechnology (UNPA- Tuxtepec Campus)

Institute of Applied Chemistry (UNPA- Tuxtepec Campus)

In addition:

Centre for Strategic Business Studies (UTM)

Centre for Scientific Research (UNPA-Campus Tuxtepec)

"Centre for Strategic Business Studies" and the "Centre for Mathematical Modelling" (advanced project), attached to the Institute of Physics and Applied Mathematics at UTM and the Centre for Scientific Research of the UNPA.

At **Graduate Studies Centers** (UTM, UMAR, UNISTMO, UNPA, UNSIJ, UNSIS) we combine teaching with scientific research.

UNSIS: Graduate Studies

UTM: Graduate Studies (outside)

UTM: Graduate Studies (inside)

UTM: Graduate Laboratories

UMAR Graduate Studies (Puerto Ángel Campus)

UMAR Graduate Studies (Puerto Escondido Campus)

200 scientific research laboratories, distributed on the campuses of the ten State Universities.

Technological University of the Mixteca

Advanced Manufacturing Technology Laboratory

Advanced Manufacturing Technology Laboratory

3D printer.
2 CNC machining centers.
CNC Plasma Cutter.
5 degrees of freedom robot.
Electro-Erosion machine.
Injection moulding machine for plastic, Dream series.
Vertical Machining Center - MM430 (A).
Air Compressor - T30 2340.
Electrical Discharge Machining (E.D.M) - E.D 203.
Universal Lathe - TRENS SN32.
Plastic Injector - TEDERIC I380 D100 TAI-MEX.
Vertical Milling Machine - ALLMILL 949.
Band Milling Drill - TITANIUM ZAY7032.
10” Bandsaw - TITANIUM TS-250A.
Vacuum Thermoformer - HERMAQ 75CA.
Mini Lathe - PHASE II MBT-210.
AC Arc Welder - INFRA MI 80.
AC Arc Welder - INFRA TH 300.
MIG Welder - INFRA MM 140.
Plasma Cutting Machine - INFRA HOT POINT 750.
Cutter Sharpener - DAREX E90B.
14” Metal Cutting Machine - MAKITA 2414NB.
Bench Grinder – JET.
Mechanical elbow saw - SABI SM-14.
Transmitter M400 ISM TYPE 1, INPRO 32501/SG/225PH.
FLD2001 Panel.
Photobioreactor Control.
Sensor: HEAT No. 544743, REF. 243666-131, VI-SIFERM DO ARC.
Photobioreactor.
Waspmote: ph sensor model: 9328, temperature sensor, Model: 9255-P, dissolved oxygen sensor: 9327, 6600 M AH rechargeable battery + external solar panel 7v-500 ma.
Air conditioning unit.
Rotameter reading: I65MM aluminum.
Rotameter: FLDC3302G-65MM ss carbon dioxide.
LI-192SA.
Underwater quantum sensor LI-250A.
Photometer.
Air compressor.
Peristaltic pump.

Biotechnology Laboratory

Ultra high performance liquid chromatography coupled to a mass spectrometer with a Waters quadruple time of flight detector (UPLC- QTOF).
PerkinElmer Gas Chromatography.
Refrigerated centrifuge with rotor of 50 mL tubes Eppendorf brand.
Control shaking Incubator, IKA Brand.
CPXH ultrasonic bath. 20.8 L, 40 kHz.
Branson brand.
Incubator, Shel Lab.
Rotary Evaporators, IKA..

Laboratory of Bioactive Principles

400 MHz Nuclear Magnetic Resonance Spectroscopy, Brucker brand.
FT-IR Platinum ATR Spectrophotometer. Bruker brand.
VARIAN CP-3800 Gas Chromatograph coupled to mass spectrometer 1200L.
Synergy HTX 96 well microplate spectrophotometer. Biotek.
HPLC equipped with UV-vis, refractive index and fluorescence detectors, GBC brand.
Atomic absorption spectrophotometer 932 AA. GBC.

Microbiology Laboratory

Type A2 Biosafety cabinet, Labconco.
Orbital Incubator SEV-PRENDO.
Horizontal autoclave 30 L SEV-PRENDO.
Incubator SEV PRENDO.
Optical microscope.
Stereo microscope.

Physicochemical Laboratory

Eppendorf 5804R Refrigerated Centrifuge with Rotor.Digital homogenizer model T18, IKA.

Physicochemical Laboratory II

Fume extraction hood.
Drying Oven.
Deionizer.
Analytical balance.
Ultrasonic bath.
Spectrophotometer DR/5000.
Water purification system.
Kjeldahl microdigester.
Conductivity and temperature meter.
pH and temperature meter.
Turbidimeter.

Intelligent Robotics Laboratory

Autonomous vehicle AutoNOMOS v2.0.
POWERBOT and POWERCUBE platform and manipulator arm.

Automatic Learning and Human-Computer Interaction Laboratory

4 Premium BIOLOID humanoid robots.
2 NAO V4 and V5 humanoid robots.
BLUETECHNIX Argos 3D cameras.
Autonomous air vehicle.

Solid State Laboratory

Vacuum measuring chamber. LESKER.

Food Science and Technology Laboratory

Distiller with fully automatic operation system. LabTech brand.
260 L capacity climatic chamber.
Double beam UV-Vis spectrophotometer, accuracy +/- 5 nm.
Supercritical extraction equipment, UTM construction.
Ultrasonic bath.

Ultra high pressure liquid chromatograph coupled to a mass spectrometer. Biotechnology Laboratory. UTM. Huajuapan de León.

Colorimeter, Konica Minolta brand.
Cereal extruder.
Laminar flow hood (LabTech).
Rotavapor (Büchi).
Vacuum packer (Torrey).
BiologicLP protein purification system (Biorad), Kjeldahl microdistiller, mod. DMK-650.
Macrokendalh (CRAFT).

Bioprocess Laboratory

4 Liter Freeze-dryer.
Bioreactor with automatic control of 3 L.
Spray dryer of 1.5 L/h.
Digester and distiller for Kjeldahl protein analysis.
Tangential flow membrane microfiltration equipment.
Nanofiltration equipment by normal and tangential flow membranes.
UV-Vis spectrophotometer.
Nanodrop type micro volume spectrophotometer.

Centrifuge with rotor for 50 ml. and 15 ml. tubes.
Endpoint thermocycler.
Photo-documentation system for gels.
Orbital Shaking - Incubator.
Horizontal electrophoresis chamber.
Hunter Lab Scan Vis Colorimeter.

Bromatology Laboratory
Tray dryer, created at UTM.
Solar dryer, created at UTM.
Microplate Spectrophotometer.
1.5 L. Freeze-dryer.

Instrumentation Laboratory
Gas scrubber.
Kjeldahl Digestion System.
Kjeldahl micro-distiller.
Ultra-freezer.
3L. Ultrasonic Bath.

Chemistry Laboratory
Fume extraction hood with cabinet.
Micro - Kjeldahl Digester.
Kjeldahl Destillation Apparatus.
Thermobalance to measure humidity, capacity 45 grams.
UV-VIS Spectrophotometer.
Analytical Balance.
18 L Recirculating Bath.
Rotary evaporator.

Digital Media Laboratory
Camera for recording projects.
Video switcher for data and signal transfer.
28” high resolution monitor for 3D animation finishing.
TV set with professional lighting.
Professional audio recording booth.
Digi 002 audio console.

Photography Laboratory
Professional digital reflex camera, model: 60D EOS.
Semi-professional camera type Reflex- digital, model: T3i EOS.
Tripod, brand Manufroto, semiprofessional 1.20 m.
Cyclorama (bottom holder) 4m X 3m high, black paper background.
Two-unit flash illumination set (tripod, diffuser and umbrella).
7 in 1 reflective screen.
Diorama for product photography.

Natural Products and Food Science Laboratory
UPLC chromatograph coupled to a mass spectrometer.
Nuclear magnetic resonance spectrometer.

Electroceramics Laboratory
Carbolite Furnace CTF 17/300 (maximum operating temperature is 1700 C, Ar, air, O2).
Keithley 6517B electrometer with software conductivity measurements against temperature up to 1000C.
Keithley 2410 multimeter and voltage/current source with software.
Kurt Lesker vacuum measuring chamber (4 probe doors).
Lindberg/Blue M furnace, (maximum temperature 1500 C).
Quadtech 7600 LCR meter (frequency range 10 Hz-2MHz).
Planetary Mill, brand: Retsch Model: PM 100.
2 electric furnaces, brand: Barnstead/Thermo-line Model: F47925-80 description: 1200 oC.

Image Processing and Computer Vision Laboratory
DELL computer, XPS 8700. dSPACE CP1104 card 46.
HUMOSOFT data acquisition card, model TB 620.
BK PRECISION Function Generator, model 4086ANG, 80MHz.
Tektronix digital logic state oscilloscope, model MSO 3032, 300MHz.
GW Instek power supply, model GPS-3303, 0-30V, 3A

Electron Microscopy Laboratory
Scanning Electron Microscope TESCAN VEGA 3.

Electromechanical Systems Control Laboratory
dSpace platform.
FPGA platform.
Digital phosphor oscilloscope, Tektronix, model DPO 3034, 300MHz.
2 Tektronix differential voltage provers, model TMD00200, 200MHz. Tektronix PWS4305 programmable power supply, 0-30V, 5A.
2 FUTEK torque sensors, model FSH02054.
National Instruments data acquisition card, M series, model USB-6225.
GW Instek power supply, model GPS-3303, 0-30V, 3A.

Laboratory of Natural Products and Food. UTM. Huajuapan de León.

2 AC Brushless Motors, BALDOR, model BSM80N-275AA and BSM80N-275AF, 3.2 NM.
3 LEESON DC motors, models: C4D17NK6C, C4D17NK7E and C4D17NK10C, characteristics: 1/3HP, 1/2HP and 1/2HP.

Industrial Systems Correction and Fault Detection Laboratory
DELL Computer, XPS 8700.
BK PRECISION Function Generator, model 4086ANG, 80MHz.
GW Instek power supply, model GPS-3303, 0-30V, 3A.
Tektronix digital oscilloscope, model TPS 20125, 2 channels, 100MHz.
BENQ projector, model MS517, 2800 lumens.
BK PRECISION power supply, model 1672, 0-32V, 3A.

Mining - Metallurgical LaboratoryMáquina
Machine for compression of cylinders and cubes, brand PILOT of 1500kN.
Shredder for rigid polymers.
Crusher for glass.
Brinell hardness tester.
Shore C hardness tester.
Explorer Junior Core Machine, cap. 60 m.
Rock cutter, coarse cut.
Rock cutter, fine cut.
Seismograph of 8 channels, Kinemetrics brand.
2 Petrographic microscopes with image acquisition program.

Physics Laboratory
Opto-electronic equipment with stabilized laser.
PASCO SCIENTIFIC didactic equipment for experimentation in modern physics and electromagnetism.
PASCO SCIENTIFIC training equipment for experiments in classical mechanics, thermodynamics and optics.
Celestron AstroMaster 76 reflecting telescope. For astronomical observation.

Chemical Vapor Deposition Laboratory
Chemical vapour deposition reactor; 4 modes: Metal-organic, aerosol assisted, atmospheric pressure and low-pressure sources.

Usability Labs
2 GoPro Hero4 cameras.
2 Digitizer tablets.
2 MacBook Pro. Their use in various activities such as usability testing and reporting.
ViewSonic projector.
2 SAMSUNG 32" and 40" TV sets. Equipment used for usability testing inside and outside the UsaLab.
Sony HandyCam
ViewSonic Projector
Mac Pro
DELL Multi-Touch Monitor
HP Compaq Elite 8300 All-In-One PC
Sony Vaio Touchscreen 14'' Touchscreen PC
Gesell Camera

Usalab Laboratory
2 Televisions.
4 Video Cameras.
2 GoPro.
2 Monitors.
4 Desktop Computers.
4 Laptops.
2 iPad's.
2 Projectors.
2 Digitizer Tablets.

Computer Applications Laboratory (LACDA)
Alien Computer Intel i-7 processor with 8 cores @3.7GHz GTX 660 video card.
HP01 desktop computer with 8GB of RAM.
Samsung laptop with 8GB RAM.
XPS laptop with 1GB ram, Mac laptop with 8GB ram.
Dell Alien desktop computer.
HP02 desktop computer with 8GB of ram

Applied Artificial Intelligence Laboratory
High performance computational cluster consisting of 3 servers. It consists of 48 cores with 96 execution threads, 48 GB of RAM, including 3 NVIDIA Tesla K40C cards.

Systems Laboratory
10 Rasberry Pi 2 cards.
2 Touch Screen Displays for Rasberry Pi 2 cards.
Smart Board.
Dell 2100 mp video projector.
Dell Inspiron One 2020 computer.
4 Dell Dimension 8300 DHM computers.
Dell 780 Optiplex Computer.
4 Dell GX 520 Optiplex Computers.
2 Dell Optiplex GX 260 Computers.
Dell Dimension XPS Computer.

Bacteriology Laboratory
LABCONCO laminar flow chamber for bacteriological analysis of water and soil.
Continental Scientific refrigerator for preservation of culture media.
LABCONCO horizontal hood.
Variable volume pipette 0.2ML-1ML.

Physical-Chemical Water Analysis Laboratory
LABCONCO fume hood. Byepass system.
Water quality measurement equipment (Hydrolab - DataSonde5X).
pH and temperature meter CONDUCTRONIC.
DR 5000 Spectrophotometer for various colorimetric analyses.
Drying Oven.
Deionizer.
Analytical balance.
Ultrasonic bath.
Water purification system.
Kjeldahl microdigester.
Conductivity and temperature meter.
Turbidimeter.

Soil Science Laboratory
Plant sample mill IKA, for chemical analysis of plant tissue.
Incubator for bacteriological cultures.
Incubator with C02 supply for bacteriological cultures that require a controlled environment.
Drying oven.
Total station used for topographic surveys.
Kjeldahl digester.
Rotap sieve shaker.
Desiccator riossa.
Heracell® CO2 incubator.
Bench model centrifuge.
Kjeldahl microdigester.
Reciprocal action shaker.

Advanced Programming Practice Laboratory (LAPP)
LaboratoryHigh performance computer with 4 RTX 2080TI video graphic cards.
Laptop computer with 1 TRX 2080 video graphic card.
25 Computers Electronic blackboard.
Projector.
COI, NOI and SAE software

Analogue Electronics Laboratory
8 Power supplies, brand: GW model: GPL-3030D, two outputs 0-30 volts, 2 amperes with operation capacity, series, parallel, one 5VDC output.

8 Oscilloscopes, brand: HEWLETT PACKAED, model: 54603B.
2 Computer equipment.

Centre for Strategic Business Studies
25 computers.
Electronic blackboard.
Projector.
IOC, NOI and SAE software.

Electronics Laboratory
dSpace and FPGA platforms.

Advanced Electronics Laboratories
11 Data acquisition cards (dat) brand: measurement computing Serial: USB-1208FS.
2 Universal Programmers, XELTEK, model: SUPERPRO 610P.
Function generator, brand: Agilent; model: 33120A; Waveforms: sine, square, triangular, pulse, ramp.
7 Digital multimeters, brand: Steren, model: mul-600.
2 Hot air stations, brand: Steren.
9 Digital multimeters, brand: Fluke, model: 107.

Nuclear Magnetic Resonance Spectrometer. UTM. Huajuapan de León.

100 MHz digital bench oscilloscope, make: Tektronix, model: TDS2012C, 2 channels, sampling rate: 2 GS/s, recording length: 2.5 Kp; USB.
2 bench digital oscilloscopes, brand: Tektronix, model: TDS220.
Bench digital oscilloscope, make: Tektronix, model: TDS210.
5 5X magnifying glasses with led lamp, Steren brand, model: HER-740BL.
10 Digital multimeters, brand: UNI-T, model: UT89XD.
Robot Kit 10 in 1 Ultimate 2.0, Makeblock brand.
LCR/ESR meter, BK Precision brand, model 886.
LCR meter, GW Instek brand, model LCR-916.
Solar power meter, AMPROBE brand, model SOLAR-100.
3 Dremel base drills, model 220, Dremel brand.
2 Base drills, Pro's Kit brand, model 1PK500.

Analogue Electronics Laboratory I
6 Power supplies, brand: GW, model: GPL-3030D, two outputs 0-30 volts, 2 Amperes with operation capacity, parallel series, one 5VDC output.
6 Oscilloscopes, Hewlett-Packard brand, model 54603B.
Oscilloscope, AGILENT brand, model 54621A.
7 Function generators, brand: Hewlett-Packard; model: 33120A; waveforms: sine, square, triangular, pulse, ramp.
2 Computer equipment.

Analogue Electronics Laboratory II
8 Hewlett-Packard E3611A 0-15 volts DC 3A power supplies.
8 Analog function generators 3 MHz, GW Instek brand, model GFG-8216A.
Oscilloscope brand: Hewlett-Packard Model: 54610B.
4 Oscilloscopes brand: Hewlett-Packard model: 54603B.
5 Oscilloscopes brand: AGILENT model: 54621A.
Logic analyzer brand: Hewlett-Packard Model: 54620A.
Oscilloscope 4 channels brand: Tektronix model TDS 420A.
Function generator brand: HEWLETT PACKAED Model: 8647A.
2 Computers.

Robotics Laboratory
7 Function generators brand: BK PRECISION; model: 4017 A; waveforms: sine, square, triangular, pulse, ramp; range: 0.2HZ to 50 MHZ in 8 ranges; resolution: 5 digits; Impedance: 50 OHMS.
8 Computer equipment.
8 Power supplies brand: BK PRECISION Model: 1760A.
Universal programmer brand. XELTEK. Model: 280U.

Robotics and Mechatronics Laboratory

CNC Router PROCAM of 3 axes with work area of 40x40 cm 2HP power.
Creality CR-10 S5 3D Printer with 50x50x50 cm working space.
MBot 3D printer with 25x25x15 cm working space.
DSpace DS1104 data acquisition system with 4 channels A/D +-10V, 8 channels D/A 16 bits +-10V, 20 channels of digital inputs/outputs.
Workstation Dell Precision Tower 5810.
Keithley 2231A-30-3 3-channel 0-30V voltage source.
Tektronix AFG 1022 function generator.
Tektronix TBS 1102B-EDU digital oscilloscope.
OpenBCI brain-computer interface development kit with 16 electroencephalographic sensors and 30 electromyographic sensors.
2 MYO bracelets with 8 electromyographic sensors and inertial measurement unit.

Digital Communications Laboratory I

9 Function generators, Tektronix brand; model AFG1022; waveforms: sine, square, triangular, pulse, ramp.
9 Oscilloscopes, Tektronix brand; model TBS 1052B-EDU.
10 DC power supplies, Agilent brand, model E3646A.
10 Digital multimeters, Agilent brand, model 34401 A.
Oscilloscope, Agilent brand; model A.
Function generator, Agilent brand; model: 33120A; waveforms: sine, square, triangular, pulse, ramp.

Digital Communications Laboratory II

10 Computers, Dell brand, model Optiplex 3040.
3 Function generators, Tektronix brand; model AFG1022; waveforms: sine, square, triangular, pulse, ramp.
7 Function generators, Agilent brand; model: 33120A; waveforms: sine, square, triangular, pulse, ramp.
6 Oscilloscopes brand: Tektronix, model: TDS 10023 Oscilloscopes brand: Tektronix, model: TDS 210. Oscilloscope brand: Tektronix, model: TDS 220.
7 DC power supplies, GW brand, model: 3030D.
3 DC power supplies, Matrix brand, model: MPS-3005L-3.
Spectrum analyzer, model: E4403 B Series: ESA-L.
HEWLETT PACKARD E-4411A/ESA-L1500A Spectrum Analyzer.

Automation and Mechatronic Systems Laboratory

Experimental platform: Machinery Fault Simulator-Rotor Dynamics Simulator from Spectraquest.
Advanced education control kit 250MHZ Controller board with 32MB RAM, CLP1104 DSPACE.
LAB-VOLT 8045-00 training system.
Power electronics system LAB-VOLT 8032-20.
Leeson amps 27 DUTY: CONT, FRAME: US56C, TORQUE: 11.7 ENCL: TENV, SER. FACT: 1.0, TYPE: DN C4D17NK6C.
Leeson Motor 1/3 HP. 12 Volts C4D17NK6C.
Leeson motor 1/2 HP. 12 Volts C4D17NK7E.
Leeson Motor 1/3 HP. 12 Volts C4D17NK9C.
Leeson Motor 1/3 HP. 160 Volts C42D17FK5D.
Leeson Motor 1/3 HP. 115/230 Volts A4C17DH3G P.
Samsung 50” screen.
2 Siemens RGZ 5 HP three-phase motors with 2 poles.
10 HP three-phase motor with 4 poles Siemens RGZ.
FESTO 152888 automation training kit with practice panel and compressor.

Power and Electromechanical Systems Laboratory

12 Dell INSPIRON 570 Computers.
3 Dell INSPIRON 660S Computers.
6 Matrix MPS-3005L-3 power supplies.
4 BK PRECISION 2831E Multimeters.
4 Function generators BK PRECISION 4084.
4 Oscilloscopes Tektronix TDS2012C.

Electronic Design Laboratory

2 Hewlett Packard HPE3631A triple output regulated power supplies.
Triple output power supply BK Presicion 1672A.
6 Matrix MPS-3005L-3 power supplies.
Power supply Instek GPC-3030D.
2 Astron RS-20A power supplies.
Current measuring system Tektronix TM502A.
Tektronix TDS 220 oscilloscope.
Tektronix TDS 2002B oscilloscope. 4 Tektronix TDS2012C oscilloscopes.
Tektronix CFG253 function generator.
Hewlett Packard HP33120A function generator.
4 Function generators BK PRECISION 4084.
FLUKE 117 TRUE RMS multimeter.
5 Multimeters BK PRECISION 2707B.
Multimeter Tektronix TX1.
Multimeter Hewlett Packard HP34401A.
4 Multimeters BK PRECISION 2831E.
2 Dremel workstations.

DYNASERV DMG3-1004C-115B control kit.
Xeltek Superpro 280U universal programmer.
13 Nexys 2 FPGA boards.
10 Discovery Kit STM32f429 boards.
10 Texas Instruments TMDSDOCK28335 boards.
3 TWR-KV31F120M boards.
11 USB-1208FS boards.
Makerbot Replicator + 3D Printer.
4 LEGO MINDSTORMS NTX 2.0 Kits.
7 LEGO MINDSTORMS EV3 Kits.

Control Laboratory

Three-tank system brand: AMIRA/ELWE, model DTS 200, Series: 023898; source code in C++/ Pascal Version 1.3 Windows; A/D-D-D/A Board drivers version 1.1 for C++ and DLL.
Variable load speed control, brand: AMIRA/ELWE, model DR 300, Series: 023999; source code in C++/Pascal Version 1.0 Windows; A/D-D-D/A board drivers version 1.1 for C++ and DLL.
Magnetic suspension system brand: AMIRA/ ELWE, model: MA 401, Serial 023899; source code in C Version 3.0 MS-DOS;
A/D-D-D/A Board drivers version 1.1 for C, C++ and DLL.
Beam and ball system brand: AMIRA/ELWE, model BW 500, series 023998; C++/Pascal source code Version 1.0 Windows; A/D-D-D/A board drivers version 1.1 for C, C++ and DLL.
Temperature control plant brand: AMIRA/ELWE, model: LTR 701, series 023998; MCON program NO. Series: P369.42 Version 1.4; A/D-D-D/A Board Drivers version 1.1 for C, C++ and DLL.

Fiber Optics Laboratory

Fiber optic transmission and reception, brand: EDIBON, model: EDICOM6.FIBER-OPTIC.
KIT ¨Projects in fibrer optics¨, brand: NEWPORT, model: 54603B.
2 Power supplies, brand: Hewlett Packard, model: E3611A.
Font, make: GW, model: PGC-3030D
Power supply, make: Matrix, model: MPS-3005L-3.
2 Oscilloscopes, make: Tektronix, model: TDS2012C.
LCR/W METRO ESR synthesizer, make: BK PRECISION.
Analyzer, make: HIOKI, model: 2010(3197).
2 Transmission line trainers, brand: ELECTRON; model: B45.
Antenna trainer KIT, make: ELECTRON, model: B45.
2 Hot air stations, Steren brand.

Applied Mathematics Laboratory

3 Dell Computers, Intel Core Processor i7-6700cpu@3.40 GHz. RAM memory 8.00 GB, 64 Bits operating system.

Physics Laboratory. UTM. Huajuapan de León.

22 high performance computers, with Matlab (license 271828); and free software: Maxima, R, Rstudio, Prolog, Geogebra, GIMP 2, Texmaker..

Seismological Station
Broadband seismic station, high dynamic range digital recorder (130 Db) with high resolution, multiformat, and telemetry in different formats and sampling. Fully IP. Double internal memory.

Industrial Automation Laboratory
Industrial automation kit.
Siemens PLC.
Cabinet.
Set of connection cables.
Single and double acting pneumatic pistons.
Proximity sensors.
Water deionizer with a resistivity of 18.2 Mega-Ohms·cm.
Analytical balance.
Ultrasonic Pyrolytic Spray Ultrasonic System (RPU), RPU Variant (patent pending) MX/E/2017/089535.
Fluorescence spectrophotometer.
Mufla (0-1100) oC.
Quartz tubular furnace (0-1000) oC.
Oven with rotating base.
Hydraulic press for wafers (15 Tons).
Fume extraction hood.

Applied Optics Laboratory
2 breadboard optical tables.
Magnetic bases, stems.
Lens holders.
Traditional lenses.
CCD camera.
Shack-Hartmann sensor.
Simple mounts.
Spatial filtering kit.
Variable attenuator.2 lasers.Necessary components for fabrication and characterization of tunable optical components.

University of the Sea

Aquaculture Laboratories. UMAR. Puerto Ángel Campus.

Puerto Ángel Campus

Histology Laboratory
Rotation microtome.
Industrial oven.
Tissue processor.
Tissue inclusion center.

Mass Calculus Laboratory
2 Workstations Dell and LUFAC.

Benthos Ecology Laboratory

Analytical balance.
Turbidimeter.
Sport camera.
Multiparameters of water quality.
Digital video recorder.
Light source.
Inverted microscope.
6 Microscopes.
3 Stereomicroscopes.

Ichthyology and Fisheries Biology Laboratory

Digital analytical balance.
Bench scale of 5kg/2g.
4 Portable electric scales of 400g/0.1g.
Sonic bath.
2 horizontal freezers of 25 feet, with capacity of 623 liters and temperature range from -18 to -20°C.
Graphic echo sounder.
Industrial drying oven, temperature range from 50 to 220°C.
2 Lamps for restirador with magnifying glass.
Binocular microscope with magnification range from 4x/0.10 to 100x/1.25.
5 dissecting stereomicroscopes with a magnification range from 0.65 to 5.0.

Research Laboratories

Chemical Section:
Orbital Incubator.
Recirculating bath.
2 Distillers.
Organic Carbon Analyzer (TOC).
Semi-micro Analytical Balance.
Micronutrients analyzer.
Biology Section:
Refrigerated centrifuge.
1 Sonicator bath.
2 Rotavapors .
1 UV-Vis Spectrophotometer .
1 Potentiometer.
1 Analytical balance.
1 Ultrafreezer.
Genetics Section:
Bioanalyzer.
High speed centrifuge.
Microspectrophotometer.
3 Thermocyclers.
Analytical balance.
UV transilluminators.
Microcentrifuge.
Gyromini shaker.
Potentiometer.
2 electrophoresis chambers.
Thermo block heating plate for incubation.
Microbiology Section:
1 Ultrafreezer.
Horizontal autoclave.
Laminar flow hood.
Analytical balance.
Refrigerated orbital incubator.
Culture oven.
Incubator.
Quanti-Tray sealer.
Potentiometer.

Coastal Dynamics Laboratory

Acoustic wave and current profiler (600 kHz).
RDI acoustic profiler.
Nortek acoustic profiler.
2 Corrientimeters.
Seacat Profiler CTD.
2 Microcat Sea Bird.
Weather station.
GPS locator.
Echo sounder.
GPS navigator.
Radar.

Aquaculture Laboratories

Section: Analytical
2 Carl Zeis microscopes.
1 Multi-parameter meter.
1 Multi-parameter meter.
1 Digital analytical balance.
1 Bench potentiometer.
1 Sonicator.
1 Irradiometer light meter.
1 Fluorometer.
Section: Digital Drawing
8 Computer equipment.
Section: Experimental Biology.
Trinocular microscope.
Photographic camera for microscope.
Hettich table centrifuge.
Semi-automatic colony counter.
Section: Microalgae
Portable vacuum pump.
Laminar flow hood.
4 vertical autoclaves.
4 Industrial cylindrical cylindrical flat bottom transparent fiberglass tanks (80 liters) for scaling.
3 Industrial cylindrical flat-bottom transparent fiberglass tanks (180 liters) for scaling.
Section: Live Food
3 Industrial cylindrical flat-bottomed transparent fiberglass tanks (60 liters) for scaling.

2 Recirculation systems with 6 conical cylindrical fiberglass tanks (60 liters).
System without recirculation with 3 conical cylindrical fiberglass tanks (60 liters).
2 submersible water pumps.

Section: Pilot Crops

Ozone generator.
6 Blowers.
UV filter.
11 Oval fiberglass tanks (1500 liters).
4 Rectangular fiberglass tanks (1200 liters).

Section: Larvarium

Recirculation system with 18 semi-oval fiberglass tanks (40 liters).
Espa water pump.
Section: Crustaceans.
Recirculation system with 15 fiberglass conical cylindrical tanks (80 liters).
Espa water pump.

Section: Fish

Recirculation system with 12 conical cylindrical fiberglass tanks (120 liters).
3 Circular fiberglass culture tanks.

Food Analysis and Technology Laboratory

Stirrer.
Meat grinder.
Deep fryer.
Vacuum sealer.
Drying oven (desiccator).
Horizontal freezer.
Industrial Refrigerator.
Convection oven..
Industrial stove.
Frosting machine.
Pulverizing mill.
Mufla.
Food processor.
Commercial scale of 10 kg.
2 Analytical scales

Environmental Engineering Laboratory

Section: Electrochemistry

Liquid Chromatograph with Refractive Index Detector.
Liquid Chromatograph with Diode Array Detector and Fluorescence Detector.
Potentiostat/Galvanostat.
Environmental Section: Instrumentation.
Gas Chromatograph with Thermal Conductivity Detector and Flame Ionization Detector.
Ultraviolet-Visible Spectrophotometer.
Luminescence Spectrophotometer.

Section: Pilot Plant.

Liquid Chromatograph with UV/Vis Detector.
Distillation and solid-liquid extraction tower.
Water ultra-purification system.
Filter press.
Transfer coefficient measurement equipment.
Deep bed filter.

Section: Microbiology

Orbital incubator.
Refrigerated incubator.
Microscope.
Laminar flow hood.
Plate sealer.

Environmental Engineering Pilot Plant. Environmental Engineering Laboratories. UMAR. Puerto Ángel Campus.

Biological Oceanography Teaching Laboratory

5 Microscopes.
Dark field stereoscope.
Brightfield stereoscope.
Epifluorescence microscope.
Inverted microscope.
Plankton nets.
Box type net.
Fluorescent ring light.
LED ring light.
Digital balance.

Rotation microtome.
Freezing microtome.
Analytical balance.
Niskin sampling bottle.
Nansen sampling bottle.
Industrial drying oven (stove).
Extraction hood.
Tissue flotation bath.
Electric heating plate for laboratory.

Oceanographic Teaching Laboratory Chemistry and Biogeochemistry

Industrial oven.
Refrigerator.
Electrophoresis chamber.
Melting generator.
Moisture analytical balance.
2 Polarimeters.
Calorimeter.
Spectrophotometer u.v.
Mufla.
Meter.
Multiparameters.
Autoclave.
Rotary evaporator.
Incubator.
Digital analytical balance.
Colony counter.
Vacuum pump.
Micro centrifuge.
Clinical centrifuge.
Vortex shaker.
2 Potentiometers.
Extraction hood.
Heating grill.

Physical Oceanography Teaching Laboratory

2 Brightfield stereo microscopes.
4 Dark-field stereoscopic microscopes.
Rock and mineral collection.
Calorimeter.

Geographic Information Systems and Remote Sensing Laboratory

Unmanned aerial vehicle evo-s800 of 6 rotors with remote control.
Plotter.
Smart TV screen.
YSI probe.
Creator Pro 3D printer.

Phycotoxin Analysis Laboratory (Larvatron)

Liquid chromatograph with automatic injector, DAD detector, FLD and post-column derivatizer Vector PCX.
Epifluorescence microscope (DIC, Fs, Rho, DAPI) and axiocam 506 color camera.
Fluorometer.
3L photobioreactor with lighting and control system.
Refrigerated centrifuge.
Inverted microscope.

Phycotoxin Analysis Laboratory (LARVATRON). UMAR. Puerto Ángel Campus.

Microscope.
Vertical autoclave.
Tissue homogenizer.
Mini-beadbeater.
Water bath.

Marine Invertebrate Systematics Laboratory

Extraction hood.
5 Zeiss stereoscopes.
3 Zeiss microscopes.
Olympus stereoscope.

Geological Oceanography Laboratory

Ultrasonifier.
Transmitted light microscope of bright and dark field with phase contrast.
Lyophilizer.
Electric rock cutter.

Fisheries Population Dynamics Laboratory

Low speed precision cutter.
Bone polishing machine.

Puerto Escondido Campus

Laboratory of Biological Collections

10 stereo microscopes.
Optical microscope.
2 Compasses.
3 Garmin GPS.
Pocket binoculars, Vortrex CROOSFIRE.
Riester scanning case.
Animal stethoscope.
2 Freezers.
Environmental dehumidifier, GE AHK30LKM.
Weather station.
Electric scale.
Clinometer.

Paleobiology Laboratory

Modular stereo microscope.
5 Stereo microscopes with attached cameras.
Laboratory sieve shaker.
4 Pneumatic strikers.
2 iMac computers.

Genetics Laboratory

PCR Digital Droplet System.
Vertical Ultrafreezer.
Refrigerated Centrifuge.
2 Thermocyclers.
Vertical Autoclave.
5 Binocular microscopes.
VILBERT COURMART, QUANTUM STA 1000/26 System.
U.V. Spectrophotometer, Thermo, Genesys 6.
Thermomixer equipment, Eppendorf F1 5.
PH meter (Potentiometer).
Analytical Balance, Hr-250az.
Vacuum plate sealer, Quanti-Tray 891089402.
Water purifier.
Ice maker, Luzeren Ims-50.
3 Laminar Flow Hoods.
3 Vibratory Stirrers.
2 Orbital Shakers.
3 Incubators.
3 Microscopes, Carl Zeiss.
Digital Microscope, Motic DM143.
3 Refrigerators.
13 Electrophoresis Chambers, Bio-Rad, Mini Trans Blot.
Photodocumenter, Uvp, Photo Dot It.
Complete mutation detector system (DDGE).

Livestock Products Technology Laboratory

Freezer.
3 Refrigerators.
Pasteurizer.
Grill1 Packing machine.
Convention oven.
Cheese grinder.
Meat grinder.
Meat marinator.
Meat cutting saw.
Ham slicer, Torrey RB-300.
Vacuum sealer, Torrey EVD-20.
Mixer.
Malaxaladora.
Spider mixer.
Skimmer.
Industrial blender.
Spectrophotometer.
2 Cutte industrial blenders.
Potentiometer.
2 Potentiometers of puncture.
Lacticheck ultrasonic milk analyzer.
Captive bolt gun “cash special”.
Floor scale.
Stainless steel press.
Double bottom curdling vat.
Fryer.
Consolidated bottom salamander.
Microwave oven, AMANA.
Serrano ham holder.

Turbolicuador.
Blender, Hamilton Beach 53601.
Meat grinder.
Cheese press.
Pasteurizer 70 liters.
Manual Stuffer.

Geographic Information Systems Laboratory

Total Station.
Plotter, Hewlett packard C7770C.
4 GPS, Garmin eTrex 10x.
GPS, Garmin Vista HCx.
Digitizer tablet.
Digital polar planimeter.
3 Precision topographic mechanics.
7 Compasses.
2 Pressler drill.
5 Altimeters-barometers.

Biology Teaching Laboratory

Refrigerated centrifuge.
Vertical autoclave.
10 Stereo microscopes.
9 Optical microscopes.
2 Optical microscopes, Optimus O-B6.
Triocular microscope.
2 Incubators.
Laminar flow hood.
Fume extraction hood.
Refrigerator.
Magnetic stirrer.
Digital analytical balance.
Digital balance.
Digital stopwatch.
Hygrometer.
Lamp (cold light source).
Heating grill.
Colony counter.

Chemistry Teaching Laboratory

2 Water distillers.
Kjeldahl apparatus.
Fat extractor.
Rotovapor.
Fume extraction hood.
Visible/UV light spectrophotometer.
Refrigerator.
Analytical balance.
2 Electrophoresis systems.
2 muffles.
Fixed rotor centrifuge (Microcentrifuge).
Mechanical convection drying oven.
Potentiometer.
Water bath.
Vacuum pump.
2 magnetic vibratory stirrers.
Ultraviolet light lamp.
2 Vortex stirrers.
Two-speed industrial blender.
Portable electric balance.

Forest Seed Laboratory

2 Monocular microscopes.
2 Binocular microscopes.
Garmin GPS.
Refrigerator.
Seed germinator.
Electric scale.
Portable electric balance.
Scale, Ohaus AX4423/E.
Compass, Brunton PRO 90.
Hand-held altimeter (HAGA gun).

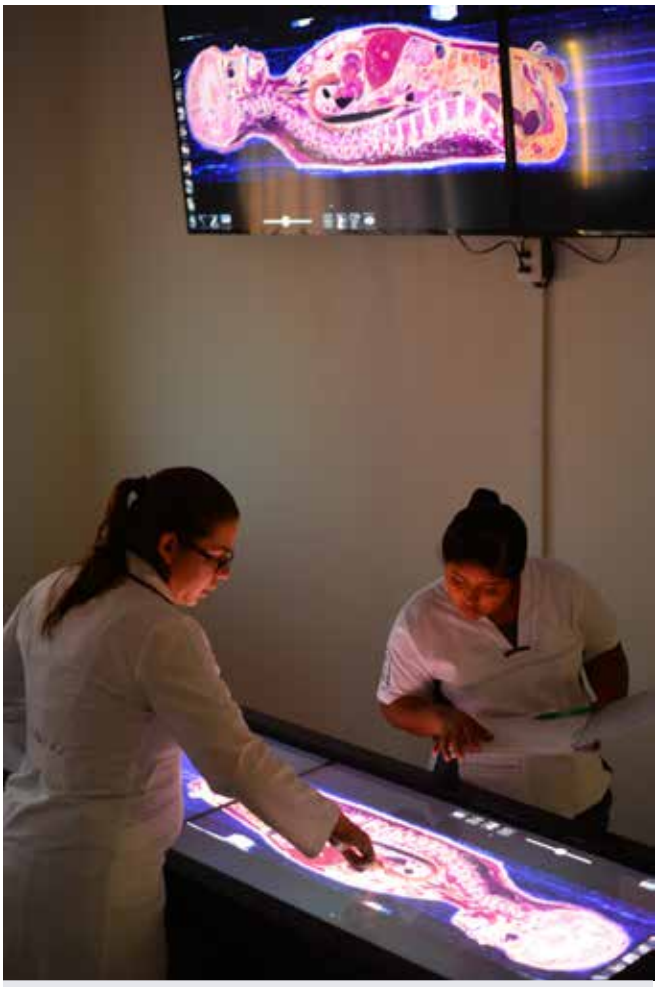
Wood Laboratory

Drying oven, Drying oven 9023av
Portable autoclave.
2 Stereo microscopes.
Laboratory microscope.
Jig saw.
Industrial drying oven.
2 Stirring grills.
Chainsaw.
Digital analytical balance.
Electric orbital sander, Dewalt D26451.
Circular saw.
Refrigerator.
Vacuum pump.

Robotic Clinic

MOES mobile simulator for emergency obstetrics.
Susie Simon simulator with ostomy.
Basic patient care simulator.
PEDI BLUE, GAUMARD S320.100.250/ S320.200.250 neonatal simulator.
8 Neonatal Baby Anne CPR manikins.
3 CPR Dummies Mike and Michelle One Year Old.
4 Neonatal CPR Dummies.
9 Torso Resuscitator CPR Dummies.
2 Full Body CPR Manikins.
Virtual dissection table.
Defibrillator.
Care simulator with standard arm.
2 Injection and infusion / intraosseous training neonatal legs, Gaumard S409.
2 advanced training arms, Gaumard S402.100.
Pediatric venipuncture arm.
Electrocardiograph, Contec Ecg 1200g.

2 Vital signs monitors.
Vital signs monitor, 6 parameters.
4 infusion pumps.
Radiant incubator for newborns.
Infant phototherapy unit.
Pedi Blue neonatal simulator.
Hospital bed.
7 Electric recovery beds.
Manual clinical bed with handrails.
Transfer stretcher without handrails.
2 Transfer stretchers with removable handrails and adjustable backrest.
Surgical lamp.
Vaccine refrigerator.
2 Operating tables.
Piston nebulizer.
19 Nebulizers.
Portable secretion aspirator.
Red trolley.
Ultrasonic bath.
Toco-cardiograph.
19 Nebulizadores.



Anatomy Room. Robotic Clinic. UMAR. Puerto Escondido Campus.

Electronics and Networking Laboratory

5 Punch down tongs, X-Case.
5 Cable testers, Enson.
5 Cable strippers, Brobotix 100501.
6 Wireless routers.
2 Managed switches.
2 Non-manageable switches.
2 Balancers.
3 No break.
2 Patch panel.
Floor rack with multicontacts.
2 Oscilloscopes.
5 Voltage sources.
5 Multimeters.
Function generator.
Pulse generator.
2 Mini Robots.
Electronic distance meter.
Video camera with lens.
Label printer.
Surveillance camera.
Magnetic card reader.
External DVD recorder.
Bar Code Reader.
Fingerprint reader.
Xeon Server.
MAC Mini, Apple i5.

Zootechnical Multipurpose Laboratories

Section: Animal Reproduction
Sca-Sperm Class Analyzer System.
Immunoassay Equipment.
Stereoscopic microscope.
Incubator for poultry eggs.
Microcentrifuge.
2 Centrifuges.
Horizontal freezer.
Vertical freezer.
2 Refrigerators.
Electronic scale.
Digital scale.
2 Thermos to store liquid nitrogen.
3 Ultrasound equipment.
Electroejaculator.
Section: Microbiology.
Lyophilization system.
2 Stereoscopic microscopes.
UV spectrophotometer.
Aerobic and anaerobic incubator.
Potentiometer.
Laminar flow hood.
Industrial oven.
Microcentrifuge.
Analytical balance.
Digital scale 5 kg.
2 Autoclaves.

Orbital shaker with platform open to air.
Section: Biochemistry and Nutrition.
Optical microscope.
Incubator.
Sonic bath.
Refrigerated vat.
Electrophoresis system.
Peristaltic pump.
Vacuum pump.
Spectrophotometer.
Culture oven.
Potentiometer.
Oven.
Centrifuge.
Refrigerator.
Analytical balance.
Digital scale 100 kg.
Autoclave.
Orbital shaker.
Section: Zootechnical Operating Room.
Kruuse electrosurgical scalpel.
Digital scale 500 kg.
Autoclave.
Optivisor.
2 Stethoscopes.
2 Laryngoscopes.
2 shavers.

Postgraduate Laboratory
Ultrafreezer.
Refrigerator.
Freezer.
Incubator.
Environmental dehumidifier, LG.

Marine Biogeochemistry Laboratory
Recirculation bath.
Hypochlorite doser.
Coulometer.

Huatulco Campus

Communication Sciences Laboratory
3 Audio consoles.
2 Video mixers.
3 Apple 27” IMAC computers.
Video tape recorder.
Analog mixer.
3 Monitor screens.

Multimedia Laboratory
2 XDCAM video cameras.
2 270U cameras.
12 reflectors.
2 scanners.
4 digital reflex cameras.
2 Macbook laptops.
11 Apple 27” IMAC computers.
3 HD portable digital audio recorders.
Analog mixer.
Monitor screen.

Tourism Laboratory
2 Fume extraction hoods.
Convection oven.
Electric salamander.
5.3 cu. ft. horizontal freezer.
16 cu. ft. display refrigerator.
Industrial blender.
Sony W300 Cyber-shot digital camera.
Sony Hybrid plus digital video camera.
2 Cooking stations.

Communication Sciences Laboratory. UMAR. Huatulco Campus.

University of the Isthmus

Smart Grid. UNISTMO. Tehuantepec Campus.

Tehuantepec Campus

Electronics and Artificial Intelligence Laboratory

ERA-MOBI mobile robot.
Smart Robotic Arm Robot.
Laser rangefinder.
6 FPGA boards.
3 LEGO Lego Mindstorms kits.
2 XBOX 360 Kinect Sensors.
3 Laptops: DELL, ALIEN, ACER.
Electric wheelchair.
4 Digital multimeters.
2 Digital oscilloscopes.
4 Voltage sources.
3 Function generators.
Wellon universal programmer.
Mechanical Tess me1, me2, and me3.
Hooke's Law apparatus.
Electromagnet for Zeeman effect.
Three-phase rotating field model.
Van de Graaff generator.
Wimshurst machine.

Hydrocarbons Laboratory

Programmable oven. Lindberg/blue, M Mini-Mite, temperature range 100 - 1100°C, 120 V, Termo brand.
Heratherm oven with drying temperature from 30 to 330 ° C.
Low torque Caframo stirrers. Lab Hcs.
Analytical balance.
Recirculating baths. PolyScience.
Soxhlet extraction equipment.
ChemiSorb 2750 catalyst characterization equipment.
ASAP 2020 catalyst characterization equipment.

Wind Energy Laboratory

Multimeter analyzer.
Digital multimeter.
Garmin Gps12xl Navigator.
Inverter (unidrive) Emerson/M100.
Imada/DS2-220 dynamometer.
Accelerometers with amplifier and signal acquisition system with 4 Kistler brand channels.
Impact hammer with modal output. Measuring range 5000N Kistler brand.
Fluke/438-II motor and power quality analyzer.
Programmable switching power supply 0-250V GW INSTEK.
TEKTRONIX digital oscilloscope, TBS1102B-EDU.
AC/DC 600A hook ammeters, Fluke 375 FC.
Inverter (unidrive) Emerson/M100.
Solar, wind and fuel cell trainer.

Oceanic Laboratory

ADP 1.0 MHZ profiler configuration for autonomous anchoring.
Portable current meter (Flow Tracker).

YSI 6600-M2 multiparameter field system.
ICP-OES iCAP 6000 series (including microwave oven).
Laminar flow hood.
Incubators.
Geographic information system workstation (TNT-Mips).
Multiparameter system for field measurements of in situ parameters.
Optical microscope.
Quanty Tray Model 2X sealer.
Printers.
Photographic camera.

Simulation Laboratory

Kit for the creation of printed circuit boards (117468 protomat s-62).
Printed circuit board creation kit (115790 lpkf pro-conduct manual).
Mixed signal oscilloscope 4+16 500 mhz.
Programmable dds function generator 120 mhz.
Digital multimeter.
Programmable linear dc voltage source.
Bench multimeter 6 1/2 digits.
Soldering station.
Prototyping system (circuit design work station).
Soldering station / smd soldering station.
1.2 m blade test bench.
10 hp generator test bench.
Semikron 30 kw converter.
Autotransformer VARIAV 3kw.
Virtual environment development system.
Printed circuit development system.
Two-way power converter (back to back) 5 kw.
Solar generation system of 500 w.
DAVIS weather station.
QUANSER Q8-USB data acquisition system.

Biomass Laboratory

Gas chromatograph, VARIAN brand, model CP 3380 with FID and TCD detectors.
UV-Vis spectrometer, VARIAN brand, model CARY 100.
Gas chromatograph, VARIAN brand, coupled to mass spectrometer.
Rotavapor BUCHI.
Mufla, VULCAN brand.

Computer Laboratory

2 ALIENWARE AURORA R6 computers.
Interactive screen.
20 Desktop Computers.

Chemistry Laboratory. UNISTMO. Tehuantepec Campus.

Solar Energy Laboratory

Source Meter Unit 2612 (Keithley) (module and solar cell evaluation).
I-V curve plotter (module current (I) - voltage (v) curve measurements,
to know its maximum power).
UV-Vis spectrophotometer (250 nm-2500 nm) + PC (optical characterization of semiconductors and solar cells).
Tungsten lamp 100W (Illumination for I-V tests).
Standard pyranometer (direct radiation) (radiation power measurement).
Albedometer (measurement of diffuse radiation power).
Standard cell (calibrate solar cells).
PC computer (Laboratory), Laptop (Field).
Photovoltaic system components (module, battery, charge controller, inverter, lamp) from various manufacturers (Conergy, BP Solar, Siemens, Atersa, Isofoton, Kyocera, etc.).
Monochromator (measurement of quantum efficiency or spectral response of the module for different wavelengths).
X-ray diffractometer (structural characterization of semiconductor materials).
Photovoltaic and thermal board simulator.

Advanced training system for wind and solar energy.
Trainer for the study of solar thermal energy (simulated panel + real panel) 127V.

Renewable Energy Laboratory
Smart Grid.
Pelton turbine.
Laboratory of electrical machines.
Power supply and control base.
Electrical networks board.
Electrical power and energy board.
Electric field board.
Electromagnetism board.
Alternating magnitudes board.
Electronic devices card.
Diode applications board.
Transistor card
Amplifier board
Operational amplifier board
Logic circuit board
Memory board
Conversion board
Multivibrator board
Three-phase circuit board
Speed control board.
Temperature control board.
Pressure control board.

Applied Optics Laboratory
Edmund Optics holographic tables (900x1200mm).
Edmund Optics brand USB 3.0 CMOS color cameras.
Fixed focal length lenses (8.5, 12.25 and 100mm) Edmund Optics brand.
Focusable laser diodes of 5mW at 633nm Edmund Optics brand.
Edmund Optics brand LDM laser line generating lenses.
36” Edmund Optics optical rails.
Edmund Optics 75mm rail bases.
Fluke/568 infrared thermometer.
Fluke/1587 isolation meter.
Fluke/810 vibration analyzer.

Experimental Chemistry Laboratory
Focused microwave oven MONOWAVE 300 brand ANTON PAAR.
2 Rotary evaporators BÜCHI R-215.
BÜCHI multivacuum evaporator.
Cryogenic reactor (-80ºc) for 4 SEV flasks.
MELTTEMP Fusimeter.
2 BÜCHI vacuum pumps.
5 SEV heating blankets.

Chemical Engineering Laboratory
Manual injection liquid chromatograph, flow rate range: 0.025-25 ml/min and pressure limit: 6000 psi.
Buchi digital rotary evaporator with electric arm and 4 liter bath coupled to a v-700 vacuum pump and a cold water recirculator.
Gasoline analyzer model gs-ppa-1.
Programmable oven.
Recirculating bath with lid.
Bath to measure viscosity.

Chemistry Laboratory
ELIX ADVANTAGE 3/5/10/15 system, ASM container and fiberglass cylinder.
Pedrolo water pump.
Analytical balance, A&D GH-252.
3 Heating racks with magnetic stirring, BARNSTEAD.
2 Heating racks with magnetic stirring, SEV.
3 Heating racks with magnetic stirring, model SP46615.
Heating jacket or heating mantle with stirring, 2000 ml, SEV.
2 Heating jackets with 500 ml stirring, SEV.
Analytical balance A&D GH-252.
Electric balance, capacity 610.
Compressor 990 professional spray GONI, 5 hp, 200 l tank.
Compact centrifuge of 6 placesc.
Air compressor, hydropneumatic ½ hp, 24 lts, with pressure gauge.

Ixtepec Campus

Electronics Laboratory
Spectrum analyzer with bandwidth from 9Khz to 3Ghz.
2 Didactic equipment for the elaboration of electrical circuits practices.
2 didactic equipment for the elaboration of embedded systems practices.
Digitizing tablet with a work area of 320 x 208 x 12 mm, for the design of electrical circuits.
2 didactic equipment for the elaboration of line-following robots with Arduino cards.
Didactic equipment for the development of line follower robots.
6 soldering stations for soldering various components.
4 DC power supplies from 0V to 30V.
2 Function generators.
2 2-channel digital oscilloscopes for the analysis of electrical signals.

LoRa 902-928 Mhz IoT Development Kit, Dragino brand.
2 IMU 10 degree accelerometers.
4 modules of 4 relays with optocoupler.
Touch screen for Raspberry.
5 Temperature and humidity sensors DHT11.
6 Wifi usb for Raspberry.
3 Fume sensors MQ-6-.
4 Mega CH340G boards.
4 Ethernet Shield
2 Access Point Linksys WAP300N.
Wattmeter Kwh.
Digital Luxmeter LX1010b.
4 Dell Inspiron 20 All in One Computers.
10 Raspberry Pi 3.

Computer Room 3
Dell computer, mouse, keyboard, Dell monitor.
Projector SVGA 800 x 600, Benq.

Networking Laboratory
4 Managed switches, Cisco brand.
4 high power external wireless access points.
2 Wireless routers with telephone ports.
Mikrotik router.
HP switch, model GE-1920.
3 DJI Phantom 3 Standard drones, with camera.
4 Nano pocket drones with camera, Cheerson brand, model CX-10C.
6 Dell computers, mouse, keyboard, Dell monitor.
Projector SVGA 800 x 600, Benq.
Software Development Room
2 Virtual reality glasses, Oculus Rift.
Bar code reader.
Biometric enroller + card.
Fingerprint reader.
Barcode printer.
Ticket printer.
8 Dell Vostro 270S desktop computers.

Juchitán Campus

Microbiology-Biochemistry Laboratory
Microscope.
Analytical balance.
Centrifuge.
Stove.
Semi-automated analyzer BTS 350 (clinical chemistry).
Water bath.
Scale.
Digital scale.

Bromatology Laboratory
Digester and distiller KJIEHDAL.
Rotary evaporator.
Fat extractor.
Distiller.
Recirculator.
3 Vacuum desiccators.
2 Drying ovens.
2 Heating grids with magnetic stirring.
Analytical balance.
Fume extraction hood.
2 Muflas.
Water bath.
Mechanical balance.

Nutrition Education and Communication Laboratory
Baffle.
2 microphones.
Set of food replicas.
7 Nutrikcal software.
5 Nutrimind software.

Anthropometry Laboratory
12 Portable stadiometers.
3 Mechanical scales with stadiometer.
2 Infantometers.
20 Seca plastic measuring tapes.
2 Metallic tapes.
2 Baby scales.

Body Composition Laboratory
35 Electrical bioimpedance scales.
Bodystat.
5 Harpenden Plicometers.

Food Production Laboratory
3 wall-mounted hoods, 90 cm wide with filter holder.
Vertical freezer, model cvc15.
2 Industrial microwave ovens.
3 commercial stoves.
2 Heavy duty juice extractors.
Vertical refrigerator.
4 Electronic scales.
4 Industrial blenders of 3 lts.
4 Industrial blenders.
Meat grinder.

Propaedeutics Laboratory and Chemical Biology Laboratory
3 Microscopes.
Centrifuge machine.
CPR and AMBUS dolls.
Fetal dummies.

Robotic Clinic. UNISTMO. Juchitan Campus

Robotic Clinic

Digital pediatric scale.
Radiant heat cradle mca. Imebo z-1100: 3bs bone-like anatomical spine model.
Adult training manikin kit.
Portable doppler ultrasound mod. Bt-250.
Duplex.
Triplex.
Portable ultrasound mca. Mindramod. Dp-10.
Digital spirometer with software, Hermed.
Disposable adult manual ambu-susitator.
Hermed infusion pumps with LED display.
Gynecological expulsion plicher table, crow's foot.
Electric bed, 3 positions range 40 - 70 cms.
Electric bed, 3 positions range 40 - 60 cms.
Negatoscope of wall.
Surgical aspirator 20 lts per minute, Hergom.
Knee valve alvinox.
X-ray equipment sy31-100p.
Tococardiograph bfm700.
Electrocardiograph of 3 channels mca. Edan.
Diagnostic kit mca. Welchallyn.
Pediatric oximeter.
Mucus aspirator of 18 liters mod. 7a-23d.
Insufflator.
Delivery equipment.
Infant CPR manikin.
Emergency neonatal intubation dummy.
Geri complete mannequin.
Interactive birth simulator.
Led phototherapy unit w/pedestal bl 100l.
Micro-controlled power regulator mod. Amcr-511.
3 Microanatomy muscle fiber at 10000 magnification.
Laryngoscope case fiber optic mca. Welchallyn 6 and 10 pieces.
Set of instruments for major surgery HP.
Set of general surgery instruments.
Pediatric digital scale
2 Radiant heat cradles, Imebio z-1100 brand.
Nasco mannequin, special needs of the female baby.
Nasco mannequin, special needs of the male baby.
Arm for blood pressure practice lf01095u.
Rescue live AED defibrillator (Sam).
Autoclave of 50 lts. max. temp. of 130 °c.
Piston compressor mca. Smartik 7.5 HP mounted, of 500 lts.
Intravenous injection arm model lf01121u.
Nasco newborn baby sb17156u.
Human fetus in uterus, mod, anatomical, mca. 3bs l10.
Figure with muscles dual sex, removable with 45 pcs.
Human skeleton anatomical model a10 3bs.
Model to practice the use of condoms 3bsc l42.
Female breast model l56 1008497.
Arm with deluxe muscles, 6 parts life size 3bsc m11.
Deluxe leg with muscles and knee 3bsc l42.

Vital signs monitor mod. Zo-zd120d.
Examination, diagnostic and major surgery lamp slim royal, mod. Kd-202d-3c.
Hip joint.
Simulator for ambulatory peritoneal dialysis lf01027u.
Simulator for auscultation trainer and smarts cope-nasco lf01142u.
Lung anatomical model.
Chesterchest, torso for central venous access.
Surgical dressing make-up simulator mannequin, lifeform Brand.
Stainless steel covered kidney table.
DNA double helix mod. 1351005128.
Physiological series of nerves 5, mod., magnetic on a metal board.
Spinal cord with nerve endings.
Digestive system of 3 pieces.
Detachable skull 3b scientific - anatomical version.
Simulator for enema administration.
Medium nervous system of its natural size.
Human circulatory system.
Animal cell siv5677.
Advanced breast examination trainer.
Male urinary system model.
Adult patient simulator for emergency and resuscitation procedures.
Zoe gynecological simulator.
Breast self-examination model.
Child and adult tracheotomy simulator kit.
Pneumothorax simulator.
Instramuscular buttock injection model.
May table and Kidney table.

University of Papaloapan

Partial interior view of the Food Workshop. UNPA. Tuxtepec Campus.

Loma Bonita Campus

Materials Laboratory

Electric stirrer.
Thermal conductivity meter.
Electronic scale.
Cimarec hot plate.
Hydraulic Press 120 Ton.
Hydraulic dam in H.
Digital viscometer.
Jug mill.
Corrosion analyzer.
Ultrasonic inspection equipment.
Concrete cutter.
Glass melting furnace.

Physical testing Laboratory
Fume extractor hood.

Reproduction Laboratory
Axio A1 upright binocular microscope.
Fluorescence binocular microscope.
CO2 incubator.
Stereoscope.
UV micropure deionizer.
Spectrophotometer.

Mechatronics Laboratory
4 propeller drone with 4K camera.
Digital phosphor oscilloscope, Tektronix.
Fiber optic fusion splicer, Sumitomo.
Laser cutter.
CNC vertical turret milling machine.
CNC lathe.
Optical table.
Optics module
2 3D printers.
8 vision camera system.

Aquaculture Laboratory
Multiparameter equipment YSI.
Oxygen meter.
2 Compound microscopes.
4 Stereo microscopes.
Photometer.

Laboratory of Biochemistry and Improvement of Aquaculture Species
Horizontal electrophoresis chamber.
Kjeldahl digestion system.
Thermocycler.
Soxlhet equipment.
High resolution liquid chromatograph.

Software Laboratory
Compute-intensive cluster server.
Interactive Samsung screen.
Interactive whiteboard.
Interactive Video Projector.

Media Laboratory
HP large format plotter.
Samsung interactive screen.
Drawing tablet.

Chemistry Laboratory
Hygrothermograph.
Mufla 1100 °C.
Fume extraction Hood.
Microdigester.
Microdistiller.
High temperature oven.
Soxhlet equipment.
Clinical centrifuge.
Thermobalance.
2 Stereoscopes.
4 Binocular microscopes.
3 Compound binocular microscopes.
Fiber analyzer.
CO2 incubator.

Tuxtepec Campus

Organic Chemistry Laboratory
Phase contrast microscope.
Programmable cold room.
Distillation equipment.
Deionizer.

Inorganic Chemistry Laboratory
Extruder.

Instrumental Chemistry Laboratory
Liquid Chromatograph UHPLC.
Gas Chromatograph.
Atomic absorption with graphite furnace
FT/IR spectrometer.

Bioprocess Laboratory
Reactor.
Freeze dryer machine.
UV Espectrophotometer.

Nuclear Magnetic Resonance Laboratory
400 Mhz Nuclear Magnetic Resonance (NMR) equipment, gas supply control, NMR control console and computer equipment with NMR operation software.

Mass Spectrometry Laboratory
High resolution mass spectrometry system UPLC-IM/MS/MS (1 UPLC liquid chromatograph, Waters Acquity M coupled to a high resolution mass spectrometer Synapt G2-Si quadruple hybrid type- time of flight (QToF)
with ion mobility for separation of isobars and enantiomers).
MS-GC gas chromatography (1 Agilent 7890B gas chromatograph with 144-sample autosampler coupled to a Waters SQD2 quad mass spectrometer with electrospray (ESI) and atmospheric pressure (APGC) probes).

Animal Biotechnology Laboratory
Computerized sperm analysis system.
Multi-chamber incubator.
Absorbance microplate reader.
Ultrasound.

Micro-manipulation and micro-injection system for in vitro fertilization.
Osmometer.
Fluorescence image capture and analysis system for inverted microscope.

Molecular Biology Laboratory
UV light photo-documentation equipment.
2 Thermocyclers.
Nanodrop microspectrophotometer.
UV light spectrophotometer.
Microcentrifuge.
2 Incubators with agitation.
Static incubator.

Robotic Clinic
Interactive tactile anatomical table.
Cardiotocograph.
2 Incubators for infants.
Maternal and neonatal delivery simulato r.
Resistant and resilient wireless trauma simulator.
Thermal cradle.
8 Gynecological simulators.
2 Electrocardiograms.
Mechanical delivery simulator.
Portable secretion aspirator.
2 Cardiac monitors.
2 Two-way infusion pumps.
Automated hospitalization bed.
Refrigerator for vaccines.
Intensive care unit fume console.
14 Consoles of fumes for hospital.

Pharmaceutical Chemistry Laboratory
2 Rotary evaporators.

Organic Synthesis and Natural Products Laboratory
Nuclear Magnetic Resonance (NMR) equipment at 80 Mhz, permanent magnet and computer equipment with NMR operation software.
Continuous flow micro reactor.
Potentiostats.
Real time PCR.
4 Rotavapors.

Plant Biotechnology Laboratory
2 Ultrafreezers -80C.
2 Controlled growth chambers for plants.
UV hybridization oven/crosslinker.
Horizontal freezer -20C.
Frosted ice machine.
Fume hood.
Microcentrifuge.

High resolution mass spectrometer. Mass Spectrometry Laboratory. UNPA. Tuxtepec Campus.

Theoretical Chemistry Laboratory
Cluster of 92 nodes.
8 Workstations.

Diffractometry Laboratory
X-ray diffractometer for powders.
X-ray diffractometer for crystals.

Calorimetry and Spectroscopy Laboratory
UV/VIS spectrophotometer.
Thermogravimetric analyzer.
Differential Scanning Calorimeter (DSC).
Surface area meter.
Gas Permeability Determinator.
Rheometer.

MULTI- OMICS Laboratory
Refrigerated centrifuge.

Biomaterials Laboratory
2 ball mills.
High temperature furnace (1600 °C).
Medium temperature muffle (600 °C).
Hydraulic press.
Glove box with controlled atmosphere.

Animal Tissue Culture Laboratory
CO2 incubator.
Inverted phase counting microscope with integrated camera.

Bioproducts Laboratory
CO2 incubator.
Freeze dryer.
Static incubator.
Automatic titrator.
Microplate reader.
FPLC.

Biological Control Laboratory
2 Incubators with agitation and temperature control.

Bioprocess Laboratory
Incubator.
Incubator with orbital agitation.
Stirred tank fermenter.
Refrigerated centrifuge.
Ball mill.

Microbiology Laboratory
Centrifuge.
Plate shaker with heating.

Plant Cell and Tissue Culture Laboratory
UV/VIS Spectrophotometer.
4.5L benchtop freeze dryer.
3 and 7 liter stirred tank reactor system.
3 liter airlift reactor system.
Thermal cycler.
Rotary evaporator.
Refrigerated Centrifuge.
Universal Centrifuge.
Microcentrifuge.
Electrophoresis system with electroisofocusing unit and power source.
2 orbital shakers.
CO2 incubator for animal cells.
Culture incubator.
Vacuum furnace.

Nuclear Magnetic Resonance Equipment. UNPA. Tuxtepec Campus.

University of Sierra Sur

Partial view of the interior of the Center for Anatomy and Dissection. UNSIS. Miahutlán de Porfirio Díaz.

Center for Anatomy and Dissection

Human anatomy touch table, ANATOMAGE.
12 Dissection tables.
Double rack, stainless steel, 5 levels.
Wall mounted double autopsy station, stainless steel.
2 Standard carts for transporting corpses for standard stainless steel trays.
Porty-Boy Mark V embalming machine.
4 Vertebral discs.
4 disassembled skulls.
2 Hearts.
Bisexual torso with open back.
Figure of muscles.
2 Human skeletons.
Heart in diaphragm.
Stomach with ulcer.
Renal corpuscle.
Arteriosclerosis model.
Hemorrhoids model.
3 Lung models.
Medial section of head.
Eyeball.
Larynx.
Digestive system.
Nervous system.
Sympathetic nervous system.
Model of female sexual organs.
Model of male sexual organs.
Middle section of female pelvis.
Mid-section of male pelvis.
Circulatory system of a fetus.
Kidney nephron and glomerulus.
Skeleton of the female pelvis.
Assemblable brain (6 pieces).
Air injection-extraction system.
25 Computer equipment.

Food and Nutrition Research Center (CINA)

Nutrical version 2013.
25 Nutrimind version 17.0.
Calorimeter model FITMATE.
QUADSCAN BS-400 bioimpedance equipment. Measurement of extracellular, intracellular and total body water.
Hill Room electric bed.
8 Body composition scales. Measurement of weight, fat percentage, muscle mass, bone mass, water percentage, metabolic age and visceral fat level.
2 Seca electronic scales.
2 Seca mechanical scales, with a maximum capacity of 220 Kg.
4 Pediatric scales.
11 Plicometers.
2 Takei dynamometers.
8 Seca portable stadiometers.
4 Seca portable infantometers.
5 Vitruvian Anthropometers.
5 Vernier Anthropometers.
7 Glucometers.
3 Hemoglobinometers.
6 Baumanometers.
2 Examination tables.
3 Auricular stethoscopes.

Sobrinox industrial refrigerator. Used for food preservation.
9 Delta industrial stoves.
Stuffer.
3 Industrial blenders.
Scale, maximum weight of 5 Kg.
Industrial Blender Blazer 20 liters.
Vacuum packing machine.
3 Felisa colony counters.
Imbera refrigerator, to preserve seeded culture media.
3 Autoclaves.
3 Electric centrifuges.
2 Incubators. Used for the growth of some microorganism.
7 Microscopes.
2 Analytical balances.
2 Felisa muffles.
Microdigester micro-kjendhal.
4 Multi-purpose meters for pH determination in solutions.
Microdistiller.
Crude fiber apparatus.
Dehydrator.
5 Refractometers.
Lyophilization system.
Konica colorimeter.
Moisture balance.
Labtech extraction hood.
Laminar flow hood.
Microplate reader.
2 Mechanical convection ovens. Used to dry and sterilize laboratory material.
Ecoshel sieve shaker.
LACTOSCAN milk analyzer.
2 Torrey scales, maximum weight 5 Kg

Dental Center

32 Trimodulars in simulation.
32 Monitors.
32 Dental simulators.
40 Dental work chairs.
32 Trimodulars in dental laboratory, for preclinic.
32 Light lamps, to illuminate the work area.
3 Dental units in diagnosis.
16 Dental units in clinic.
16 Negatoscopes.
Shock cart for clinic.
3 Plaster trimmers.
3 Vibrators for plaster.
Autoclave of 85 lts.
3 Ultrasonic tubs for cleaning dental material.
8 HP oil free compressor.
2 Dental x-ray machines.
28 Computer equipment.
Autoclave of 21 liters.
Trimmer and sealer for sterilization pouches.
32 NISSIN typodonts.
6 NISSIN dental anesthesia tipsodonts.
5 BIOART A7 plus articulators.
Video camera in simulation area.
9 Resin lamps for dental clinic units.
18 NISSIN typodonts.
4 BIOART A7 plus articulators.
34 dental work chairs for dental laboratory 1.
2 dental units for Dental Clinic 2.
4 ultrasound kits.
Bench height ladder.
Light curing light DTE lux E Plus.
2 W&H High Pieces.
2 IBIDENT Amalgamators.
24 GNATUS Swivel Benches with backrest for dental materials laboratory.

Students in nursing practice. UNSIS. Miahuatlán de Porfirio Díaz.

Robotic Clinic

Robot simulator for childbirth - Victoria Noelle S2200.
Advanced patient simulator robot - SIMMAN 211-00050.
2 Simulators for training in women's care, obstetrics, post-partum, wound assessment and treatment and general patient assessment and treatment - Laerdal VitalSim 200 -1000.
Full body simulator for childbirth - Noelle S560.
2 Neonatal intubation simulators LF01213U.
3 Male neonates with special needs LF01194U.
Premie Hall S3009 premature neonatal simulator, for neonatal cardiopulmonary resuscitation, omphaloclysis.
2 Labor and delivery torsos S552.
6 Hospital simulators for medical and nursing staff training.
2 Neonatal intubation simulators LAERDAL 240-00001.
2 Simulators for pediatric intubation LAERDAL.
2 Neonatal resuscitation simulators. - Laerdal 240-00001.
4 Pediatric care simulators Mike and Michelle 5 years old with Stethoscope Kit for auscultation of heart and lung sounds in specific sites.
3 female simulators for practice.
2 Male practice simulators.
4 Pediatric auscultation simulators.
Baby Nita vascular accesses.
Baby buddy anatomical model for CPR.
Articulated baby anatomical model.
3 Term newborns.
Neonate.
5 Female babies with special needs.
2 Anatomical models pediatric arm.
5 Advanced arms.
5 Dorsal arm with venous access.
4 Female pelvises for catheterization.
2 Advanced heads.
Ear simulator.
Sakamoto injection simulator.
Incubator with accessories and temperature control.
Radiant cradle or cervocune.
5 Simulators, back with arm, venous access with removable skin for insertion and removal of vascular accesses.
15 adult and 6 infant simulators for cardiopulmonary resuscitation.
3 Two-channel invasive pressure monitors - NASCO PROMT700.
3 five-channel invasive pressure monitors - M9.
2 Infusion pumps with one channel range.
Defibrillator with external pacing and continuous monitoring.
11 Electric beds with antibacterial mattress - Hill Room.
2 Ceiling operating room lamps, 584 mm lampshade.
4 Vertical medical fume consoles (oxygen, negative pressure and air).
15 Vertical medical fume consoles (oxygen, negative pressure and air).
Digitally controlled laminar flow hood, 1/4 HP exhaust fan.
5 LAERDAL gynecological simulators with accessories and 7 interchangeable wombs with pathologies.
2 HIKVISION surveillance cameras, electric cable, HDMI 20 mts. cable, microphone and stand.
3 Smart TV wall screens, LED, with remote control SAMSUNG 65".
4 Smart TV wall-mounted displays, LED, with remote control SAMSUNG 75".
2 wall-mounted negatoscopes, 3 mm smooth acrylic screen.
Electro-hydraulic operating table.
3 Manual elevation operating tables.
Spirometer with software, calibrator and signal cable.
3 Portable suction equipment.
3 Electronic scales for infants.
BIONET 7-segment cardiograph.
Laboratory refrigerator for vaccines.
Electrocardiograph with 10 electrodes.
2 Emergency trolleys for cardiac arrest with 5 compartments.
2 Trough baths for bathing and neonatal stimulation.
5 M9 monitors and 6 vertical consoles for number corroboration.
4 Cure trolleys.
2 Bedpans.
3 Buroescip.

Information Technology Center

45 Computer equipment, CORE i7 processor, Hard disk 2 tb.
25 Computers, Processor Intel Core-i5-4570 CPU at 3.20 GHz. 8 GB RAM memory. 500 GB Hard Disk. With Windows7 Pro.
7 Acer Aspire V5-561-6414 Laptops, Intel Core I5-4200 processor, 1TB Hard Disk, 8 GB of RAM.
9 iMac, Apple brand, mod. A1225.
Drone Phantom 4 pro.
10 Monitors Asus VA325H LCD 31.5" Full HD.
Camera Cannon 6D MarkII.
Camcorder Cannon XF305.
6 Lego Robots Mindstorms Education.
3 Apple Tablets 1 GB A7 1.2 GHZ.
15 Cisco serial cards, mod. HWIC-2T.

Rack server cabinet Intellinet brand, mod. 203623.
Interactive didactic blackboard ALFHER brand.
Rack Cabinet Intellinet 19”, 27 units.
PowerEdge R320 1U server. Intel Xeon E5-2400 processor. Intel C600 series chipset. 16 GB RAM. 2 TB hard disk.
PowerEdge R420 server. Intel Xeon Processor E5-2400. Intel C600 series chipset. 16 GB of RAM memory. 1 TB hard disk.
8 x 28JL NCS Jaguar 2-Post Fixed Rack 28JL.
2 Racks fixed 26 U.
13 Cisco 1921 1900 series routers. 512 MB memory. With ports: 2 RJ-45, 1 RJ-45 auxiliary, 1 RJ-45 console, 1 usb type A, 1 usb type B, 2 expansion slots E HWIC-0.
17 Cisco 2960 Switches. Cisco Catalyst mod. WS-C2960-24-S with 24 RJ45 ports and 1 RJ45 console port. Internal memory 64 MB.
6 kit X-Case RJ11/RJ-45 Cable Tester and Cable Finder.
2 Nanostation, Ubiquiti brand, mod. Loco M5.
4 Bar code readers, Hand Held brand.
5 Barcode readers, Posline LC2300U brand.
3 bar code readers, Posline SL2020 brand.
Bar code reader, Posline SM2450 brand.
5 Card readers, Posline TMSR-12K-SM brand.
2 Posline IM900 receipt printers.
3 Epson TM-U220 receipt printers.
DATAMAX E-4203 receipt printer.

Computer-Electronics Laboratory

6 Tektronik oscilloscopes. Mod. TDS 1002, 2 channels. 60 MHz, 1 GS/s.
6 Function generators. Mod. BK Precision 4017 A. 10 MHz. Sweep/Function Generator.
3 Multimeters, brand FLUKE, mod. 110.
5 Multimeters, FLUKE brand, mod. 287.
2 Multimeters, FLUKE brand, mod. 187.
3 Power supplies, Bk Presicion brand, mod. 1627A.
3 Power supplies, Bk Presicion brand, mod. 1760A.
Universal microprocessor programmer, BK PRESICION, mod. 864.
Graphic printer, Zychem brand, mod. ZY-SUSE.
4 WLC100 station electric soldering irons.
2 PK-500 industrial mini-drills.
Industrial air compressor SS3R2-GM.

Public Health Laboratory

UUltrafreezer.
Potentiometer.
Analytical balance.
Magnetic stirrer with temperature control.
Vortex.
Refrigerator.
Biological digital microscope with LCD screen Luzeren brand.
Oven.
Microtome.
Portable automatic electric autoclave 24l.

Center for Anatomy and Dissection. UNSIS. Miahuatlán de Porfirio Díaz.

Biometra T advanced Analytik Jena endpoint thermal cycler.
Real-time thermocycler CFX96 Touch PCR Detection System with 96-well reaction module, BIO RAD.
HPLC Chromatograph.
Thermo Scientific Smart2pure pro uv/uf 16 lph water purification equipment.
NanoDrop one Spectrophotometer Thermo Scientific.
Real time PCR BIO RAD brand.
Microplate reader Spectramax Abs Plus with Softmax Pro Software.
Thermo Scientific LED HB120-S Thermoblock.
Beckman Coulter refrigerated centrifuge (Allegra X-30R).
Vertical electrophoresis chamber and transfer module (Mini-Protean Tetra Cell).
VCX-130 Sonicator (Sonics&Materials/Daigger).
DLAB benchtop orbital shaker model SK-R330-PRO/SK330.5.
Shel Lab bath model Swbr17.
Electric Bunsen burner BA6101X1 ACTUAL 36135-04.
2 individual ECOSHEL type II laminar flow hoods.
Photodocumentation GelDoc XR BIORAD.
Real-time PCR hood PURAIR-PCR-24.
Horizontal electrophoresis chamber (Cscientific chamber, model Cs-Spat).
Veterinary tabletop hematology analyzer vetscan hm5".
Licon Hemat 18 human hematology analyzer, Difer 3 Parts 18 Param Licon, with Lexmark Ms310dn printer.
Fuji Drichem Nx500i blood chemistry analyzer.
Digital rotary evaporator with electric elevator and vertical glassware. Bath of 3.5 liters, Usb port for data management. Operates with 110v, model Re100-Pro, brand Dlab Series: Xz191aj0000664 Order: 19 16 3458.
Veterinary Hematological Analyzer MEK -6550J/K.
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Chemistry Laboratory

AHematology analyzer - Mindray.
Blood fume analyzer - Bayer.
Incubator with two stainless steel trays - Terlab.
Bacteriological incubator stove with stainless steel chamber - Felisa.
Steam rotator with condenser - Buchi.
2 Analytical balances - Ohaus.
Electric water bath.
Solvat laboratory centrifuge.
Micro centrifuge for hematocrit.
2 Binocular microscopes - Motic.
Triocular microscope with projection chamber - Karl Zisse.
Sterilization pressure cooker.
2 UV/VIS spectrophotometers.
Extraction hood.
Vacuum pump - Edwar.
Vacuum pump - Felisa.
Vacuum drying oven with 14 x 14 x 20" chamber, hydraulic thermostat.
Analog drying oven, maximum temperature 220°C.
Mufla of 0-100°C, with "K" type thermocouple sensor.
ABBE refractometer, optical, with measuring range from 1.3000 to 1.7000 ND YK 0.25 BRIX.
Manual refractometer.
5 Organic Chemistry distillation equipment.
2 Electronic Handy Step equipment with PLASTIBRAND pD tips with adjustment range of 5µl. 12.5µl. to 1250 µl.
Laboratory refrigerator.
2 Meters to analyze Total Cholesterol, Triglycerides and Glucose - Accutrend Plus.
3 Triple bar granatary balances.
7 Heating racks.
2 Tube stirrers.
2 pH meters.
Microhematocrit reader without type.
Pipette stirrer.
Vortex stirrer.
Wintrobe rack without type.
2 Cell counters.
2 Micropipettes of varied volume.

Biology Laboratory

Microscope with integrated detachable camera.
Automatic autoclave to sterilize healing material.
Manual autoclave to sterilize healing material.
Semi-automatic autoclave to sterilize healing material.
Culture oven for bacterial growth.
Oven for sterilizing glass or stainless steel material.
6 Microscopes.
2 Stereoscopes to observe microorganisms.
Laminar flow hood.
Incubator (CO_2) for bacterial culture.
Industrial drying oven for dry heat sterilization.
Double wall calorimeter with oxygen pump.
Centrifuge.
2 Refrigerators to keep reagents, septa and blood.
Videoprojector.
Colony counting equipment.
Portable analytical balance.
2 Triple-arm granatary balances.
5 Heating grids.
2 Vortex stirrers.
Stainless steel water bath.

Sliding vane vacuum pump.
Portable air compressor.
4 Potentiometers
2 Automatic micropipettes
7 Dissection cases
Portable turbidity meter.
Cell counter.
Pediatric scale.
Pressure cooker for sterilization.
Microwave oven (galenic preparations).

E-Government Laboratory

12 Computer equipment mod. Optiplex 9020. Processor Intel Core-i7 CPU 8 GB Ram memory. 500 GB.

Clinical Pathology Laboratory

Stirrer MS-M-S10.
Grill with stirrer MS7-H550-Pro.
Grill MS-H280-Pro.
Homogenizer OS20-S.
Refrigerated Centrifuge D3024R.
Micropette Plus.
Multichannel (8 or 12 Channels).
Bacteriological Incubator.
Biorad Model-C1000 Thermocycler.
Bio-Rad Photodocumenter. Gel System.
Metrix Micro Centrifuge.
Eppendorf Refrigerated Centrifuge.
Rotor for Refrigerated Centrifuge.
Vortex Genie2 Variable Speed Vortex Stirrer.
Thermo Scientific Electrophoresis System.
Set of 5 VWR Pipettes.
Type A2 Safety Hood for Organism Handling.
Bio-Rad Mini-Protean Vertical Electrophoresis Chamber.
Bio-Rad Power Supply.
Electronic Balance.
Dry water bath.
Refrigerator with Freezer (Therrmo Scientific brand).
Fume Extraction Hood.
Analytical Balance, Ohaus Pioneer 224C.
Complete Rotavapor with Diagonal Distiller.
Compressor, tank capacity: 190 L.
Water bath with ultrasound.
Felisa Automatic Vertical Autoclave.
Analytical Balance (Ohaus).

University of Sierra Juárez

Total carbon analyzer. Earth Sciences Laboratory. UNSIJ. Ixtlan de Juárez.

Ecology and Biodiversity Laboratory

Portable solar radiation station, measuring environmental factors such as temperature, solar incidence, wind speed, pressure and humidity. In addition, it analyses atmospheric data and climate models.
Stereoscopic Microscope, observation, analysis and dissection of living and/or dead organisms

measuring structures at different scales and taking pictures at different magnifications.

Environmental Microbiology Laboratory

Plant incubator ICP-18 designed to maintain, at operator controllable points, the temperature and intensity of lighting as well as the programming of day-night periods, it is indispensable for research of plants, fungi, bacteria, etc.
Quanty Tray Sealer; seals Quanty trays of rapid methods containing microorganism cultures to bring them to incubation.
Electric Incubation Stove: maintains and grows microbiological or cell cultures. The incubator maintains temperature, humidity and other conditions at an optimal level, such as the content of carbon dioxide (CO_2) and oxygen in its interior atmosphere.
Horizontal Laminar Flow Hood; serves as a sterile working place, to sow and manipulate microorganisms in different crops.

Soil and Water Laboratory

Liquid Chromatography System with Collector; separates phases in samples by ion exchange, affinity and molecular weight.
4.5 L Tabletop Lyophilizer: sample drying by cryogenics.
UV-Visible Spectrometer; colorimetric and concentration determination by absorbance.
Water distiller; purifies tap water, through controlled vaporization and cooling processes.
E-PURE water deionizer; To remove ions from water and obtain higher purity for equipment.
Muffle; normally used for firing ceramic materials and for melting metals through thermal energy. Within the laboratory a muffle furnace is used for substance calcination, substance drying, melting and control processes.
An industrial furnace is commonly used to dehydrate laboratory reagents or to dry instruments. The furnace increases its temperature gradually over time as well as its programming.

Molecular Biochemistry Laboratory

2 IMAGUN SYSTEM and Bio- Rad GEL Doc EZ photo-documenters; used to visualize agarose and acrylamide DNA gels.
3 Gradient Thermocyclers; last generation amplification of DNA fragments (PCR).
3 Sequencing Gel Chamber with power source used for the separation of small DNA fragments.
Fume extraction hood for handling dangerous reagents.

Universal CMS Metrology machine for wood mechanics testing. UNSIJ. Ixtlan de Juárez.

Earth Science Laboratory

Organic Carbon Analyzer; used as a non-specific indicator of water quality or the degree of cleanliness of the equipment, it measures the amount of carbon dioxide generated by oxidizing organic matter under special conditions.
Bioclimatic environmental chamber; environmental management system with automatic temperature range, for the conservation and aging of plants.
SOKKIA total station, for measuring angles from marks made on transparent disks.
Tree climbing bike, built in high quality material for greater safety, suitable for trees with diameters greater than 26 inches.

Ecotoxicology Laboratory

Flowmeter kit watermark water flowmeter current meter.
Leaf porometer, calculates the electrical conductivity in plants (stomata), to measure moisture content.

Digital Stereo Microscope LUXEO 4D specific with stationary auxiliary objective.
Multiparameter meter without GPS, to measure water turbidity and temperature, conductivity in alkaline solutions.
UV-VIS DR 600 Spectrophotometer, to measure absorbance and concentration, with Tungsten and deuterium lamp with automatic wavelength.

Environmental Geology Laboratory

Axioscopic polymer microscope; Used for the observation of smaller samples that are not visible to the human eye, to distinguish shapes and morphology.

Instrumentation Laboratory

Gas chromatograph with FID detector for the study of organic contaminants in total waters such as insecticides and pesticides.
Liquid chromatograph with UV-Vis detector; identifies organic compounds, pesticides, proteins, amino acids.
ICP plasma emission spectrometer; determines heavy metals in water and soil samples in a spectral range from 160 to 900 nm.

Environmental Chemistry Laboratory

20-place Digestion Unit. Hermetically sealed and watertight container, used to convert nitrogen-containing substances (proteins) into a convenient form of nitrogen, chemical oxygen demand can be determined.
Universal refrigerated centrifuge. Separates solids from a solution by a decantation or sedimentation process with cooling systems, ideal for laboratory applications.
Standard centrifuge, used for decantation or sedimentation processes mainly of solids or liquids, used for the separation of two liquid phases.
Fume extraction hood. For the separation of acidic solutions that give off toxic vapors.
Digital microscope for the observation of samples and microorganisms.
Microwave oven (Multiwave pro solv 60HZ, rotor 16MF100, pressure and temperature sensor). Performs microwave-assisted digestion and extraction of inorganic and organic samples.
Multiparameter ORION VERSA STAR is capable of gathering accurate data for advanced electrochemistry laboratory operations all in one compact, versatile meter. The meter has four channels that accept interchangeable pH, conductivity, DO, pH/ISE, and pH/achievement modules.
Vacuum drying oven. Performs heating, baking, drying, agricultural genetics, protein and starch digestion, drug metabolism, sterilization, conditioning, preheating, curing and aging, serum protein analysis.
Particle meter (Nanotrac 252). A power spectrum is used to distribute the particle size.
2 Raman Systems Inc (ALGITRON) and Dimension - P2. Raman spectroscopy (named after C.V. Raman) is a spectroscopic technique used in chemistry and condensed matter physics to study low-frequency modes such as vibrational, rotational, and other.

Geographic Information Systems Laboratory

24” DESIGNJET T610 Plotter prints high quality images such as maps, topographic charts, scientific research posters among other high resolution prints.
6 Desktop Computers; They have the capacity of Ram memory and hard disk for spatial and biogeographical analysis.

Laboratory Waste

The separation of materials is carried out by compatibility synonymous with chemical affinity (Brethrick’s Handbook of reactive chemical Hazards). Storage of materials with similar reactivity is performed.

Gas Storage Hut

The storage of high purity carrier gas tanks such as Nitrogen, Helium, Argon, Extra Dry Air etc., connected to their corresponding equipment, is carried out.

Wood Technology Laboratory

Extractor hood for fumes and fumes extraction.
6-station soxhlet extractor.
Heating and magnetic stirring plates.
FTIR spectrometer.
CMS Metrology universal machine for wood mechanics tests.

Chemical-Biological Laboratory

30 x 60 cm vertical autoclave.
Analytical balance.
Standard analytical balance, capacity 220g.
Triple arm granatary balance.
Mechanical balance.
Water bath for 40 electric tubes.
Vacuum pump.

Centrifuge w/standard rotor for microtubes.
Colony counter.
Digital spectrophotometer.
Non-electric aluminum sterilizer.
Mechanical convection oven.
Drying oven 48 x 35 x 60 cm.
Metal incubator.
pH meter. Conductivity, temperatura.
Biological binocular microscope.
Stereoscopic microscopes.
Tabletop flask.
Heating and stirring grill.
Automatic Refrigerator.

Microbiology Laboratory
Vertical autoclave.
Analytical balance.
Incubator.
Laminar flow hood.

Laboratory - Herbarium
Stereo microscopes.
Optical microscopes.
Plant matter dryers.
Botanical presses.

Wood Physics and Mechanics Laboratory
CMS Metrology universal testing machine for wood mechanics tests.

University of La Cañada

Food Workshop. UNCA. Teotitlán de Flores Magón.

Chemistry Laboratory
Microwave oven for chemistry.
Drying oven with electronic regulation and digital readout. BINDER.
Polarimeter 50/60 HZ.
METROHM potentiostat. 910 PSTAT mini.
Melting point at 400°C. ON 127 VOLTS 60 HZ 127 W.
Digital recirculating cooler.
Refrigerator.
Traceable infrared thermometer.
Rotary evaporator.
Extraction hood and fume and fume. Built internally of stainless steel extraction system of 6" diameter, with 6mm guillotine window measures: 120x80x145 cm, operates with 120 volts.

Laboratory for the Evaluation of Nutrition Status and Nutritional Education
LANGE Plicometer.
HARPENDER Plicometer.
SLIM GUIDE Plicometer.
VERNIER anthropometer.
Ultrasonic stadiometer ADE.
ADE wall stadiometer.
Portable stadiometer.
SECA brand infantometer.
Fiberglass measuring tape seca brand.
Fiberglass measuring tape Lufkin brand.
In-body body composition analyzer.
TANITA INNER SCAN body composition analyzer.
Body composition analyzer TANITA FIT SCAN.

SECA brand scale.
Scale with integrated stadiometer.
seca infant scale.
Tanita infant scale.
Omron body fat monitor.
Dynamometer.
Baumanometer.
Heart rate meter POLAR brand.
Pedometer.
Food replicas.
Nutrikit, nutritional consultation package.

Pharmacobiology Laboratory

BIO RAD horizontal electrophoresis system.
Power supply for electrophoresis system.
Scorpion water distiller.
HETTICH laboratory centrifuge.
ECOSHEL drying oven.
Fume extraction hood.
Electric analytical balance.

Biology Laboratory

UV-VIS Spectrophotometer (VELAB).
Lambda Ultraviolet Spectrophotometer.
KONTROLAB urine strip reader.
Horizontal freezer.

Research Laboratory

Hematology analyzer (MEDONIC).
Signaturen cryogenic thermos of baskets.
Centrifuge for laboratory HETTICH.
Homogenizer stomacher without type r4 system.
Incubator.
Microplate reader.
Electronic precision balances.
DAIGGER binocular microscope.
Microscope with LCD monitor EUROMEX.
NATIONAL stereo microscope.
Laboratory microscope IROSCOPE.
Microtome without type ECOSHEL.
Micropipettes of various capacities.
Fluorometer and luminometer FLUOROSKAN Ascent FLThermo Scientific.

CINA

BIOBASE vertical autoclave with flywheel, capacity 100L

Liquid chromatograph (HPLC). Chemistry Laboratory. UNCA. Teotitlán de Flores Magón.

NovaUniversity

Classroom NovaUniversity, Central Ocotlán Campus.

Ocotlán Campus

Central Campus Recording and Transmission Rooms

Polycom Clarity video conferencing platform. With capacity for 25 video conferencing sessions and up to 100 users connected in HD quality.
Endpoint, video conferencing equipment, Polycom Real Presence Group 310-720p.
65” Smart Board Interactive LED Display, Touch-Screen, Model SBID- 6065S.
60” Full HD LED screen.
7 Polycom HDX 7000 End Point video conferencing equipment.
7 Interactive digital whiteboard systems, Smart Board 600i4 of 64”.
7 LED Screens 32 Inches Full HD.

San Jacinto Campus

Media Room

9 Endpoints, video conferencing equipment, Polycom Real Presence Group 310-720p.
Endpoint, video conferencing equipment, Polycom Real Presence Group 300.
65” Smart Board Interactive LED Display, Touch-Screen, Model SBID- 6065S+ 8 for new classrooms.
BenQ RP703 70″ interactive flat screen system.
60” Full HD LED screen + 8 new classrooms.
7 Endpoint, Polycom HDX 7000 video conferencing equipment.
7 Interactive whiteboard systems, Smart Board 600i3 of 64”.
7 LED 32” Full HD screens.

Electronics Laboratory

4 10Mhz function generators, Agilent Technologies.
4 Dual power supplies, Agilent Technologies.
4 Digital oscilloscopes with 8.5” display, Agilent Technologies.
4 Digital station multimeters with 5-digit display, Agilent Technologies.

Chemical - Biological Laboratory

3 Binocular compound microscopes
Analytical balance.
Tensiometer
Portable meter for potassium analysis in soil and plant tissue samples.
Portable meter for nitrate analysis in soil and plant tissue samples.
Digital timer
CO2 meter
Light meter in 4 ranges.
Gasoline-powered motorized fumigator
Multiparametric meter (photometer) N, P, K, Ca, Mg.
Waterproof portable multiparametric pH/CE/TDS/TEMP meter.
Horizontal laminar flow hood
Neubauer chamber
Compound microscope BA210
Pedological backpack
14 cubic feet refrigerator

Portable electric autoclave.
GPS.
Bouyouccus densimeter.
Refractometer.
Digital scale of 5000 grams.
Drying oven.
Topographic level.
Metallic compass.
Horizontal and vertical level.
Laser temperature meter

ICT Laboratory

Dell PowerEdge T30 Server.
13 HP All in ONE 200G3-21.5” Computers.
Cisco SG112-24-24 Switch.
Router Cisco RV130-Multifunction.
Router Cisco Rv325-14 ports.
2 Nobreak APC BR1500.
DSLR Camera Canon Rebel T6.
Tripod.
Microphone.
BenQ MW550 digital projector.
14 Regulators for electronic devices.
12 Binary tables.
15 Chairs.
ACER widescreen monitor.
Logitech keyboard and mouse set.

Juxtlahuaca Campus

Electronics Laboratory

2 10Mhz function generators. Agilent Technologies.
3 Agilent Technologies dual power supplies.
2 Digital Oscilloscopes with 8.5” display Agilent Technologies.

Media Room

7 End point, Polycom RealPresence Group 300 video conferencing equipment.
7 BenQ RP703 70″ interactive flat screen systems.
7 LED screens 32 Inches Full HD.

Chemical – Biological Laboratory

13 Binocular compound microscopes.
6 Binocular microscopes, Stereo Zoom.
Analytical balance.

Nopala Campus

Media Room

7 Endpoints, video conferencing equipment, Polycom Real Presence Group 310-720p.
7 Interactive whiteboard systems, Smart Board 600i3 of 64”.
7 Full HD 32” LED screens.

Transmission antenna. NovaUniversity. Ocotlán Central Campus.

University of the Coast

Expulsion area. Robotic Clinic. UNCOS. Pinotepa Nacional

Chemical-Biological Laboratory

Analytical Balance.
Drying Oven, digital temperature control for moisture determination, range from 5 to 210 °C.
Kendall macro equipment with distiller for protein determination.
Micro Kendall equipment.
Golfish equipment for fat determination.
Mufla, for ash determination.
Laminar flow hood.
Distilled water purifier.
Extraction hood.
Stereoscopic microscope head.
Refrigerator.
Freezer, capacity 300 gr, sensitivity 1 mg, tray diameter 80 mm.
Analog vortex stirrer with speed from 0 to 3400 rpm.
Potentiometer.
Visible and UV light spectrophotometer, VELAB.
Apparatus for melting point determination.
Ergonomic binocular microscope.
Binoplus Millenium.

Robotic Clinic

Maniquí simulador de parto (Noelle®).
Childbirth simulator manikin (Noelle®).
19 CPR manikins.
4 General procedures mannequins.
Human skeleton.
Anatomical model of the brain.
Anatomical model of internal organs.
Anatomical model for IUD insertion.
Anatomical model for breast self-examination.
Anatomical model for condom insertion.
2 Infusion pumps.
2 Electric beds.
2 Inflatable anti-decubitus mattresses.
2 Mechanical beds.
14 Tripods for solutions.
Examination bed.
Transfer stretcher.
Transfer table.
2 Portable oxygen cylinders.
Wheelchair.
Walker for adult.
Pair of crutches.
4 Scales with stadiometer.
10 Aneroid blood pressure monitors.
10 Stethoscopes.
5 Glucometers.
Laryngoscope with Miller straight blades.
Diagnostic set with C-handle.
2 Portable aspirators.
Pediatric scale.
Portable Doppler.
Tococardiograph.
Neonatal bedside cabinet.
Radiant cradle.
Neonatal incubator.
Nursing vital signs monitor.
Autoclave for surgical instruments.
Surgical lamp.
2 Pasteur tables.
4 Thermos for biological of 9 lts.
Thermos for biological of 45 lts.
5 Stem thermometers for the vaccination thermoses

Veterinary Anatomy Laboratory

4 Dissection cases.
10 Dissection tables.

Small species veterinary clinic

2 Electrosurgery machines.
Inhaled anesthesia equipment.
Ultrasound.
Autoclave.
Surgery table.

Mayo table.
Scales.
Solution holder.
2 May trays.
Pre-surgical table.
Surgical instrument.

Animal Reproduction Laboratory
Embryo freezer.
Microscope.
Cryogenic Thermo
Bovine Artificial Insemination Equipment.

University of Chalcatongo

Operating Room. Robotic Clinic. UNICHA. Chalcatongo de Hidalgo

Chemistry Laboratory
2 Binocular microscopes.
Glucometer.
Vertical autoclave.
Centrífuge.
2 pH meters.
Analytical balance.
Portable stadiometer.

Continuing Education Laboratory
Video Conference Equipment: Real Presence Group Series 310-720p, with EagleEye IV-4x camera.

Microbiology Laboratory
Upright freezer.
Grease remover.
System for crude fibre determination.
UV-Vis spectrophotometer.
Vacuum pump.
Vertical laminar flow hood.
Orbital shaker with a heating plate.

Bromatology Laboratory
Manual autoclave.
Rotary evaporator.
Mufle.

Robotic Clinic
Newborn patient simulator for emergency and resuscitation procedures.
Pediatric skills simulator.
Advanced electronic delivery simulator.
Advanced nursing mannequin with vital signs simulator.
Radiant heat crib with phototherapy lamp and oxygen therapy.
3-position electric hospital bed with wheels. Wired remote control for operation of bed movements.
Vital signs monitor 12” with 6 parameters.
Electro CMS 600G. Main features: Touch screen color TFT LCD to display working status and ECG waveform. 12 simultaneous ECG leads, with digital signal processor.
Hydraulic operating table.
Single operating room lamp of 50,000 - 150,000 lux halogen light.

Workshops

Technological University of the Mixteca

Ceramic Workshop

Fume kiln. For firing fume ceramics with one carriage and door, maximum temperature 1200 °C, 16 atmospheric burners, refractory insulating partition linings and ceramic fiber.
Electric kiln. With capacity of 10 cubic feet, cone 10 with digital temperature control of 4 ramps. Sasabe GC-12/29.
Electric kiln. 110 volts int. 11.0 “x13.50”, Skutt.
Hammer mill micropulverizer, equipment with electric motor of 1 H. P., Comesa.
Roller table. With 1/3 H. P. electric motor with three 1 gallon jugs, porcelain lined (high alumina), Comesa.
Extruder. With vacuum for ceramic pastes with 2 H. P. and 1 H. P. motors in the vacuum pump, Comesa.
Vibrating screen. With electric motor of 1/3 H. P. with two frames with stainless steel mesh, Comesa.
Mixer for ceramic paste. With constant speed and 1CF single-phase motor, capacity of 45 liters of paste.
Electric artisan lathe.
Scale lathe. Manufactured in carbon steel, equipped with instantaneous start and stop system with brake and clutch, with a 1P. electric motor, Comesa.

Glass Workshop

Electric oven. With fusing support 10 x 50.
Fusing oven wheel assembly. Pujol.
Ceramic firing kiln. Spectrum.
Beveler 8” Diam. B4RV.
Rebabbing machine, model: Glastar G14 Diamond Star.
Rebabbing machine, model: G8 All-Star.

Plastics Workshop

60 cms. vinyl cutting plotter. Roland CX24-camm-1.
Vertical hydraulic plastic injection machine, ARSA.
Intec blast sandblasting machine. RX-1RT.
CNC Router 1.00 X 80cm cutting MYD 2005.
Vacuum thermoformer, Afisamatic VTF5261-P1.
Horizontal heating machine.
OTMT equipped drill press.
Vimalert belt drive column drill.

Textile Workshop

Industrial sewing machine, make: Brother, model: S7200A-405-2G40.
Embroidery machine, make: Brother, model: PR600C.
2 Heating grills, make: Thermo Cimarec, model: HP131225.
Straight machine, make: Brother, model: S7550A-5.
Overlock machine, make: Yamato, model: AZ7500SD-A4DF-8.
Interlock machine, make: Kansan Special, model: WX-8803F.
Buttonhole machine, make: Brother, model: HE-800A-2.
Cutting machine, make: Lunasew, model: LN-100K.
Cutting machine, make: Luna, model: LN-100-RS.
Overlock machine, make: Yamato, model: CZ6500A4DF.
Zig-Zag machine, make: Zoje, model: 1906.
Steam irons, make: Full Steam, model: SH-304.

Wood Workshop

Electric planer for wood, 5HP motor.
Circular saw with mortiser for wood, 3HP 220/440 motor. Straight guide. Cutting capacity 100 mm.
Wood rotary saw with arbor. Diameter 25.4 mm with 2HP motor and 740x530 mm working table.
Floor lathe for wood, with ¾ HP motor.

Mini Max T-124 copying lathe.
Universal radial floor saw, with 300 mm disk. Industrial use, 2800 RPM and 2HP motor.
Radial saw.
2 radial arm saws.

Metals workshop
Reinforced motorized guillotine with foot pedal, for cutting sheets up to 1/8' gauge.
Manual guillotine.
Universal tube rolling machine.
Sheet bending machine.
Sheet bending machine with grinding wheel.
Manual milling machine.
Elbow planer.
Conventional manual lathe.
Drill milling machine.
Air compressor motor for painting repaired furniture.
Metallizer.

Silk-screen printing workshop
Pre-drying plate.
Transfer plate 40cm x 40cm.
Octopus A 6-2 (6 colors, 2 double rotation tables).
Rack of 50 grills (50cm x 50cm).
Rack of 50 grills (50cm x 100cm).
Seriplus display table, 80cm x 90cm.
Seriplus table with halogen light, 70x90 cm (inclined).
Metal developing vat.

Fashion Design Workshop
CNC laser cutter STM-4040.
WACOM 20" digitizing tablet.

Food Workshop
Exhauster.
Smoker oven.
Skimmer
Plate pasteurizer.
Refined pulper.
Crimper.
Autoclave or retort.
Baking oven.
Sheeter.
Boiling pans.
Mixers.
Fermenter.
Meat injector.
Stuffer.

University of the Isthmus

Tehuantepec Campus

Plastics Workshop
Thermoformer.
Industrial bench drill.
Sandblaster cabin.
Edging machine.
Forming machine with template up to 40cm.
4 Bevel tripie machines.

Silk-screen printing workshop
Developing vat.
Hot Stamping.
Octopus.
Exposure table.
Transparency table 70x90 inclined.
Rack.
Teflon thermoplate.

Ceramic Workshop
Gas oven.
Electric oven.
Industrial furnace.
Small gas oven.
Mixer.

Textile Workshop
2 sewing machines.
4 Stand up and down looms.

Fotography Workshop
2 Enlargers.

Wood Workshop
Electric spinning top.

Metals Workshop
CNC vertical machining center.
Mechanically controlled curtain bending machine.
Cabinet mounted parallel lathe with 1.5 CF single-phase motor.
1500 kgs hydraulic table.
Analog hardness tester.
Hydraulic tube bender.
Milling drill.
A.C. welding machine.
Welding machine with ¼" fume hose.
Band saw.
Universal radial saw.
Wood lathe.
Table circular saw.
Belt and disc sander.

University of Papaloapan

Loma Bonita Campus

Silk-screen printing workshop
Round screen printing machine.
Octopus.
Heat press.

Metals Workshop
Lathe.
Metal bending machine.
Metal cutting machine.
Punching machine.
Column drill.
Electric welding machine.

Wood Workshop
Circular table saws.
Miter saws.
Wood lathe.
Jig saws.
Wood edger.

Ceramic Workshop
Kiln.
Parallel lathe.

Plastics Workshop
Thermoformer.

Tuxtepec Campus

Food Workshop
Texture analyzer.
Ultrasound system.
Viscosimeter.
Dehydrator.
Micro Kjeldahl.
UV/VIS.
Nanospray.

University of Sierra Juárez

Wood Technology Workshop
Wood-Mizer LT15 Portable Sawmill Wood-Mizer LT15
Microtome.
Scales.
Microscope.
Stereo microscope.
Rotary evaporator.
Vacuum pump.
Digital balance.
Edger.
Industrial planer/planer.
Pneumatic nailer.
Belt and disc sander.
Horizontal vertical floor sander.
Router/router.
Pendulum jigsaw.
14” band saw.
18” band saw.
Circular saw.
Radial arm saw.
Compound miter saw.
Industrial type table saw.
Floor column drill.
18X47” wood lathe.
Wood floor lathe.

University of La Cañada

Food Workshop
Industrial skimmer.
Food desiccator.
Food dehydrator.
Thermosealing machine.
Refrigeration thermostat (recirculator).
2 Viscosimeters.
Kjeldahl apparatus (6 posic w/glass tube).
Kjeldahl micro apparatus (white).
Milk analyzer.
Kjeldahl nitrogen analyzer.
Kjeldahl protein digester analyzer.
Ceptometer canopy density analyzer.
Colorimeter.
Canner seamer.
Horizontal freezer (white).
Vertical freezer (1 door, stainless steel).
Distiller.
Kjeldahl digester of 4 units.
Stuffer.
Vacuum packer.
Double glass door vertical cooler.
Canner.
Medium agitation equipment with agitator. 3 blades and non-skid base.
6 burner fume stove with oven.
4 burner fume stove with oven.
Electric juice extractors.
Manual juice extractor.
3 position soxhlet extractor (grills).
Fermenter for glass baking.

Fryer.
Small homogenizer (base).
Small homogenizer with emulsifying rod.
Large homogenizer with base and emulsifying rod.
Drying oven.
Convection oven for glass door baking.
Baking and fermentation oven.
Drying oven.
Electric oven.
Microwave oven.
Double door baking oven.
Incubator.
Fume scrubber.
Domestic blenders.
Industrial blenders.
Immersion blender (submersible).
Manifold of 4 u for digester (upper).
Portable chlorophyll meter.
Ph meters (potentiometers).
Arm ph meter (potentiometer).
Commercial microwave.
Electric grinder.
Mufla.
Digital muffle.
GPS navigator.
Automatic level (tripod in reagent room).
Magnetic stirring grids with heating.
Digital fruit penetrometer.
Food processor.
Meat slicer.
Digital refractometer
Refractometer (brixometer).
Home freezer refrigerator.
Sifter.
4-channel thermometer.
Digisense ir thermometer.
Analytical balance (thermobalance).
Kitchen scale.
Electronic precision balance.
Recirculator.
Electronic scale.
Electronic scale max 60kg min 250g.
Mixer.
Industrial mixer-blender.
Steel pot pump.
Secretarial coffee maker.
Fume extraction hood.
Centrifuge.
Sieve shaker.

University of the Coast

Wood Workshop
Portable Jointer cutter.
Floor drill.
Floor saw.
Band saw.
Copying lathe.
Band compressor.
Radial arm saw.
Bench saw.
Miter saw.

Metals Workshop
Cortadora Jointer portátil.
Floor drill.
Floor saw.
Band saw.
Copying lathe.
Belt compressor.
Electric welder.
Industrial welder.
Metal cutting saw 14” 3 Hp.
Tooling milling machine 2S.

Silk-screen printing workshop
Four-arm octopus.
Suction table.
Drying tray.
Sublimation equipment 8 in 1.

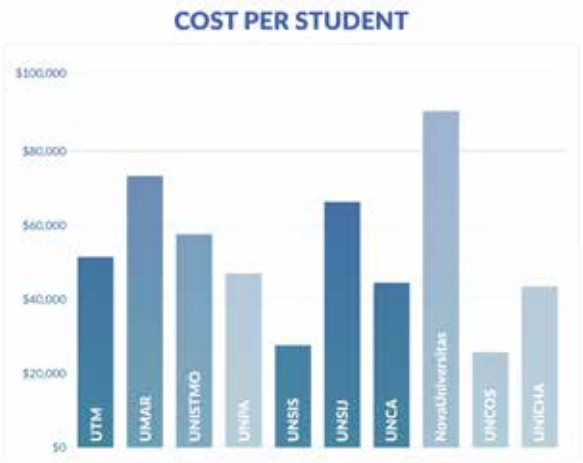
Plastics Workshop
HER-MAQ Thermoformer.
3d printer.

Agroindustrial Production Workshop
Semi-industrial mixer.
Meat grinder.
Vacuum sealer.
Semi-industrial baking oven.
Stuffer for meat products.
3 stainless steel vats for cheese elaboration.

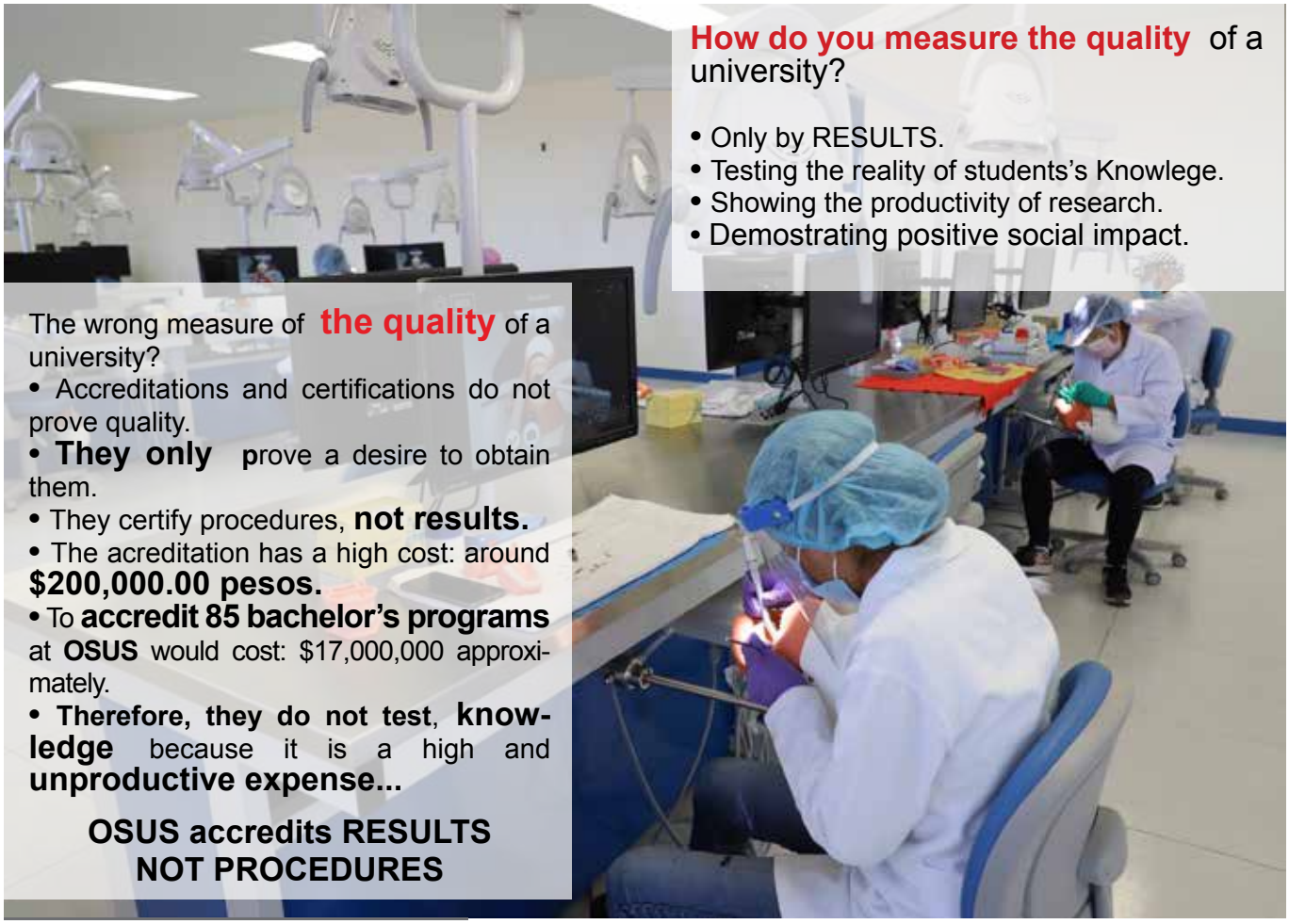
Workshop - Forage Equipment
Mechanical press for silo in bag.

Quality Education

- **Quality education has a cost, but, it costs more not to educate, or to educate halfway.**
- **The calculation of the real cost of education must take into account the quality of that education.**
- **Lower cost per student than many universities[1].**



Average cost per student at **OSUS:** **OSUS: $35, 965.72**
Average cost per student at **UNAM:** $77,357.00
Source: Annual Account 2000-2019, Budget 2020, UNAM.



How do you measure the quality of a university?

- Only by RESULTS.
- Testing the reality of students's Knowlege.
- Showing the productivity of research.
- Demostrating positive social impact.

The wrong measure of **the quality** of a university?

- Accreditations and certifications do not prove quality.
- **They only** prove a desire to obtain them.
- They certify procedures, **not results.**
- The acreditation has a high cost: around **$200,000.00 pesos.**
- To **accredit 85 bachelor's programs** at **OSUS** would cost: $17,000,000 approximately.
- **Therefore, they do not test, knowledge** because it is a high and **unproductive expense...**

OSUS accredits RESULTS NOT PROCEDURES

1 The calculation of the cost per student in a real university is quite complicated and can only be arrived at at the level of estimates, which are always debatable. There are universities that are really nothing more than schools, whose function is exclusively or almost exclusively teaching, in which case the calculation is relatively simple and is made by dividing the budget by the number of students. However, when a university performs (in addition to teaching) the other functions, the problem becomes more complicated when calculating the part of the expenditure that goes to teaching, scientific research, dissemination of culture, promotion of development and community services.
This is what happens with the state universities of Oaxaca, in which the functions other than teaching, and in particular scientific research, are of great importance, which is positive for the country.

Educational Offer

OSUS offers **85** undergraduate studies **73%** of them are classified as STEM

(Science, Technology, Engineering and Mathematics. Including Health Science Careers).

Tropical Agricultural Engineering
University of Papaloapan, Loma Bonita campus

Environmental Engineering
University of the Sea, Puerto Ángel Campus

Civil Engineering
Technological University of the Mixteca

Aquaculture Engineering
University of the Sea, Puerto Ángel campus University of Papaloapan, campus Loma Bonita

Agribusiness Engineering
University of la Cañada
University of the Coast

Agronomy Engineering
NovaUniversity (San Jacinto, Juxtlahuaca and Santos Reyes Nopala Peripheral Campuses)

Food Engineering
Technological University of the Mixteca
University of Papaloapan, Tuxtepec campus
University of la Cañada

Biotechnology Engineering
University of Papaloapan, Tuxtepec campus

Computer Engineering
Technological University of the Mixteca
University of the Isthmus, Tehuantepec campus
University of Papaloapan, Loma Bonita campus

Design Engineering
Technological University of the Mixteca
University of the Isthmus, Tehuantepec campus
University of Papaloapan, Loma Bonita campus
University of the Coast

Electronics Engineering
Technological University of the Mixteca

Renewable Energy Engineering
University of the Isthmus, Tehuantepec campus

Pharmacobiology Engineering
University of la Cañada

Engineering in Applied Physics
Technological University of the Mixteca

Automotive Mechanical Engineering
Technological University of the Mixteca

Mechatronic Engineering
Technological University of the Mixteca
University of Papaloapan, Loma Bonita campus

Fishing Engineering
University of the Sea, Puerto Ángel campus

Petroleum Engineering
University of the Isthmus, Tehuantepec campus

Wood Technology Engineering
University of Sierra Juárez

Forestry Engineering
University of the Sea, Puerto Escondido campus
University of Sierra Juárez

Industrial Engineering
Technological University of the Mixteca
University of the Isthmus, Tehuantepec campus

Chemical Engineering
University of the Isthmus, Tehuantepec campus

Actuarial Studies
University of the Sea, Huatulco campus

Administration
NovaUniversity (San Jacinto, Juxtlahuaca and Santos Reyes Nopala Peripheral campuses)
University of Chalcatongo

Municipal Administration
University of Sierra Sur

Public Administration
University of the Isthmus, Tehuantepec campus
University of Sierra Sur

Tourism Administration
University of the Sea, Huatulco campus
University of Sierra Juárez

Biology
University of the Sea, Puerto Escondido campus
University of Sierra Juárez

Marine Biology
University of the Sea, Puerto Ángel campus

Environmental Sciences
University of Sierra Juárez

Communication Science
University of the Sea, Huatulco campus

Business Science
Technological University of the Mixteca
University of the Isthmus, Ixtepec campus
University of Papalopan, Tuxtepec campus
University of Sierra Sur
University of the Coast

Maritime Sciences
University of the Sea, Puerto Ángel campus

Chemical Sciences
University of Papalopan,Tuxtepec campus

Law
University of the Isthmus, Ixtepec campus

Economics
University of the Sea, Huatulco campus

Nursing
University of Sierra Sur
University of Papaloapan, Tuxtepec campus
University of the Isthmus, Juchitán campus
University of the Sea, Puerto Escondido campus
University of the Coast University of Chalcatongo

Mexican Studies
Technological University of the Mixteca

Informatics
University of the Sea, Puerto Escondido campus
University of the Isthmus, Ixtepec campus
University of Sierra Sur
University of Sierra Juárez
University of la Cañada
NovaUniversity (San Jacinto, Juxtlahuaca and Santos Reyes Nopala Peripheral campuses)

Applied Mathematics
University of the Isthmus, Tehuantepec campus
University of Papaloapan, Loma Bonita campus
Technological University of the Mixteca

Medicine
University of Sierra Sur
University of Papaloapan

Veterinary Medicine
University of the Coast

Nutrition
University of Sierra Sur
University of the Isthmus, Juchitán campus
University of la Cañada
University of Chalcatongo

Oceanology
University of the Sea, Puerto Ángel campus

Dentistry
University of Sierra Sur

Clinical Chemistry
University of la Cañada

International Relations
University of the Sea, Huatulco campus

Animal Science
University of the Sea, Puerto Escondido campus
University of Papaloapan, Loma Bonita campus

The best universities to study Nursing in Mexico are in OSUS.

Graduate Studies

12 Doctorates and 35 Masters

PhD in Biotechnology
University of Papaloapan, Tuxtepec Campus

PhD in Chemical Sciences
University of Papaloapan, Tuxtepec Campus

PhD in Environmental Sciences
University of the Sea, Puerto Ángel Campus

PhD in Marine Ecology
University of the Sea, Puerto Ángel Campus

PhD in Electronics with specialisation in Applied Intelligent Systems
Technological University of the Mixteca

PhD in e-Government
University of Sierra Sur

PhD in Mathematical Modelling
Technological University of the Mixteca (Included in the National Postgraduate Quality Program)

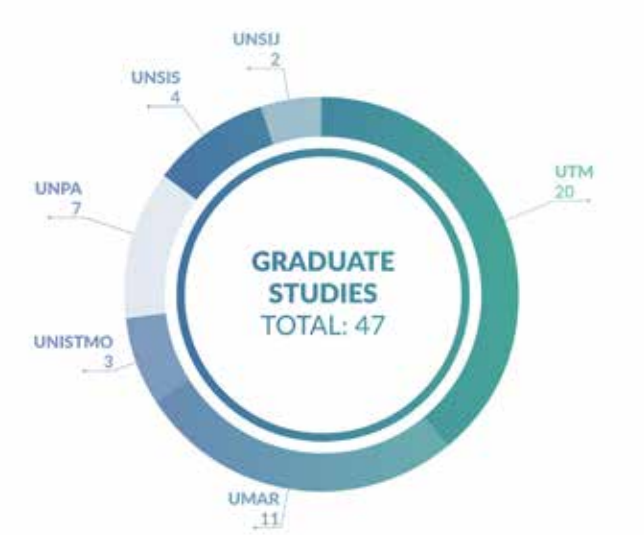
PhD in Animal Production and Health
University of the Sea, Puerto Escondido Campus

PhD in Robotics
Technological University of the Mixteca (Included in the National Postgraduate Quality Program)

PhD in Applied Computer Technologies
Technological University of the Mixteca

PhD in Artificial Intelligence
Technological University of the Mixteca

PhD. in Science: Natural Products and Food
Technological University of the Mixteca



Master in Livestock Production and Processing
University of Papaloapan, Loma Bonita Campus
(Included in the National Postgraduate Quality Program)

Master in Agricultural Production and Processing
University of Papaloapan, Loma Bonita Campus
(Included in the National Postgraduate Quality Program)

Master of Business Administration
Technological University of the Mixteca

Master in Biotechnology
University of Papaloapan, Tuxtepec Campus
(Included in the National Postgraduate Quality Program)

Master in Environmental Sciences
University of the Sea, Puerto Ángel Campus (Included in the National Postgraduate Quality Program)

Master of Science in Conservation of Forest Resources
University of Sierra Juárez

Master of Science: Marine Ecology
University of the Sea, Puerto Ángel Campus (Included in the National Postgraduate Quality Program)

Master of Science in Wind Energy
University of the Isthmus, Tehuantepec Campus
(Included in the National Postgraduate Quality Program)

Master of Science in Solar Energy
University of the Isthmus, Tehuantepec Campus

Master of Science: Genetics of Biodiversity
University of the Sea, Puerto Escondido Campus

Master of Science in Environmental Management
University of Sierra Juarez

Master of Science: Wildlife Management
University of the Sea, Puerto Escondido Campus

Master in Materials Science
Technological University of the Mixteca

Master of Science: Natural Products and Food
Technological University of the Mixteca
(Included in the National Postgraduate Quality Program)

Master in Mathematical Modelling
Technological University of the Mixteca

Master in Energy Law
University of the Isthmus, Ixtepec Campus

Master in Chemical Sciences
University of Papaloapan, Tuxtepec Campus (Included in the National Postgraduate Quality Program)

Master in Computing with speciality in Distributed Systems
Technological University of the Mixteca-Virtual

Master in International Criminal Law
University of the Sea, Huatulco Campus

Master in Fashion Design
Technological University of the Mixteca

Master in Furniture Design
Technological University of the Mixteca

Master in Electronics: Option in Applied Intelligent Systems
Technological University of the Mixteca
(Included in the National Postgraduate Quality Program)

Master in e-Government
University of Sierra Sur
(Included in the National Postgraduate Quality Program)

Master in Interactive Media
Technological University of the Mixteca

Master in Tourism Marketing
University of the Sea, Huatulco Campus

Master in System Optimization and Control
University of Papaloapan, Loma Bonita Campus

Master in Municipal Strategic Planning
University of Sierra Sur
(Included in the National Postgraduate Quality Program)

Master in Animal Production and Health
University of the Sea, Puerto Escondido Campus

Master in International Relations: Environment
University of the Sea, Huatulco Campus

Master in Robotics
Technological University of the Mixteca
(Included in the National Postgraduate Quality Program)

Master in Public Health
University of Sierra Sur
(Included in the National Postgraduate Quality Program)

Master in Advanced Manufacturing Technology
Technological University of the Mixteca

Master in Applied Computer Technologies
Technological University of the Mixteca
(Included in the National Postgraduate Quality Program)

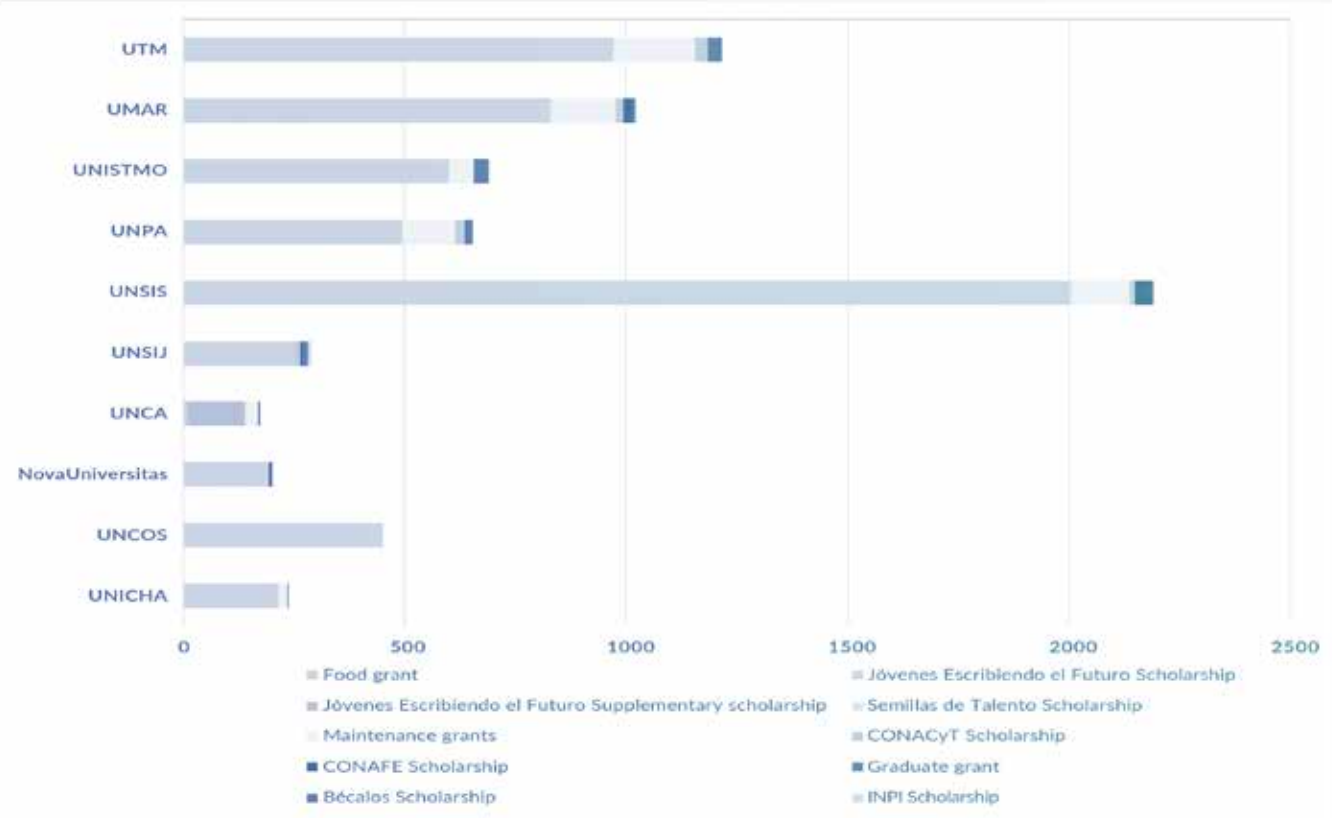
Master in University Administration
University of Sierra Juárez

Master in Artificial Intelligence
Technological University of the Mixteca

Partial view of the Public Health Laboratory. UNSIS. Miahuatlán de Porfirio Díaz

99% of our students have **free tuition fees***

7,127 students benefit from **scholarships** for Higher Education*



Scholarships are also provided by Groups of professors and some individuals

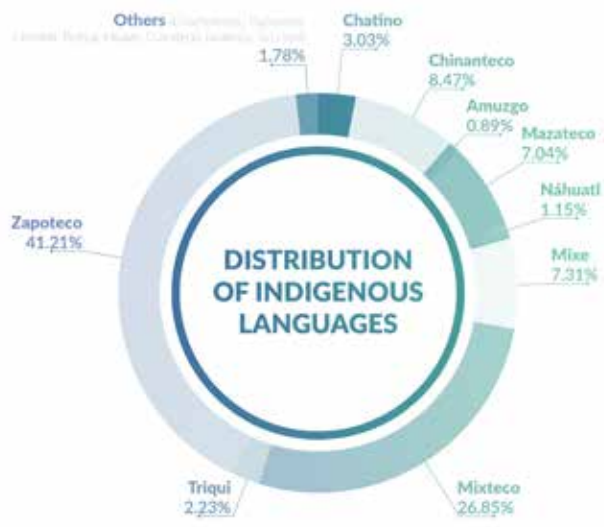
* Data from October 2021.

Gender

University	Women in STEM	Total students in STEM	Percentage of women in STEM
UTM	545	1893	29%
UMAR	646	984	66%
UNISTMO	185	455	40.6%
UNPA	750	1129	66%
UNSIS	1545	2128	72%
UNSIJ	93	179	52%
UNCA	63	119	53%
NOVAUNIVERSITAS	48	104	46%
UNCOS	365	593	61.5%
UNICHA	212	246	86.1%
SUNEO	**4,452**	**7830**	**57%**

Medicine students in class. UNSIS. Miahutlán de Porfirio Díaz

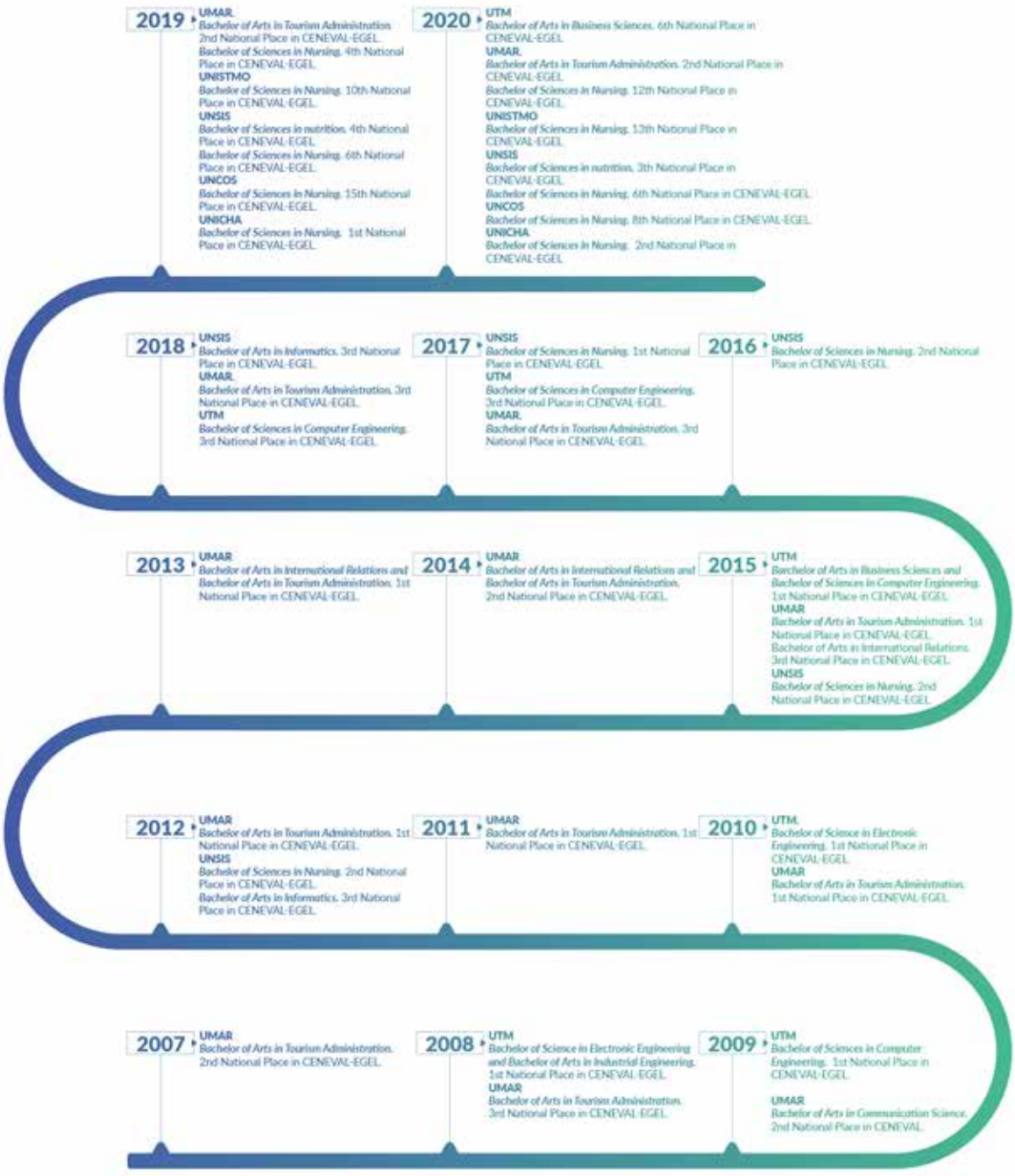
Cultural Diversity



The vast majority of students are from indigenous communities

Nursing students in class. UNICHA. Chalcatongo de Hidalgo

CENEVAL Results and awards



The EGEL (General Knowledge Examination), applied by CENEVAL, measures the level of knowledge of the graduates of each degree program and compares them with the results of the participating universities. This makes it possible to identify to what extent undergraduate graduates have the knowledge and skills essential for the start of their professional practice.

The continuous and systematic use of the EGEL provides valid and reliable information that contributes to establish, fundamentally, the level of effectiveness and relevance of the different programs and modalities of professional training offered by the universities and is the only serious indicator of performance.

* CENEVAL makes the comparison based on the results of the previous year.

Faculty by University

Technological University of the Mixteca

216	Full-time research professors
105	with a Doctoral degree
75	with a Master's degree
58	Researchers members of the SNI
24	Academic bodies
136	Research projects
150	Publications in 2020-2021
9	Institutes

University of the Sea

255	Full-time research professors
84	with a Doctoral degree
129	with a Master's degree
48	Researchers members of the SNI
19	Academic bodies
114	Research projects
221	Publications in 2020-2021
10	Institutes

University of the Isthmus

137	Full-time research professors
45	with a Doctoral degree
71	with a Master's degree
20	Researchers members of the SNI
10	Academic bodies
1	Research projects
92	Publications in 2020-2021
2	Institutes

University of Papaloapan

161	Full-time research professors
97	with a Doctoral degree
49	with a Master's degree
41	Researchers members of the SNI
25	Academic bodies
26	Research projects
113	Publications in 2020-2021
3	Institutes

University of Sierra Sur

170	Full-time research professors
50	with a Doctoral degree
73	with a Master's degree
17	Researchers members of the SNI
25	Academic bodies
34	Research projects
90	Publications in 2020-2021
4	Institutes

University of Sierra Juárez

50	Full-time research professors
21	with a Doctoral degree
25	with a Master's degree
11	Researchers members of the SNI
5	Academic bodies
59	Research projects
43	Publications in 2020-2021
1	Institutes

University of La Cañada

43	Full-time research professors
19	with a Doctoral degree
20	with a Master's degree
6	Researchers members of the SNI
6	Academic bodies
43	Research projects
26	Publications in 2020-2021
2	Institutes

NovaUniversity

25	Full-time research professors
12	with a Doctoral degree
12	with a Master's degree
12	Research projects
10	Publications in 2020-2021

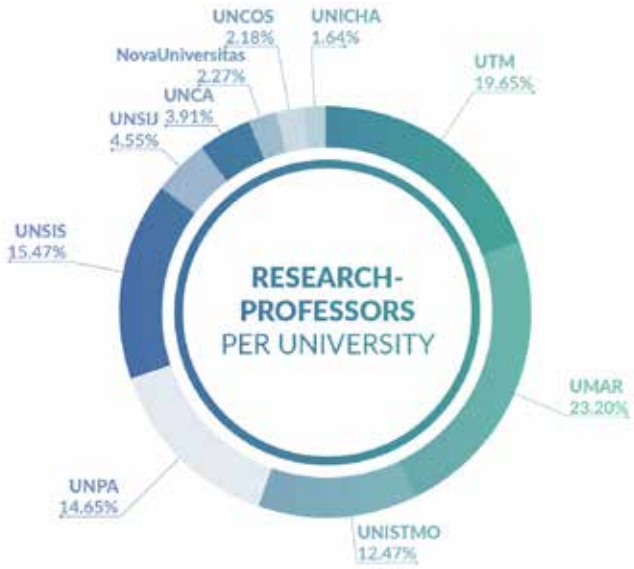
University of the Cost

24	Full-time research professors
5	with a Doctoral degree
16	with a Master's degree
3	Research projects
9	Publications in 2020-2021

University of Chalcatongo

18	Full-time research professors
3	with a Doctoral degree
10	with a Master's degree
1	Researchers members of the SNI
8	Publications in 2020-2021

The number of faculty at OSUS varies throughout the year.



1,100 Research Professors

203 Of them belong to SNI

441 Doctorates

81 Language teachers: All native of the language they teach: 73 English, 4 Chinese, 3 French and 1 German

Relation between number of students and teachers and cost per student

At OSUS, the ratio is around **10:1**

The OSUS Universities respond to the quality criterion, normally followed at the international level, of ensuring that the number of students per professor is low, in order to facilitate their interaction.

As comparative figures:
CALTECH 3:1 ;
Harvard 5:1;
MIT 3:1;
Stanford 5:1;
University of Pennsylvania 6:1;
Oxford 11:1;
Cambridge 11:1;
Sophia University (Japan) 1:1;
Complutense University (Spain) 12:1

This relationship, which is a quality measure, is achieved at a very low cost.

Spanish universities spend an average of 6,480 Euros.

UNAM 77,357 $MXN (2020).

CALTECH 41,538 $USA (Tuition and Fees).

UPENN 60,000 $USA.

Oaxaca State University system: 36,000 $MXN average.

Research

428 Research projects in progress 2020-2022

TECHNOLOGICAL UNIVERSITY OF THE MIXTECA

- Algebraic identification of rotodynamic parameters of rotor-bearing system bearings.
- Alternative technologies for the improvement of dairy products.
- Analysis of Architectural Design.
- Analysis of business competitiveness in the Heroic City of Huajuapan de Leon.
- Analysis of business management in MSMEs in the commerce sector of the Heroic City of Huajuapan de Leon, Oaxaca.
- Analysis of samples using UHPLC-QTOF.
- Analysis of the effects of COVID-19 on the company and society.
- Analysis of the electrolysis process to generate hydrogen in a didactic model.
- Application of Community Value Added to promote Local Economic Development.
- Application of genetic algorithms for the automatic generation of non-repudiation protocols.
- Application of machine learning methods to gravitational wave signal processing.
- Application of Muther's systematic distribution planning.
- Attention to the general recommendations of the CNDH 43/2020 to the Technological University of the Mixteca.
- Behavior of the assembly of unicel pieces depending on the assembly setting.
- Bio-inspired adaptive optical system that mimics accommodation and illumination control present in the human eye.
- Biopolymers in the formulation and synthesis of materials for agroindustrial applications.
- Business networks, associativity strategy for the sustainable development of micro, small and medium enterprises.
- CAN BUS network independence module.
- CD network system: CD-CD converters.
- Chaos and some of its forms in topological dynamics.
- Characterization of heat waves using extreme value theory and simulation.
- Characterization of PCB particles obtained through the crushing process: Morphology and size.
- Characterization of secondary metabolites from plant extracts and agro-industrial wastes.
- Chemical study of Alloispermum integrifolium, Encyclia varicosa and Toumefortia densiflora, medicinal species from Oaxaca.
- Climate monitoring of the upper Mixteco river basin.
- Comparative analysis, based on design elements and visual communication techniques, between the Vitruvian man and page one of the Fájervar and Mayer codex.
- Connections and loops in modified quantum gravity.
- Conservation and control of microbial strains
- Construction of an electronic accelerating body controller with PWMC signals Stochastic force transmission control in stationary structures using negative stiffness technology.
- Control of stochastic force transmission in stationary structures using negative stiffness technology.
- Cost-benefit ratio in the formulation of concrete used in the construction works of the Oaxaca State University System (OSUS).
- Creative triggers.
- Design and construction of a biotechnological system to treat wastewater generated at the University of the Isthmus, Tehuantepec Campus.
- Design and construction of a biotechnological system to treat wastewater generated at the University of the Sea, Puerto Escondido Campus.
- Design and development of polystyrene (EPS) modular roof and wall units as an alternative construction system.
- Design and implementation of a pilot plant for the production of a probiotic drink based on whey. Project approved in the call for proposals of the Stimulus Program for Research, Technological Development and Innovation.
- Design and implementation of teaching-learning strategies to increase student performance in higher level structured programming courses.
- Design and manufacture of a multi-cavity injection mold applying concurrent engineering to manufacture disposable plastic knives.
- Design and manufacture of a non-conventional auxiliary device for vision improvement.
- Design and manufacture of products with natural fibers from the State of Oaxaca.
- Design of a high dynamic performance vibration absorber based on an inverter connected to a beam-type structure.

- Design of a sustainable mushroom processing plant.
- Design of interfaces with an inclusive approach for special education students.
- Design, engineering and advanced manufacturing applications for the design of furniture, mechanical parts and device housings.
- Determination of the development of moral judgment of applicants to UTM.
- Development and evaluation of anti-varroa formulations using agro-industrial waste.
- Development of a cereal enriched with Moringa oleifera to combat malnutrition in children.
- Development of a mobile application for teaching Spanish to foreigners.
- Development of fermented beverage products from agave and evaluation of their probiotic potential of microbiota present in fermentation musts.
- Development of prepared alcoholic beverages.
- Development of renewable energy methodologies and equipment.
- Development of robotic mechanisms for physical rehabilitation.
- Dynamic compacity and the finite intersection property.
- Dynamic improvement of vibration isolators using mechanical networks based on rotational inertia and negative stiffness effects.
- Effect of natural multifunctional additives on the correlation of lipid and protein stability of raw meat during storage.
- Elaboration of flood hazard maps in Huajuapan de Leon, Oaxaca.
- Electric vehicle with BLDC wheel motors.
- Environmental Care 1.0: ECORED SANDI. (2019-2020).
- Establishment of an Agavetum. Conservation and propagation of agaves.
- Establishment of quality indicators for black mole from Oaxaca. Project approved in the call for proposals.
- Evaluation of the biological properties of organic extracts and pigments from species of the Bignoniaceae and Convolvulaceae families with potential applications in the food industry.
- Exploration of the biological properties of organic extracts of species of the Bignoniaceae family and the genus Ipomoea (Convolvulaceae) with focus on the management of foodborne disease-causing agents and control of non-enzymatic oxidation of processed fruits for juice.
- Extraction, purification and characterization of the enzyme hydroperoxide lyase, as well as its substrate, from natural products.
- Film production portfolio, documentary of Jarabe MixtecoCaos and some of its forms in Topological dynamics.
- Financial inclusion in Latin America.
- Financial inclusion, youth entrepreneurship and public policies.
- Finite element method for elliptic differential equations with integrable Henstock-Kurzweil functions-CONACYT.
- Flora and its uses in the San Miguel Suchixtepec Community Reserve, Miahuatlán, Oaxaca.
- Fredholm theory and spectral approximation.
- Graphic communication signs to improve the executive functions of children with Autism Spectrum Disorder.
- High Performance Computing for Advanced Large Scale Intelligence Methods.
- Hyperspaces and compact sets determined by networks and retractions (funded by CONACYT).
- Identification of parameters in mathematical models, analysis of the growth rate of the Malthus model and permittivity in capacitance tomography.
- Impact of food-packaging interaction on sensory and microbiological characteristics of food.
- Implementation of a biorefinery for the mezcal processing industry.
- In vitro evaluation, isolation and characterization of metabolites from natural sources.
- Industry 4.0 and the Industrial Engineering Curricula in the State of Oaxaca.
- Integral management of urban solid waste generated in the city of Huajuapan de León. (KUILI).
- Interface design and usability study for the tourism promotion website of the Huatulco Bays and its surroundings.
- Jarabe Mixteco film script.
- Job prospects of graduates of the Bachelor's Degree in Business Administration and the Master's Degree in Business Administration at the Technological University of the Mixteca, from Covid 19.
- Knowledge management and competitiveness in the renewable energy industry.
- Kolmogorov-type models with bifurcation parameter.
- Manual for CAN-BUS communication network interdependence module.
- Mathematical modeling of language competence.
- Mathematical modeling of neurosignaling in castration-resistant prostate cancer.
- Mechanical evaluation of the maguey fiber-clay composite used for the elaboration of construction materials.
- Ñanduvi.

- Obtaining bioactive compounds from Acalypha cuspidata and Adenophyllum aurantium.
- Optimal design of non-traditional dynamic vibration absorbers based on an inverter for passive vibration control.
- Participation of women in independent candidacies for local governorships in Mexico (2015-2020).
- Passive control and regeneration of vibration energy in buildings subjected to seismic loads.
- Perception system using deep learning techniques for real-time autonomous navigation of a mobile platform.
- Plate support with cavity for plastic injection.
- Political globalization and social control of markets.
- Post Modem Mixteco: Photo Essay.
- Profitability analysis for the cultivation of Pitahaya.
- Promotion of rainwater harvesting and utilization as an alternative water supply in communities of the Upper Mixteco River Basin.
- Quantitative study of pitahaya plant growth as a function of cuttings length and two types of substrate.
- Recurrence and product recurrence in dynamic systems.
- Reinforcement learning in the automatic acquisition of knowledge about non-communicable diseases.
- Relative properties and induced functions in hyperspaces.
- Removable structure used in a pick up truck bed.
- Renewable energies and sustainable products: improvements in the microalgae cultivation system.
- Research and analysis of unit costs in housing construction during the COVID-19 sanitary contingency period in 2021.
- Reverse-engineered plastic face shield visor.
- Self-balancing two-wheeled personal transport vehicle.
- Separation of flavonoids from plant substrates using membranes coupled to liquid chromatography.
- Smelting furnace for non-ferrous metals at low scale.
- Spatial intervention of the main access to the Technological University of the Mixteca to improve mobility and accessibility for users.
- Statistical analysis of the surface finish of a metal obtained by machining processes.
- Statistical inference in the Markowitz model.
- Stochastic vibrational energy regeneration in vehicles using a linear electromagnetic transducer.
- Strategies to increase water availability in a sustainable manner in the Upper Mixteco River Basin, Oaxaca, Mexico.
- Study and behavior before seismic forces of a classroom building with metallic structure.
- Study of chassis systems for electric vehicles.
- Study of photocatalytic films deposited on the surface of tin oxide-based ceramics.
- Study of the anti-amebic structure-activity relationship (QSAR) of compounds extracted from natural products.
- Study of the frequency-magnitude distribution of earthquakes in the state of Oaxaca.
- Support for the maintenance of a UPLC-QTOF, used in the development of natural products and food research in the state of Oaxaca.
- Sustainable development of backyard organic vegetable gardens.
- Synchronization of a BLDC motor network with event-based communication.
- Technological and innovation capabilities for organizational competitiveness.
- The Atlantean and Yahui correspondence of the movement supporting the universe. Development of visual elements and concepts of the pre-Hispanic Mixtec culture applicable to graphic design.
- The labor market and its relation to economic development.
- The local economic development of mezcal producers in Oaxaca and its correlation.
- Thermodynamic characterization of the extractive process using supercritical CO2 applied to seeds of Theobroma cacao L.
- Thermo-mechanical recovery of aluminum from pharmaceutical packaging (blister).
- Treatment of recalcitrant wastewater by anaerobic digestion-anaerobic ozonation.
- Use of agro-industrial waste to obtain biocompounds used for the development and evaluation of functional foods with antioxidant and antiviral activity in the respiratory system.
- Use of plants and by-products of animal and plant origin as sources of antioxidant compounds and protein ingredients in dairy and meat product applications.
- UTM-2019 Inclusion and Educational Equity Program.
- Wastewater treatment systems for houses in Guadalupe Cuautepec, San Juan Bautista Suchitepec, Oaxaca.
- White light emission of HfO2: Al3+ films prepared by RPU.
- Women Leaders (LILA).

UNIVERSITY OF THE SEA

- An approach to the seasonal variability of surface and central water bodies in the Gulf of Tehuantepec.
- Analysis of performance indicators of the use of the infrastructure of the Port of Veracruz, 2002-2020.
- Analysis of the competitiveness in national and international tourism of the CIP Huatulco, an application of the shift-share analysis.
- Analysis of the mistletoe problem at the University of the Sea, Puerto Escondido campus: main hosts, dispersers and management proposal.
- Analysis of water quality in the Copalita coastal observatory, from the lower Copalita River to San Agustin Bay. Internal.
- Aquaculture recirculation system for efficient water use: Proposal for the operation of independent ponds in the aquaculture laboratory of the University of the Sea.
- Association of Southeast Asian Nations: Challenges in shaping an economic community.
- Batoid fish processing.
- Cephalopods and anthropogenic garbage.
- Challenges for the establishment of a normative order in the contemporary international system.
- Challenges of the obligatory nature of higher education since its elevation to constitutional rank.
- Characterization and artificial incubation of backyard turkey (Meleagris gallopavo) eggs.
- Characterization of the potential of pre-isolated and collected cyanobacteria as a source of pigments, polymers and bioproduct generation.
- Characterization of the vulnerability and resilience of artisanal fisheries to environmental variability in the South Pacific of Mexico.
- Community intervention model for the revaluation and self-management of artisanal fishing as an element of cultural identity and food self-sufficiency in the Afro-Mexican populations of the coast of Oaxaca. CONACYT.
- Conservation of the orange-fronted parakeet (Eupsittula canicularis) in Santa María Colotepec, Oaxaca: reproduction, capture rate and environmental education.
- Contingency of massive mortality of marine and coastal organisms on the coast of Oaxaca.
- Contribution of Marxist feminism to International Relations.
- Culture, human rights and gender issues in international relations.
- Curation and maintenance of the phycological collection of the University of the Sea.
- Design and implementation of an associative network of entrepreneurs and micro-entrepreneurs (local and indigenous) of the Pochutla district of the coastal region of Oaxaca.
- Design of molecules based on molecular descriptors of non-peptide compounds from the venom of the salivary glands of the octopus Octopus hubbsorumcon with antagonistic activity to the Nav sodium channel of Humano.
- Determination of the quality of water for human use and wastewater from the University of the Sea, Puerto Angel campus.
- Development of Mobile Applications for the Preservation, Promotion and Dissemination of the Zapotec Language.
- Development of new materials based on residual lignin from industrial processes such as food or paper.
- Diagnosis of the impact of the sustainable development discourse on the territorial identity of the communities of Oaxaca (Port of Salina Cruz, Oaxaca) in the face of the Interoceanic Multimodal Corridor.
- Diagnosis of the state of the wood of two areas of the Wood Technology Laboratory of the University of the Sea, Puerto Escondido campus.
- Diversity and molecular identification of diaspores dispersed by fruit bats in the Botanical Garden of UMAR, Puerto Escondido Campus.
- Documentary history of coffee: a fair trade perspective in Oaxaca.
- Ecology of beetles of the University of the Sea.
- Ecology of waterfowl in an estuarine-marine transition ecosystem.
- Effect of temperature and packaging on seed deterioration and germination parameters of Moringa oleifera Lam.
- Energetic evaluation of carbazoles and phenylamines by thermal analysis for their implementation in solar cells.
- Evaluation of diets for sheep with forage for sheep with composite tree-grass forage in Bajos de Chila.
- Evaluation of eutrophication and proliferations in the pastoral lagoon: causes and consequences.
- Evaluation of the beneficial effect of Trichoderma spp. on apple banana plants regenerated in vitro.
- Evaluation of the growth and yield of three grass varieties from the coastal valley of Oaxaca, induced by diverse saline conditions in greenhouses.
- Evaluation of the potential of massive sequencing techniques, environmental DNA and genetic barcoding for the description of the benthic biodiversity of marine and coastal ecosystems of Oaxaca.

- Exploring the dynamics of fungal diversity in the coast of Oaxaca.
- Extensive cultivation of Malayan shrimp (Macrobrachium rosenbergii) in rural communities of San Pedro Pochutla, Oaxaca, for self-consumption and popular supply.
- Film tourism. A multidisciplinary proposal.
- From the Great Comba National Park to the Big Bend International Park: a proposal for binational cooperation between Mexico and the United States to create an international conservation area.
- Functional diversity of beetles in a system for livestock research.
- Generalization of the Theorems of the Cauchy Integral Formula, the Hartog Extension and the Weierstrass Preparation.
- Genetic barcoding of macroscopic fungi from selected localities in the coastal region of Oaxaca.
- Geographical analysis of coastal production areas (Coastal Port Industrial Systems).
- Germination of diaspores dispersed by birds and bats.
- Global Policy and Environment.
- Growth of two tree species, native to the coast of Oaxaca.
- Hermila Galindo, pioneer feminist in Mexican International Relations.
- History of communication routes in southern Oaxaca: maritime and land communication between the 16th and 19th centuries.
- History of contemporary Hispano-American international thought.
- History of social communication in Huatulco Bays.
- History of the treatment of the problem of development in the UN: 1945-2020.
- Hormonal profile of pregnant and postpartum anestrus ewes under heat stress conditions in the Oaxacan tropics.
- Identification of risk factors for earthquakes and tsunamis in Puerto Angel and Zipolite, Oaxaca and their social perception.
- Identification of species of microorganisms associated with the change of coloration in the Manialtepec Lagoon (October 2019 and 2020).
- Identity through Mexican cinema and foreign policy. Prodep 2020.
- Impacts of ecotourism and proposals for an ethical and ecologically responsible management.
- In vitro chemical and antifungal study of three species of the Salvia genus (Family: Lamiaceae) from the state of Michoacán.
- Industrial concentration and specialization: an interactive map of Mexico.
- Integral development of a molecular and computational tool for the identification of hermaphrodite seedlings of Carica papaya maradol variety from the coast of Oaxaca, by means of Lamp type analysis.
- Integrative taxonomy and creation of a reference library of spiders and beetles of the coastal region of Oaxaca.
- Invasive polychaetes in marshes and harbors of Mexico: vulnerability and resilience.
- Maintenance of the UMAR marine mammal osteological collection (COMMUMAR).
- Marxism and the origins of International Relations.
- Mexican state mining law reform project (2018-2021): public utility impact.
- Mexico's foreign policy through presidential reports during the 20th century.
- Microbial community change as a function of the interaction of two water masses under wave mixing conditions.
- Microplastic and food webs.
- Modeling and parametric optimization of the electrochemical mineralization of drugs against COVID-19 (Hydroxychloroquine and chloroquine) in an electrochemical flow reactor equipped with boron-doped diamond electrodes.
- Modeling of trophic interactions in the Gulf of Tehuantepec through Network Topology and Geographic Information Systems.
- Molecular characterization and analysis of the activity of ornithine decarboxylase enzyme (ODC) in differentiation and pathogenesis of Colletotrichum sp., causal agent of antrachnose in papaya fruits.
- Mountain memory wanderings: stories and testimonies of Zapotec communities in southern Oaxaca.
- Multidisciplinary analysis of the global post-COVID-19 situation.
- Nationalism, cinema and Mexico's foreign policy.
- Nutrient dynamics and hydrographic characterization of the water column in the oxygen minimum zone in the Gulf of Tehuantepec in the Tehuantepec season in 2020. Effects on zooplankton associated with deep scattering layers.
- Octavio Paz: Thought and International Projection.
- Online seminars on remote sensing in scientific research.
- Political ecology of wind energy in the Isthmus of Tehuantepec.
- Potential study of biogas generation from mezcal vinasse and hydrolyzed human urine.

- Preliminary standardization of the identification of viral agents in papaya plants from the coastal region of Oaxaca with molecular techniques and digital image processing.
- Preliminary study of the environmental quality of the Colotepec River, in the Municipality of Santa María Colotepec, Oaxaca.
- Production of insects for inclusion in the feeding diets of black Iguana (Ctenosaura pectinata).
- Prospective studies on the use of non-conventional substrates in biological processes.
- Regional integration, outer space and global governance.
- Reliability of INEGI source information: inconsistencies of the geological chart for the isthmus region 2007.
- Reproductive ecology of three species of damselflies (Teleostei: Pomacentridae) in the rocky portion of "La Entrega" bay, Mexican South Pacific.
- Revisionism in International Relations (2020-2021).
- Sampler of woods that are being used or have potential for use in the coastal region of Oaxaca.
- Scientific Vocations: Science Club.
- Security and international affairs.
- SIGEXAM. UMAR exam management system.
- Simulation of release, maintenance of genetic variability, nutritional analysis of black iguanas (Ctenosaura pectinata) and green iguanas (Iguana iguana) from CECOREI-UMAR.
- Socio-environmental analysis of stress factors in the communities of Lagunas de Chacahua National Park. Intern
- Spatial characterization of mesophotic reef ecosystems of the Veracruz reef system; ecological and economic implications for their conservation and management.
- Spatial Democratization of Puerto Escondido.
- Spatio-temporal variation of biogeochemical processes in the coastal zone of the Gulf of Tehuantepec.
- Students from rural areas who chose a career in Tourism at the University of the Sea.
- Study of ocean acidification and its effect on the reef communities of the Mexican South Pacific. SEP-CONACyT.
- System for automatic acquisition and processing of climatological data in the tropical sheep area of the UMAR experimental field.
- Territorial identity of salt producers in Salinas del Marques, before the Interoceanic Multimodal Corridor.
- The environmental migrant in the context of security studies. Levels of (in) security and vulnerability.
- The finances and economic and financial autonomy of Mexico's Integral Port Administrations, or ports (APIS) (1990-2016): from macroeconomics to microeconomics, or the other way around?
- The impact of climate change and its impact on Afro-descendant communities in the Chacahua lagoons. Mexus-CONACyT.
- The maritime economy of Oaxaca, a socioeconomic vision of the coastal region.
- The State of Oaxaca under a maritime perspective.
- The state of the question of youth in Mexico and digital culture.
- Traditional forms of communication in Oaxaca.
- Trend and determinants of Mexico's maritime cargo traffic during the period 1990-2016.
- Underwater photogrammetry of coral structures in Huatulco Bays.
- Use and importance of artificial water troughs in the low deciduous forest of the central coast of Oaxaca.
- Virtual Museum of Sister Cities

UNIVERSITY OF THE ISTHMUS

- Removal of emerging contaminants in water using photochemical and sonophotochemical methods.

UNIVERSITY OF PAPALOAPAN

- Adaptation based on sustainable community and biodiversity management of the Papaloapan Basin (Hydrological Region RH-28).
- An introduction to the fascinating world of robotics interactive e-book.
- Astronomical evenings under the skies of communities beyond the Papaloapan River.
- Astronomy, mathematics and science from the Papaloapan under a multilingual approach for indigenous communities in the state of Oaxaca and the rest of the world.
- Biochemical and hematological profile of Nile tilapia (Oreochromis niloticus) and Mojarra Oaxaqueña (Vieja zonatta) farmed in the lower middle region of the Papaloapan basin: cementing health bases.
- Characterization of bovine production units in the region with animal welfare indicators.

- Circadian clock control and biotechnological potential of carbon conservation regulators belonging to bzip transcription factors in plants.
- Citizen science for the biodiversity of Loma Bonita.
- Development of biotechnological tools for the production of 1G and 2G bioethanol from agroindustrial waste at pilot plant level.
- Development of capacities for competitiveness in bioagribusiness, based on sustainability and continuous improvement in the municipality of Tuxtepec.
- Estimation of the spectral energy distribution of protoplanetary disks from the curved wall of cavities in the disk opened by a forming planet.
- Impact of mass media on habitat satisfaction in Loma Bonita, Oaxaca. Informative quality for a sustainable future.
- Maintenance of the instrumentation of the chromatography and mass spectrometry laboratory of the University of Papaloapan.
- Metabolomic characterization of barbascos, in wild and cultivated in vitro, of pharmaceutical interest in the Papaloapan Basin, Oaxaca.
- Nano-encapsulation of doxorubicin (anticancer drug) by liposomes and spray drying using resistant starch as wall material.
- Prevalence of subclinical mastitis in dual-purpose cattle and its effect on the nutritional quality and safety of milk produced in Loma Bonita, Oaxaca.
- Resistance of the tick rhipicephalus microplus to different ixodicides in the Papaloapan Basin Region, Oaxaca.
- Robotic didactics in the community context, extension 2020.
- Strengthening of the infrastructure of the applied chemistry institute of the University of Papaloapan (UNPA) to increase regional development in the state of Oaxaca.
- Support for the maintenance of the infrastructure of the bioprocess, diffraction and inorganic chemistry laboratories of the University of Papaloapan.
- Synthesis and characterization of the stability of nanoparticles containing Bacillus thuringiensis porasporins and their evaluation as antineoplastics.
- Synthesis of new arylpiperazines and evaluation of their antibacterial, antifungal and antibiofilm activity in priority pathogenic microorganisms and in multiresistant clinical isolates.
- Synthesis of nitrogenous steroidal compounds with potential antiproliferative activity.
- The impact of tourism activities on the intangible cultural heritage and landscape in the lower Chinantla of the state of Oaxaca. Towards an interdisciplinary study with a regional approach.
- The use of hypoxia core genes to improve starch content and flooding tolerance in plants.
- The use of new generation fungicides based on RNAi for the protection of tropical crops.
- Towards a private cloud computing to support teaching and research.

UNIVERSITY OF SIERRA SUR

- Academic Burnout and school performance in university students.
- Algebraic structures in Matroids.
- Analysis of complex systems in the planning of development strategies: the case of the mezcal system in the district of Miahuatlán, Oaxaca.
- Community water management: access and distribution in the municipality of San Simón Almolongas, Oaxaca.
- Determinants of poverty traps in Mexican microenterprises: perspectives from the entrepreneur's choice theory.
- Determination of the glycemic index in typical Oaxacan foods as an alternative for the prevention of Diabetes mellitus 2 at the population level.
- Develop and evaluate software-hardware tools based on neurometric and biometric information, which allow determining the emotional state of a user when interacting with user interfaces.
- Development of a bioelectrical information and eye-tracking system to evaluate usability and user experience (UX) at the CETI (Information Technology Center).
- Development of didactic material for the implementation of online philosophy courses.
- Diagnosis of environmental goods and services of ecosystems in the sub-basins that make up the municipality of Miahuatlán de Porfirio Díaz, Oaxaca.
- Digital inclusion as a tool for transformation and development in the state of Oaxaca.
- Distribution of prevalence of Chagas disease in the state of Oaxaca and risk of exposure to Trypanosoma cruzi in the community of the University of Sierra Sur.
- Economic, Social and Environmental Analysis of Ecotourism: Contribution to sustainable development in San José del Pacífico, Oaxaca?
- E-government for open government in Oaxaca: transparency, accountability and access to information as mechanisms for strengthening democracy, citizenship and governance.

- Evaluation and diagnosis of the neurocognitive status of older adults in Valles Centrales, Oaxaca.
- Exploration and description of municipal websites in Mexico in 2021 with an interdisciplinary perspective of computer science and social sciences.
- Knowledge, attitudes and practices related to oral health in dental students of the UNSIS.
- Mental health in disaster situations: Social rejection and discrimination towards health workers in the COVID-19 pandemic.
- Microbiological and social study of the presence of ESKAPE group bacteria in samples obtained from the community in Miahuatlán de Porfirio Díaz, Oaxaca.
- Molecular epidemiology of drug use and comorbidities in Mexican population, as well as its repercussions in the legal framework.
- Municipal environmental governance in the state of Oaxaca: in the framework of compliance with Agenda 2030 of the Sustainable Development Goals.
- Nutritional status, food security and emotional health in the Oaxacan population during confinement due to the SARS-CoV-2 virus.
- Obtaining theobromine from Oaxacan cocoa shells and its synergy with Spirulina to combat reactive oxygen species.
- Proposal for the elaboration of the Medical-Health Law Manual for health professionals.
- Public health biodata in Mexico: a transdisciplinary axiomatic proposal.
- Relationship between lifestyles and the level of performance of executive functions in young adults of a public university in Oaxaca, Mexico.
- Risks due to water intake and their social representations in the adult population of the urban center of Miahuatlán de Porfirio Díaz, Oaxaca.
- Social determination of care trajectories of children with cancer in Oaxaca, Mexico.
- Systems for analyzing medical images.
- Taxonomic and molecular identification of allergenic species of the Poaceae family in the region of Miahuatlán de Porfirio Díaz, Oaxaca.
- The emotional meaning of dress for older Oaxacan women.
- Urban growth and sustainable development in the municipality of Miahuatlán de Porfirio Díaz, Oaxaca, in the XXI century.
- Use of ICT for the analysis of the macro regions of Mexico, through the contrast of indicators to promote the development of society in Oaxaca.
- Use of simulators as a didactic resource in the training of nursing professionals.

UNIVERSITY OF SIERRA JUÁREZ

- Analysis of student enrollment at the University of Sierra Sur.
- Analysis of technological infrastructure, advantages and disadvantages in the use of ICT in the elementary schools of Ixtlán de Juárez, Capulalpam de Méndez and Guelatao de Juárez.
- Analysis of the ecological flow by hydrological subregion.
- Analysis of the Physical-Mechanical Properties of three Pine Species in the Sierra Norte, Oaxaca, Mexico.
- Bacterial communities associated with Ectomycorrhizae of Pinus Patula and their biotechnological application.
- Biometry of forest species in Mexico.
- Calculation of stem volume of Pinus patula, Pinus Oaxacana and Quercus laurina using machine learning.
- Cecidology in Sierra Fria, Aguascalientes, Mexico.
- Collection and systematization of local knowledge in the Sierra Juarez.
- Collection of cones UNSIJ.
- Collective action institutions in community and territorial forest management in the Sierra Juarez region of Oaxaca.
- Connectivity of Distributed Ecosystems in Pueblos Mancomunados of the Sierra Norte of Oaxaca.
- Design and construction of a biodigester for the production of biogas from cattle excreta.
- Determination, evaluation and quantification of heavy metals present in two natural areas of the state of Chiapas, Mexico.
- Determination of volumetric yield and dimensional quality of sawn wood in Ixtlán de Juárez, Oaxaca, Mexico.
- Development of auxiliary teaching products Intensive English for Beginners for the English academic program, Language Center, University of Sierra Juárez.
- Development of Competences and Increase of knowledge in Computer Science Students of the UNSIJ for the improvement of performance in Integral Calculus of one or several variables.
- Development of Flipped Classroom Audiovisual didactic products for the English academic program, Language Center, University of Sierra Juárez.
- Dynamic structure, production and ecology of forest species in the Sierra Norte of Oaxaca.

- Dynamics of natural pine-oak forests in Mexico.
- Dominant height growth and tapering-volume of Pinus douglasiana and pinus patula.
- Ecological and socioeconomic attributes of home gardens in the Sierra Juarez of Oaxaca. A strategy for peasant sustainability.
- Ecology and conservation of wild mammals in communities of the Sierra Norte-Chinantla Region, Oaxaca.
- Economic and social impact of the University of Sierra Juárez in the community of Ixtlán de Juárez.
- Educational innovation applied to the teaching-learning of calculus.
- Educational innovation using the Blended Learning model in teaching at the University of Sierra Juárez.
- Educational robotics.
- Effect of agricultural practices on soil microbial biomass in Villa Talea de Castro, Oaxaca.
- Environmental education for sustainability in higher education institutions, curricular and pedagogical challenges.
- Environmental Management and Climate Change.
- Evaluation of natural regeneration of timber forest species and non-timber forest resources present in communities of the Sierra Juarez of Oaxaca.
- Evaluation of the effect of Eisenia Fetida coelomic fluid on the growth of phytopathogenic fungi.
- Evaluation of thinning trials in plantations of Pinus patula and natural stands of Pinus pseudostrobus in two regions of Oaxaca.
- Factors affecting the pine lumber market in Oaxaca, an econometric analysis.
- Flora of the Sierra Norte Oaxaca.
- Habitat characterization of the vegetation of high ecological interest of the mountain mexophilous forest.
- Impact of Fire and Debarking Insects on Forest Species Mortality.
- International Trade of Wood and Wood Derivatives in Mexico 2000-2020.
- Introduction of CAD and CNC technology at the University of Sierra Juarez through the development of wooden furniture prototypes.
- Kraft cellulosic pulp quality of Pinus Oaxacana Mirov, compared with cellulosic pulp quality of Pinus Strobus Linnaeus var. Chiapensis Martínez.
- Legal situation of timber harvesting in small quantities in the Sierra Juarez and coasts of the State of Oaxaca.
- Obtaining activated carbon from biomass of forest species of the Sierra Juarez.
- Obtaining tannins from the bark of forest species of the Sierra Juarez.
- Participation and equity of women in community forestry enterprises in the District of Ixtlán, Oaxaca.
- Prediction of school dropout using artificial intelligence techniques.
- Preservation of Pinus Oaxacana Mirov wood with boron salts and CCA salts.
- Radial variation of density and its relationship with mechanical and energetic properties of Pinus Oaxacana Mirov and Pinus patula Shl. Et Cham, from the community of Ixtlán de Juárez, Oaxaca.
- Secondary Forests in the Sierra Norte de Oaxaca, Functional Analysis from local knowledge.
- Strengthening of Water Management Capacities towards greater Environmental Justice in the Communities that make up the Rio Grande Sub-basin, Sierra Norte, Oaxaca.
- Study of the genetic diversity of Panthera Onca (Felidae) in the Jaguar Conservation Center (Yaguar-Xoo): an approach for its Ex situ conservation.
- Technological characterization of the wood of forest species from Ixtlán de Juárez, Oaxaca.
- The construction of self-management processes in communities of the Sierra Juarez of Oaxaca (Local Solutions for Environmental Justice, 2nd Stage).
- The diversity of Psocodea: 'Psocoptera' (Insecta) in the District of Ixtlán, Sierra Norte, Oaxaca.
- The erosion of natural and cultural knowledge in the community of Ixtlán de Juárez, Oaxaca.
- The family gardens in the Sierra Norte de Oaxaca. A strategy of Agroforestry Systems (Second stage).
- The Proliferation of Wheat Farms: Mechanism of Social Economic Development, with a high probability of erosion of Aquatic Diversity.
- The role of environmental variables in the distribution and abundance of tree species in northwestern Mexico.
- Virtual education in times of Covid-19, analysis of factors related to the transition from face-to-face to distance learning in university students in the state of Oaxaca.
- Vulnerability and community management of water supply systems for human consumption in the Sierra Norte de Oaxaca.
- Web platform for the management of reading reports.

UNIVERSITY OF LA CAÑADA

- Analysis of the immune response induced by two Mexican isolates of T. cruzi with different virulence.

- Analysis of the function of insulin and its receptor in brain metabolism.
- Association of labor stress with nutritional status in workers of the University of La Cañada.
- Biological management of the creole bean crop (Phaseolus sp. L.) var. Cuarenteño in Teotitlán de Flores Magón, Oaxaca.
- Computational technology applied to the rescue, conservation and diffusion of the Mazateca Language in the Cañada Region.
- Contextual analysis and interaction design of a support system for the visually impaired.
- Determination of shelf life through accelerated tests of Oaxacan black mole paste marketed in glass containers
- Determination of the frequency of the dengue virus in the town of Teotitlán de Flores Magón, Oaxaca.
- Determination of the prevalence of gastrointestinal parasitosis by means of conventional and molecular techniques in school children of the Cañada region of Oaxaca.
- Design of a System for the General Administration of an Intelligent Laboratory.
- Design of an algorithm to measure the similarity of literary synopses and summaries of an average reader.
- Development and implementation of a platform for the dissemination and technology transfer of food products made by students of the University of La Cañada.
- Drying of Huacle Chile.
- EDUCATE mobile application that will help in the control of homework for preschool teachers.
- Effect of methanolic extracts of Parkinsonia praecox and Stevia lucida on the proteolytic activity, phospholipase A2 activity and cytotoxicity (on macrophages) of scorpion venom.
- Effect of mountain microorganisms on the nutritional quality of corn stubble (Zea mays), wheat straw (Triticum spp) and alfalfa hay (Medicago sativa).
- Evaluation of different substrates for the growth of Podaxis pistillaris fungus.
- Evaluation of the in vitro fermentation kinetics of a totally mixed ration for small ruminants including Prosopis laeviagata pods from the Cañada region.
- Evaluation of the potential of medicinal plants to inhibit the oxidative stress generated in macrophages by scorpion venom.
- Extract of medicinal plants and poisons on pathogenic bacteria and cancer cell lines.
- Liquid culture of Ganoderma lucidum in culture media formulated with maguey pulquero mead (Agave ssp.).
- Low-cost optical microscopy.
- Low irradiation as a stimulus to the DNA repair system in sunflower (Helianthus annuus L.) with 60Co gamma rays.
- Mobile application based on a collective memory for the rescue of the Nahuatl language of San Gabriel Casa Blanca, Oaxaca.
- Morphometry of neurons in a model of Chagas disease.
- Obtaining raw material from a Criollo bean variety (Phaseolus vulgaris L.).
- Physicochemical characterization of Jacaratia mexicana fruit at four stages of maturity.
- Proposal for the design of a software prototype to support patients with olfactory disorders.
- Proteomic analysis of intestinal parasites obtained from samples of child patients from the Cañada region.
- Proximal physicochemical and chemical morphological study of three varieties of Chile Huacle (Capsicum annum) in fresh and dry state from San Juan Bautista Cuicatlán Oaxaca.
- Recommender System for the improvement of Eating Habits.
- Registration of the Basic Table of Medicinal Plants for diabetes mellitus type 2 (DMT2) used by traditional doctors of the OMIC.
- Start-up of the UX-UNCA Usability Laboratory.
- Strategies for the sustainable use of chilhuacle chili and its transformation into value-added products.
- Study and analysis of soil microbial diversity, with the perspective of biotechnological, microbiological and metagenomic use in the Cañada Region of the state of Oaxaca
- Study of functional foods with possible antimicrobial activity.
- Study on the school trajectory of basic education students in the Cañada Region.
- Study to determine the seroprevalence of Chagas disease in the community of Teotitlán de Flores Magón, Oaxaca.
- Synthesis of copper (II) metforminate, from drug recovered from expired medicines.
- Theories of the prevalence of poverty in the state of Oaxaca, Mexico.
- Towards a hybrid education for the COVID-19 health emergency.
- Web application for the collection and identification of scorpion species in the town of Teotitlán de Flores Magón, Oaxaca.
- 3D representation of some Mexican Sign Language phrases in the context of a personal presentation.

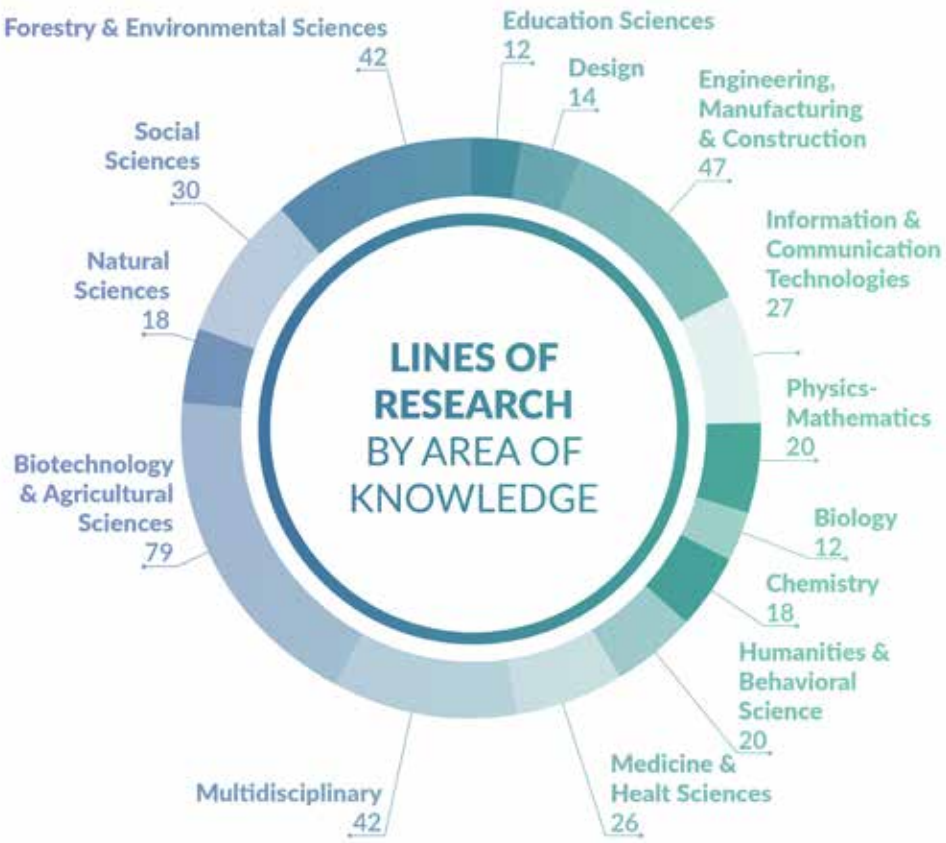
NovaUniversity

- Biological parameters of the guava weevil (Conotrachelus spp.) and determination of the species in Ocotlán de Morelos, Oaxaca.
- Design of a solar reflective vialette for road embedded with a light warning system.
- Effect of inorganic fertilization on the growth of Agave potatorum Zucc.
- Effect of mycorrhizal fungi and phosphorus on the growth and development of wild agaves.
- Environmental performance in family businesses. The case of the handicraft sector.
- Inoculation of plant growth promoting bacteria in Agave potatorum Zucc.
- Morphological and molecular identification of the black fly (Diptera: Sciaridae) associated with lily (Lilium spp.) cultivation.
- NovaUniversity Accounting System, for students taking Accounting courses at NovaUniversity University and its campuses (SICONU).
- Optimal climate consultation system for crops (CC-RUGO).
- Participatory diagnosis in the agricultural sector in two municipalities and one municipal agency in the district of Ocotlán, Oaxaca.
- Production of native Oaxacan chili peppers in greenhouses.
- Toxicity of different aqueous and ethanolic plant extracts for the control of Heilipus lauri Boheman under controlled conditions.

UNIVERSITY OF THE COAST

- Agricultural, physical, bromatological, mineralogical, phytochemical and sensory characterization of different improved varieties of hibiscus.
- Agroindustrial diversification of products obtained from Jamaica.
- Agronomic characterization and sensory evaluation of okra (Abelmoschus esculentus L.) as a coffee substitute.

OSUS explores and develops several areas of knowledge



National and International Conferences at OSUS

4th International Conference on Mathematical Modeling
October 8 and 9, 2020

Opening ceremony presided over by the rector of the Technological University of the Mixteca (UTM), Dr. Modesto Seara Vázquez.
Among the participants were:

- Dr. Senén Barro Ameneiro - CiTIUS-Research Center in Intelligent Technologies - University of Santiago de Compostela, Spain.
- Dr. Ángel Manuel Ramos del Olmo - Institute of Interdisciplinary Mathematics - Complutense University of Madrid, Spain.
- Dr. Paulo Canas Rodrigues, Department of Statistics, Federal - University of Bahia, Salvador, Brasil.

6th Meeting on Experimental Nuclear Magnetic Resonance (ENMR)
November 12-13, 2020

Opening ceremony presided over by the rector of the Technological University of the Mixteca (UTM), Dr. Modesto Seara Vázquez.
Among the participants were:

- Dr. Francisco Javier Cañada – Margarita Salas Biological Research Center, CSIC, Spain.
- Dra. Laura Castañar – University of Manchester, United Kingdom.
- Ph. D. Eric Johnson – Bruker Biospin, UU. EE.
- Dr. Armando Navarro – Federal University of Pernambuco, PE, Brazil.I.

The Great Enterprise and Society Reconstruction Conference
October 21 and 22, 2021

Opening ceremony presided over by the rector of the Technological University of the Mixteca (UTM), Dr. Modesto Seara Vázquez.
Among the participants were:

- Rebeca I. Muñoz Torres – University of Westminster, England.
- Yazid Abubakar Abdullahi - University of Sharjah in the United Arab Emirates (UAE).
- George Saridakis - University of Kent, England.
- Dra. Sandra Sookram y Roger Hosein - University of the West Indies, Trinidad and Tobago.

International E-Government Conference
November 18 and 19, 2021

Opening ceremony presided over by the rector of the University of Sierra Sur (UNSIS), Dr. Modesto Seara Vázquez.
Among the participants were:

- Dra. Susana Finquelievich – Senior Researcher at CONICET and Director of the Information Society Research Program.
- Dr. Christian Arturo Cruz Meléndez – Professor-Researcher at the University of Sierra Sur.

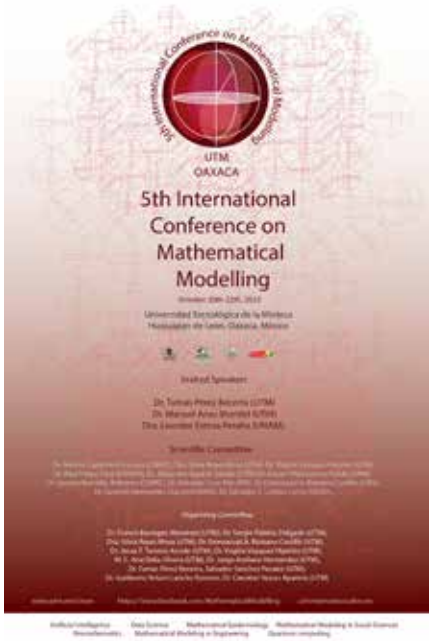
2nd Regional Workshop
Renewable Energies, Trends and Technological Development
December 2 and 3, 2021

Opening ceremony presided over by the Vice-Rector of the University of the Ishtmus (UNISTMO), Dra. Silvia Cora Bonilla.
Among the participants were:

- M.C.E.E. Efraín Alejandro Ramírez Gómez - ROBUR GROUP USA – Wind Park Roaring Brook, Lowville, New York, USA.
- Alba Segura Zamora - QSES - Director of ACCIONA ENERGÍA MÉXICO.
- Ing. Luis Alberto Calderón - President of the Energy Cluster of the State of Oaxaca - Director of SOLARVATIO.

In October 2022 OSUS will hold two International Congresses.
Venues: Technological University of the Mixteca and University of the Sea.

5th International Conference on Mathematical Modeling
October 20, 21 and 22, 2022



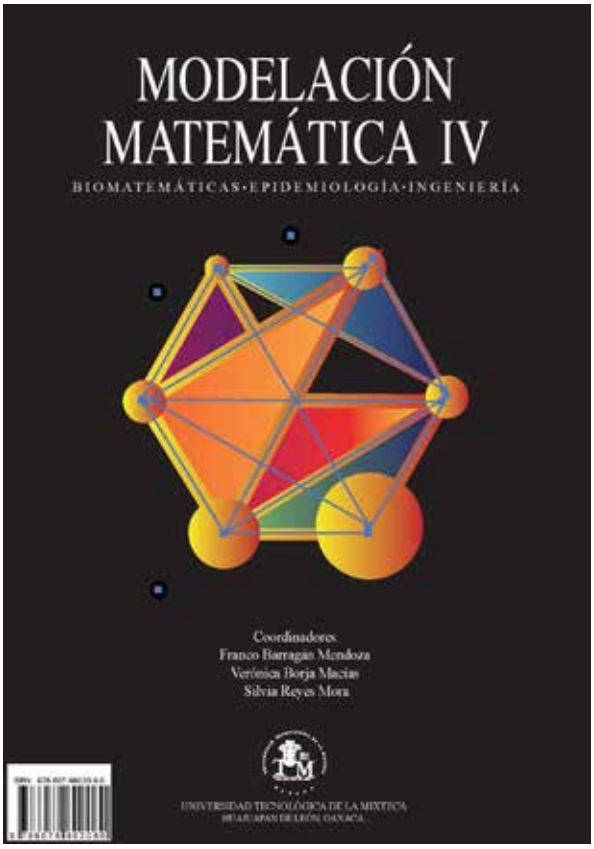
XXV Annual Congress
New International Order and Restructuring of Power: Crisis, Fragmentation and Challenges.
October 13, 14 and 15, 2022.

OSUS PUBLICATIONS

Books: 110

Technological University of the Mixteca

1. *Una aproximación a la espectroscopia de Resonancia Magnética Nuclear. Salas Coronado, R. (Coord.). 2022. 416 pp.*
2. *Modelación Matemática IV. Biomatemáticas. Epidemiología e Ingeniería. Barragán Mendoza, F., Borja Macías, V. y Reyes Mora, S. (Coord.). 2021. 200 pp.*
3. *El Jarabe mixteco. Memorias y documentos. Castellanos Balderas, I., Ortiz Escamilla, R., Bautista Peña, L. y Durán Salazar J. 2020. 165 pp.*
4. *Maíz e insectos en la cultura mixteca. Ortiz Escamilla, R. (Comp.). 2020. 192 pp.*
5. *Un Nuevo Modelo de Universidad. Universidades para el desarrollo. Seara Vázquez, Modesto. 3a. Ed. 2019. 322 pp.*
6. *Modelación Matemática III. Biomatemáticas e Ingeniería. Barragan Mendoza Franco, Palafox Delgado Sergio, Santiago Santos Alicia (Eds.), 2019. 227 pp.*



7. *Mitos, creencias e iconografía mixteca. Ortiz Escamilla Reina (Comp.), 2019. 279 pp.*
8. *La región Mixteca de la arqueología a la política. Ortiz Escamilla, Reina (Comp.). 2018. 205 pp.*
9. *El uso del software libre en la academia y la industria de México. Fernández y Fernández, Carlos Alberto y Lluvia Carolina Morales Reynaga (Coord.). 2018. 185 pp.*
10. *Modelos matemáticos en Biología, Ciencias Sociales e Ingeniería. Reyes Mora, Silvia y Santiago Santos, Alicia (Coord.). 2017. 164 pp.*
11. *Tierras y dioses en la Mixteca. Ortiz Escamilla, Reina (Comp.). 2017. 341 pp.*
12. *Mitos y simbolismos en la cultura mixteca. Ortiz Escamilla, Reina (Comp.). 2017. 217 pp.*
13. *Memorias de las XIV y XV Reunión Nacional de Ciencias Empresariales. Sánchez Meza, Francisca A. et al. 2015. 85 pp.*
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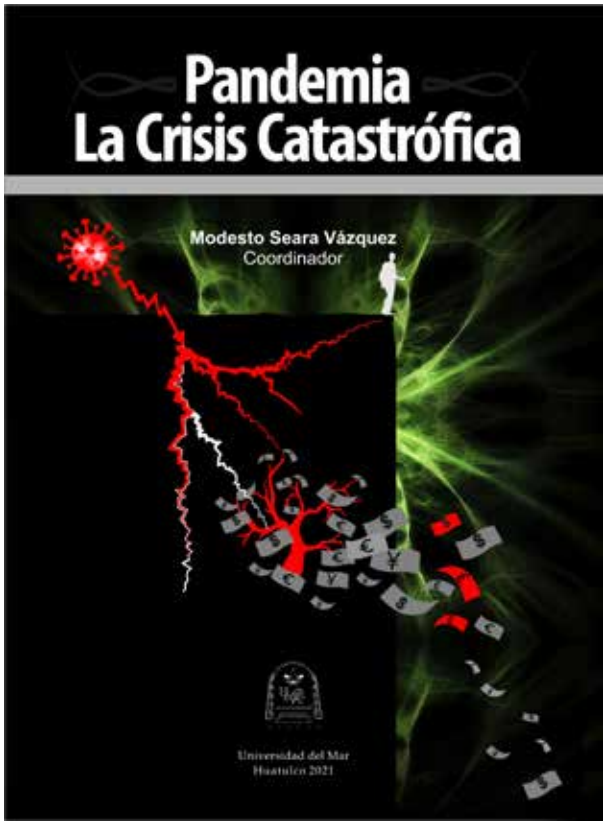

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Cultural Promotion

Knowing the past to forge the future

Promotion of the **knowledge, appreciation and development of the cultures of the state.**

Mixtecos

Popolocas

Afromestizos

Ixcatecos

Cuicatecos

Zapotecos

Triquis

Chatinos

Mixes

Zoques

Huaves

Chocholtecos

Mazatecos

Tacuates

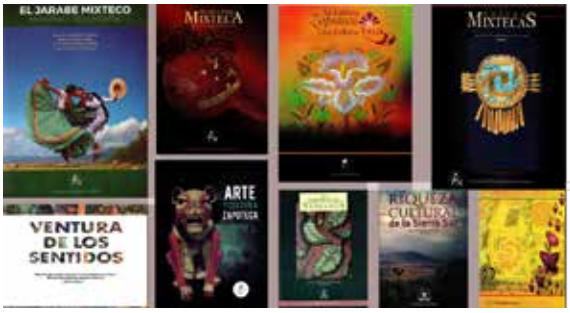
Chontales

Chinantecos

Amuzgos

Nahuas

In these years, the Weeks of Cultures have become one of the most representative forums in theacademic field and in the various artistic manifestations in the State, bringing together outstandingresearchers and artists from different areas including: painters, sculptors, musicians, dancers, singers, actors, craftsmen and bands. All the richnessof the State has been able to meet and show itselfin an open space not only for the university community, but for the population in general.



Together with the results of preservation, dissemination and diffusion of culture, it has been possibleto gather research material for the publication ofbooks that now constitute the paradigm of specialized studies on the subject of a certain culture,placing us as the institution that gathers the greatest number of published researches on the corresponding culture.

Until 2022 101 Cultural Weeks have been held and 110 books have been published

In 2020 the culture weeks were suspended on a face-to-face format for public health reasons.

In 2021 the 7 weeks were conducted virtually.

XII Week of the Cultures of the Cañada. August15th to 20th. UNCA. Teotitlán de Flores Magón

XX Mixtec Culture Week. August 22nd to 27th. UTM. Huajuapan de León

XIX Zapotec Culture Week. August 23rd to September 3rd. UNISTMO. Tehuantepec Campus, Ixtepec Campus and Juchitán Campus.

XIII Week of the Cultures of the Papaloapan . September 5th to 10th. UNPA. Loma Bonita Campus and Tuxtepec Campus.

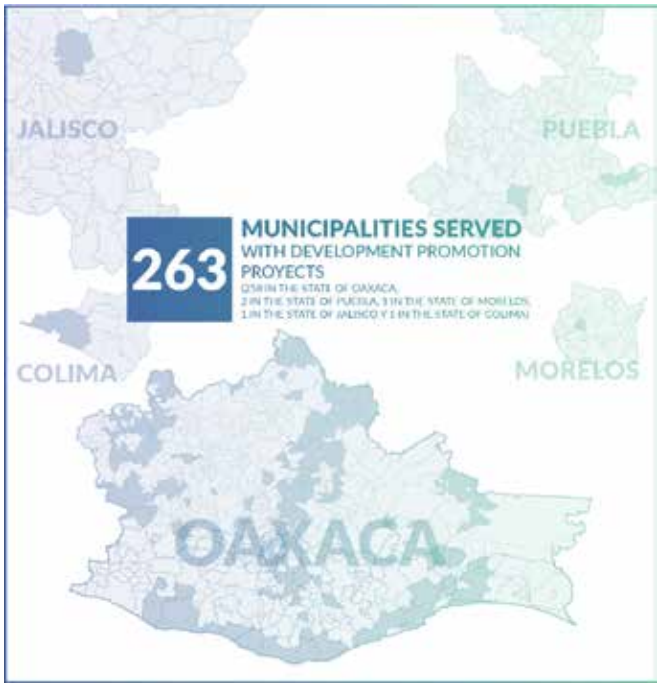
XIII Week of Cultures of the SierraSur. September 12th to 17th. UNSIS. Miahuatlán de Porfirio Díaz.

IV Week of Afro-Mexican Culture. September 19th to 24th. UNCOS. Pinotepa Nacional.

XIII Week of Cultures of the Sierra Juarez. September 26th to October 6th. UNSIJ. Ixtlán de Juárez

Access all cultural programmes at:
https://www.youtube.com/c/SUNEOOaxaca/playlists

Promoting Development



425

Children and young people attended en cursos de capacitación durante los fines de semana entre 2020 y 2022.

918

High School Teachers in refresher courses between 2020 y 2021.

107

Productive projects promoting community development.

The services of Promotion of Development offered by the universities to the governmental, social and private sectors of the state of Oaxaca, have the objective of linking the scientific-technological activity of the universities with society.

Based on this concept, the Promotion of Development is one of the main functions carried out by the universities of OSUS and consists of the support provided to rural communities, producers' organizations and private producers, through technical consultancy, training courses and the development of productive research projects, in which professors-researchers and technicians from the universities participate.

Training and technology transfer program for producers and primary production units of the Secretaría de Desarrollo Agropecuario, Pesca y Acuacultura (SEDAPA), with the participation of representatives of the following production systems: Cacao, Pineapple and Tilapia. University of Papaloapan, Tuxtepec campus.

A través de estas acciones se desea fortalecer a los núcleos productivos con innovaciones tecnológicas que permitan el adecuado desarrollo de sus actividades primarias mediante el aprovechamiento sustentable de los recursos naturales de las regiones, a fin de fomentar un uso y manejo racional de los mismos. El propósito es coadyuvar en el desarrollo socio-económico del sector productivo primario de las regiones, contribuir en forma significativa a la transformación de la sociedad y propiciar mejores condiciones de bienestar.

Services to the people of Oaxaca

13 Public Bookstores
Huajuapan de León, Puerto Escondido, Pochutla, Huatulco, Oaxaca, Tehuantepec, Ixtepec, Juchitán, Loma Bonita, Tuxtepec, Miahuatlán, Ixtlán, Teotitlán de Flores Magón.

Public Library
Tehuantepec

2 Botanical gardens
Chepilme (Pochutla) and Puerto Escondido

University Clinic
15, 755 medical consultations (2020-2022)
UNSIS – Miahuatlán

2 Seismological stations
UTM and UMAR

22 Meteorological stations
In all campuses except CECAT, Ocotlán, San Jacinto, Pinotepa Nacional, Juxtlahuaca and Chalcatongo.

3 Experimental fields
Bajos de Chila and Loma Bonita (2)

Technological Park
UTM-Huajuapan de León

Historical Mining Archive of the State of Oaxaca
UTM - Huajuapan de León

Tourism Training Center
UMAR - Oaxaca de Juárez

Wind Energy Training Center
UNISTMO-Juchitán

Agavetum
UTM-Huajuapan de León

Awards, achievements and most significant results

Every process requires time to obtain the expected results

First places in national and international competitions
in various disciplines.

Nursing students at Graduation Ceremony. UNICHA. Chalcatongo de Hidalgo

Of the 237 universities nationwide, that where present at the nursing General Knowledge Exams (EGEL) of CENEVAL, in 2021, five OSUS universities were ranked among the top fifteen

- University of Chalcatongo: Number 2
- University of Sierra Sur: Number 3
- University of the Coast: Number 8
- University of the Sea: Number 12
- University of the Isthmus: Number 13

2021

- UTM. Graduate Noel Rafael García Heredia won first place in the “Dr. José Emilio Vargas Soto” national prize for the best thesis in Mechatronics Engineering and related areas awarded by the Asociación Mexicana de Mecatrónica A.C. with the thesis “Desarrollo de Mecanismo para Prótesis de Rodilla con Sistema de Autobloqueo” (Development of a Knee Prosthesis Mechanism with a Self-locking System).

- UTM. The Computer Engineering Educational Program achieved accreditation for 5 years in the CIEES List of Higher Education Programs Recognized for their Good Quality.

- UTM. The Mechatronics Engineering Educational Program was accredited for 3 years on the CIEES List of Higher Education Programs Recognized for Good Quality.

- UTM. Dr. Virgilio Vázquez Hipólito and his thesis student, Sandra Indhavani García Mendoza, a graduate of UTM’s Bachelor’s Degree in Applied Mathematics, were awarded an honorable mention for the best undergraduate thesis at the national level by the Mexican Mathematical Society through the “Sotero Prieto 2020” call for papers. The recognition was given at the inauguration of the 54th CNSMM, held in Puebla, on October 18, 2021 (https://www.youtube.com/watch?v=V0SUvaVDrKU).

- UTM. Student Andrés Arturo Montero Reyes received an Honorable Mention in the category “Best thesis or research in design 2021” with his work “Preliminary mechanical characterization of an ecological agglomerate based on the banana pseudostem (Musa x paradisiaca) and its application in a modular lattice for interiors”, in the 2021 edition of the National Design Award: Diseña México.

- UMAR. International Relations graduate Izaira López Sánchez received the 2021 State Youth Award in the category of Artistic Activities with her project for the recovery of the Ñuu Sa’vi language.

- -UMAR. International Relations graduate Noel García, was awarded by The Washington Academy of Political Arts & Sciences in the Youth Leadership category of the Napolitan Victory Awards 2021, the most prestigious awards in political communication.

- UMAR. Ninth semester International Relations student Everardo Ordaz was selected as youth delegate of the Mexican delegation to the UN 2021.

- UNISTMO. Students Castillo Villalobos Eymy Lizette, Espinoza Peza Itzel Guadalupe, Leyva Canseco Jacqueline del Carmen and Enríquez Jiménez Brisa Guadalupe participated virtually in the Second Regional Round of the VIII National Oral Litigation Competition, organized by the American Bar Association’s Rule of Law Initiative-ABA ROLI Mexico, May 2021.

- UNISTMO. Students Clío del Carmen Jiménez Robled and José Manuel Fajardo Estudillo won 1st and 3rd place, respectively, in the Virtual Modality Research Paper Competition of the International Congress of Nursing with Intercultural Approach “Teaching to teach in times of COVID-19”, held in May.

- UNISTMO. Students Carlos Albero Matus Santiago, Andrea Maraí Cordero Santiago, Antonio Cruz Toledo and Samuel Ramírez Toledo participated and competed in the Seventh National Oral Trial and Preliminary Hearings Competition (2020-2021). Event sponsored by the California Western School of Law and the American Federal Department.

- UNISTMO. The winning student of the poster contest, C. Melissa Toledo Toledo, participated in the XXIX International Materials Research Congress. Held in Cancun, Mexico by the Mexican Society of Materials A.C.

- UNPA. The curricula of Business Sciences, Nursing and Biotechnology Engineering were accredited with level 1 of the CIIES.

- UNPA. The Master’s Degree in Agricultural Production and Processing was recognized by the PNPC with the level: Recently created.

- UNPA. The Master’s degree in livestock production and processing was recognized by the PNPC at the following level: Under development.

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2020

- UTM. First place in the Undergraduate Poster Presentation, with the topic: “Evaluation of the antimicrobial activity of essential palm oil (Brahea dulcis)”, during the XIII International Virtual Congress on Food Safety, Quality and Functionality in the Food Industry and Food Services, held on March 18 and 19, 2020.
- UTM. First place in the AMRoB Award for best master’s thesis. Awarded by the Asociación Mexicana de Robótica e Industria A.C. to Erick Daniel Flores Salazar, graduate of the Master’s program in Robotics.
- UTM. First place in the “José Emilio Vargas Soto” National Award for the best thesis in Mechatronics and related areas. Awarded by the Asociación Mexicana de Mecatrónica A.C. to Mario Enrique Herrera Cordero, graduate of Mechatronics Engineering.
- UTM. Honorable mention in the “José Emilio Vargas Soto” National Award for the best thesis in Mechatronics and related areas. Awarded by the Asociación Mexicana de Mecatrónica A.C. to Hugo Javier Cortés Ruiz, graduate of Mechatronics Engineering.
- UMAR. Oceanologist Pablo Gregorio Ruiz won second place in the modality of Oral Presentations in the thematic area Marine and Coastal Ecosystems, as part of the activities of the XI International Symposium on Carbon in Mexico, with the topic “Effect of the Copalita River on the carbonate system in the coastal zone of Bahías de Huatulco, Oaxaca, Mexico.”
- UMAR. Students Ricardo Isaí Altamirano Ávila and Charlotte Díaz Monsch of the Bachelor’s Degree in Oceanology, obtained fourth place in the knowledge contest for undergraduate students, as part of the Annual Meeting of the Mexican Geophysical Union.
- UMAR. The student Jonathan Samario won first place in the “Voices of my Earth 2020” contest. The recognition was awarded on January 18, 2021 and the essay was published in digital format in the magazine of the Secretariat of Indigenous and Afro-Mexican Peoples, Year 1, Number 1.
- UNISTMO. The student Mariano Martínez Patiño, receives the academic merit award for indigenous and Afro-Mexican youth “Seeds of Talent” granted by the Government of the State of Oaxaca, through the Secretariat of Indigenous Peoples and Afro-Mexicans.
- UNISTMO. The student Williams Fuentes Cortes gives the first workshop “Acercamiento a la Lengua Zapoteca” at the University of the Isthmus in February 2020.
- UNISTMO. Students Hizamar Alcántara Toledo, Israel Rodríguez Avendaño, Javier Jhair Santiago Chávez and Luis Martín Blas Sánchez participated in the “VII National Oral Litigation Competition”, held from February 27 - 29, 2020.
- UNSIS. Jesús Aguillón Chávez, a student of the Bachelor’s Degree in Municipal Administration, was selected as a member of the Oaxaca Youth Rights Observatory. The student presented the “Proyecto de Decreto por el cual se crea el Reglamento de las Legislaturas Juveniles”, winning in the Open Congress table.
- UNSIS. The Bachelor’s Degree in Municipal Administration obtained Accreditation, for five years, from the List of Higher Education Programs Recognized for their Good Quality, granted by the Interinstitutional Committees for the Evaluation of Higher Education (CIEES).
- UNSIS. The Master’s Degree in Strategic Municipal Planning was renewed for a period of five years in the National Program of Quality Postgraduate Programs (PNPC), obtaining the level “In Development” in said list, according to the results of the evaluation carried out by the National Council of Science and Technology (CONACyT) to this educational program.
- UNSIS. The Master’s Degree in Public Health was renewed for a period of five years in the National Program of Quality Postgraduate Programs (PNPC), obtaining the level “In Development” in said list, according to the results of the evaluation carried out by the National Council of Science and Technology (CONACyT) to this educational program.
- UNSIS. The Master’s Degree in Electronic Government was renewed for a period of five years in the National Program of Quality

Postgraduate Programs (PNPC), obtaining the level "In Development" in said list, according to the results of the evaluation carried out by the National Council of Science and Technology (CONACyT) to this educational program.

- UNSIS. Students Miguel Ángel García Reyes and Elvira Marisol Márquez Ríos won second and third place, respectively, in the "Voces de mi Tierra 2020" call for proposals. The awards were presented on January 18, 2021 and the essays were published in digital format in the magazine of the Secretariat of Indigenous and Afro-Mexican Peoples, Year 1, Number 1.
- UNSIJ. Luis Ángel Sánchez Santiago, a student in the Forestry Engineering program, received an honorable mention for participating in Young Forestry Entrepreneur 2020 with the project Mueble Mx041.
- UNSIJ. The Bachelor's Degree in Environmental Sciences obtained the 5-year Certification by the CIEES (October 2019 to November 2024).
- UNSIJ. The Bachelor's Degree in Biology obtained 5-year Accreditation by the CIEES (December 2020 to January 2026).
- UNSIJ. The Bachelor's Degree in Computer Science obtained 5-year Accreditation by the CIEES (October 2020 to November 2025).
- UNICHA. Students from the second semester of the Bachelor's Degree in Nursing won first place in the XXIII Anatomy Creativity Contest 2020, Sculpture category, held on March 4, 5, and 6 at UNAM.

2019

- UTM. First and second place in mini-sumo robots at the Continental RoboMatrix in Quito, Ecuador.
- UTM. Second place in the Student Design Competition (SDC), which took place during the IX Latin American Congress on Human Computer Interaction (CLIHC 2019) held in Panama City, Panama, from September 30 to October 4, 2019. Second place, project YAKUIN: Personal Content Verifier in Digital Messaging.
- UTM. Student Frida E. Ramírez Ortiz of the Applied Physics Engineering program was selected to attend the Frontiers in Optics 2019 event held in Washington, D.C., by the Optical Society of America (OSA) USA, September 12-18, 2019.
- UTM. Participation in the RoboChallenge in Beijing, China, as the only team from Oaxaca to participate at the university level. The competition was held from August 9 to 11, 2019.
- UTM. First place in the RoboCup Soccer Standard Platform League category of the Mexican Robotics Tournament in Guadalajara, Jalisco; the most important Robotics Tournament in the country, held March 21-23, 2019.
- UTM. First place in the Humanoid Challenge category and first place in Autonomous Vehicle at the Talent Land Competition in Guadalajara, Jalisco. Talent Land is the largest technological event in the country, held April 22-26, 2019.
- UTM. Participation in the National Design Award competition, Diseña México 2019 on October 14, 2019, where the thesis entitled "Design of Prefabricated Aquaponic System, Combining Vertical and Horizontal Cultivation Areas" by graduate Noemi Cruz Martinez, received honorable mention in the category of best Design thesis and overall winner in the category of other products/professional. Her work was also exhibited at the Franz Mayer Museum for a period of time.
- UTM. The student Daniela Isis Flores Silva, a tenth semester student of the Bachelor's Degree in Applied Mathematics at UTM, had an outstanding participation obtaining second place in the XVI International Logic Olympiad 2019, which was held on May 18, 2019 at the Madrid School in Mexico City, additionally four finalists from UTM attended the Final Phase of the International Logic Olympiad.
- UTM. First and second place in the VII Espartaqueada Nacional de Matemáticas in the upper level student category, the winners were: Viridiana Itzel Méndez Vásquez and Ludwig Cortés Reyes respectively, both students of the sixth semester of the Bachelor's Degree in Applied Mathematics, the event was held on May 19, 2019.
- UTM. Mechatronics Engineering graduate Leobardo Elí Sánchez Velasco won first place in the "Dr. José Emilio Vargas Soto" award for the best thesis in Mechatronics Engineering and related areas granted by the Mexican Association of Mechatronics. The award ceremony was held during the closing ceremony of the 18th National Congress

of Mechatronics held at the Instituto Tecnológico Superior de San Andrés Tuxtla, in the city of San Andrés Tuxtla, Veracruz, on October 19, 2019.

- UTM. Francisco Javier Espinosa García, a graduate of the Master's program in Robotics, was awarded the AMRob prize for best graduate thesis in the area of Robotics. This award was granted by the Mexican Association of Robotics and Industry (AMRob) and presented at the closing ceremony of the XXI Mexican Congress of Robotics (CoMRob 2019) held on November 15, 2019.

- UMAR. The student Luz María García García of the Bachelor's Degree in Economics won second place in the XX Political Essay Contest of the State Electoral Commission (CEE) of Nuevo León with her topic: Civil Society Organizations (CSOs) as a form of citizen participation in the municipalities of the State of Oaxaca: a proposal for their measurement.

- UMAR. Erick Daniel Cruz Mendoza, a graduate of Communication Sciences, was the winner of the 2019 "Luis Estrada" award for scientific dissemination.

- UMAR. Students Noel García García and Catalina Habana Vargas of International Relations and Tourism Administration, respectively, received the academic merit stimulus for indigenous and Afro-Mexican youth "Seeds of Talent" awarded by the Secretariat of Indigenous and Afro-Mexican Peoples of the state of Oaxaca to outstanding students who have a project to promote the languages and customs of their place of origin.

- UMAR. Christian Jair Gálvez Cortez and José Ángel Cantera Cruz, seventh semester students of the Bachelor's Degree in Economics, won first place in the "University Entrepreneur Award" of the Oaxaca Institute of Entrepreneurship and Competitiveness, in the category of Solidarity Economy and Social Impact.

- UMAR. Margoth Liliana Castro Cubillos, PhD student in Marine Ecology, Puerto Angel campus won 2nd place in the category of papers at the 6th International Symposium Campeche 2019 RECORECOS "The Network for the Knowledge of Coastal Resources of the Southeast" under the direction of Dr. Valentina Islas Villanueva, CONACYT Professor attached to the Institute of Genetics.

- UMAR. The students of the Master's program in Marine Ecology, campus Puerto Angel Francisco Muñoz Reyes, Diego Alberto Medrano García and Luis José Ortiz Martínez. They won 1st, 2nd and 3rd place respectively in the modality of poster presentation at the X Congress of the Mexican Society of Coral Reefs, under the direction of M.A.I.A. Eduardo Juventino Ramírez Chávez.

- UMAR. The student María Luisa Rodríguez Medellín obtained the third place for best poster presentation with the work entitled: Sexual dimorphism through the genital papillae of the irregular sea urchin Rhyncholampas pacificus in the 4th Latin American Congress of Echinoderms from November 10 to 15, 2019 in the City of La Paz, Baja California Sur.

- UNISTMO. Participation of Emanuel Marcial Castillo, ninth semester student in the XXIX Summer of Scientific Research, in the Robotics and Mechatronics Laboratory of the Computer Research Center of the National Polytechnic Institute, collaborating with the project called "Machine vision for biological image recognition", under the tutelage of Dr. Juan Humberto Sossa Azuela.

- UNISTMO. Rigoberto Hernández Cruz and Consuelo de los Ángeles Luis Peralta the Petroleum Engineering career participated as exhibitors in the course "Introduction to refining processes" from July 22 to 26, 2019, the course was held at the Faculty of Engineering of the UNAM.

- UNPA. Mechatronics Engineering student Itzamary Romero Sosa received an honorable mention from the Mexican Society of Mechatronics for her thesis "Application of the fiber optic Sagnac Interferometer to control an angular motion mechanism".

- UNSIS. Miguel Silva Castellanos, a tenth semester student of the Bachelor's Degree in Municipal Administration, received the 1st place prize in the State Essay Contest "El Municipalismo en México", from the hands of the Magistrate President of the Electoral Tribunal of the State of Oaxaca. Miguel Ángel Carballido Díaz. The award ceremony was held in the framework of the 50th Anniversary of the Foundation of the First Municipality in Mexico.

- UNSIS. The student Gudelia Martínez Sala, fourth semester student of the Master in Public Health at UNSIS, under the tutelage of professors: Dr. Alejandra Sánchez Bandala, Dr. Ariel Abeldaño Zúñiga and Dr. Hady Keita won 1st place in the Competition of free research papers in the 5th International Congress of Nursing 2019, Global Health: A theme of all, oral modality, with the theme: "Intergeneratio-

nal transmission of spousal violence and its social determinants".

- UNSIS. Irma Cruz Martínez, a ninth semester student of the Bachelor's Degree in Public Administration, participated in the Seminar on Identity and Community Leadership, organized by the U.S. Embassy in Mexico in collaboration with ANUIES and the University of New Mexico in Albuquerque. The seminar was held from July 7 to August 3, 2019 in the city of Albuquerque, was aimed at Mexican students, belonging to an indigenous people, outstanding for their proven academic performance and leadership both in academia and in their communities.

- UNSIS. Students Jesús Aguillón Chávez and Ángel Rojas Ruiz, both students of the Bachelor's Degree in Municipal Administration, were selected as members of the First Youth Parliament of Oaxaca, convened by the LXIV Legislature of the State Congress. As part of the activities on August 19, 2019 they attended the Training Workshop on Legislative Matters and on August 20 they were sworn in as Youth Deputies, presenting proposals and law initiatives on Sustainability and Citizen Participation in the tribune, as an exercise for the generation of public policies for the benefit of society from the youth sector.

- UNSIS. Two projects of the Master's Degree in Public Health received 2nd and 3rd place in the 2019 State Health Research Award. M.S.P. Gabriel Guerrero Reyes obtained 2nd place in the Public Health Modality with his thesis project "Post-traumatic stress in Oaxacan population affected by the 2017 earthquakes", which was directed by Dr. Roberto Ariel Abeldaño Zúñiga, with the collaboration of Mtro. José Isaías Siliceo Murrieta and Dr. María Alejandra Sánchez Bandala. Likewise, Dr. Ruth Ana María González Villoria obtained the 3rd place in the Public Health Modality, with the research "Parental practices and presence of bacteria in urinary tract infection", with the collaboration of M.S.P. Guadalupe Alejandro Ledesma Hernández and Dr. Jesús Silva Sánchez.

- UNSIS. Jesús Hernández Jiménez, student of the Bachelor's Degree in Computer Science, obtains Honorable Mention in the "Genio de la Lógica SUNEO 2019" contest, organized by the Technological University of the Mixteca.

- UNCA. Approval of Project A1-S-55142, "Elucidation of the mechanism of action in vitro of medicinal plants used in Oaxaca against scorpion venom" in the call CONACyT Basic Science 2017-2018. Technical Responsible: Dr. Mayra Herrera Martínez.

- UNCA. Participation of Lilia Lucía Estrada Fabián in the XI International Forum of Science and Engineering, Superlevel Category (FICI 2019) in Santiago de Chile.

- UNCOS. Students of Engineering in Design obtained the 3rd State place in a short film to prevent child sexual abuse, titled: Te Creo en Corto.

- UTM. CIEES Level 1 recognition for the Design Engineering program, accreditation that began in December 2018 and concludes in January 2024.

- UTM. CIEES Level 1 recognition for the Bachelor's Degree in Business Studies program, accreditation that began in March 2019 and concludes in April 2024.

- UTM. CIEES Level 1 recognition for the Engineering in Applied Physics program, accreditation that began in October 2019 and concludes in November 2024.

- UMAR. Three undergraduate study programs have Level 1 CIEES recognition as quality educational programs. The programs with Level 1 are Marine Biology, Environmental Engineering and Tourism Administration.

- UNSIS. The Bachelor's Degrees in Nursing, Business Science and Public Administration renewed their five-year Level 1 status on the List of Higher Education Programs Recognized for their Good Quality, granted by the Inter-institutional Committees for the Evaluation of Higher Education (CIEES), valid from March 2019 to April 2024.

- UNSIS. The Bachelor's Degree in Nutrition obtained a three-year Level 1 on the List of Higher Education Programs Recognized for Good Quality granted by the Inter-institutional Committees for the Evaluation of Higher Education (CIEES), valid from December 2018 to January 2022.

- UNSIJ. CIEES accreditation for five years to the Bachelor's Degree in Environmental Sciences.

2018

- UTM. Second place as best "Student paper" at the 6th International Workshop on New Trends in Medical and Service Robotics MESROB 2018, with the work "A characterization of a robotic hand

with movable palm", authored by Francisco Javier Espinoza García, Manuel Arias Montiel, Giuseppe Carbone, Esther Lugo González and Matteo Russo. Event held from 04 to 06 July 2018 in the city of Cassino, Italy.

- UNCA. Wins the National phase of Expo-Ciencias 2018 and obtains a pass to the International Forum of Science and Engineering in the Supra Level Category, to be held in August in Santiago de Chile in 2019.
- UNCA. Second place in the Student Design Competition (SDC), held in the city of Merida Yucatan, as part of the National Congress MEXIHC 2018.
- UTM. Third place in the Student Design Competition (SDC), held in the city of Merida Yucatan, within the framework of the National Congress MEXIHC 2018.
- UTM. First place in the "Humanoid Challenge" challenge for the team Robótica de la Mixteca (RDM) Humanoides UTM. Second place in the "UAS Challenge" category for team RDM DRONES UTM and third place for team RDM AUTONOMOS UTM, in the "Automodel Car" category. It represents UTM's first participation in the Talent Network framework, being the first university in the state to participate in such contest, held from April 02 to 06, 2018.
- UTM. Third place in the VI Espartaqueada Nacional de Matemáticas for Daniela Isis Flores Silva, student of the Bachelor's Degree in Applied Mathematics. Competition organized by Antorcha Magisterial, the Mexican Center for Economic and Social Studies (CEMEES) and the National Federation of Revolutionary Students Rafael Ramirez (FNERRR). The event took place in Tecomatlán Puebla, on May 19 and 20, 2018.
- UTM. Third place in the Third Robotics Tournament, with the participation of Team RDM HUMANOIDES UTM in the Robocup Standard Platform League category. The participating students were: Oscar Alberto Zavala Salas, José Armando Sánchez Rojas, Eduardo Akio Sánchez Watanabe, Rocío Ambrocio Delgado, advised by Dr. Alberto Elías Petrilli Barceló. Event organized by the Mexican Federation of Robotics, hosted by the Instituto Tecnológico de Estudios Superiores de Monterrey. Monterrey, Nuevo León from March 22 to 24, 2018.
- UTM. CIEES Level 1 quality recognition for three years to the Industrial Engineering Program in May 2018.
- UNSIS. The Bachelor's Degree in Computer Science renews the five-year Level 1, of the Padrón de Programas de Educación Superior Reconocidos por su buena alidad de los CIEES in 2018.
- UNSIJ. Selection of student Laura Yasmin Flores López, through the Young Forestry Entrepreneur contest, to participate as the Institution's Forestry Delegate for the period March 1, 2018 to March 1, 2019.
- UNCOS. 1st place obtained by students of Agroindustrial Engineering and Design Engineering in the First ExpoProyectos Productivos, held by the H. Ayuntamiento Constitucional de Santiago Pinotepa Nacional on May 25, 2018.

2017

- UTM. Global competition finalists in the Student Design Competition (SDC) held at the International Conference on Human Computer Interaction (ACM SICGHI) 2017, held in the city of Denver, Colorado, USA from May 06-11, 2017. Finalist, project PACo: An educative Instrument to Transform Society.
- UTM: First and Second place in the Student Design Competition (SDC) and First place in the poster competition, held during the 8th Latin American Congress on Human Computer Interaction (CLIHC) 2017, held in the city of Antigua Guatemala from November 08 to 10, 2017. First place, project SBK: Smart Braille Keyboard for Learning Braille Literacy in Blindo r Viasully Impaired People. Second place, project YAMI: Auxiliar complement to enable visually impaired people to use mobile devices. First place in the poster competition, YAMI: Compendium of Good Practices for Usability Studies with Visually Impaired Children.
- UTM. In May 2017 ranked as the first university in the state to have a working prototype of a rescue robot, designed and built by UTM students and academic staff. Classification that serves to participate in the World Robot Summit 2018 in the category of Disaster Robots, to be held in October in Tokyo, Japan.

- UTM. Dr. José Emilio Vargas Soto" International Award granted by the Asociación Mexicana de Mecatrónica A.C. to the best undergraduate thesis in the area of mechatronics engineering, awarded to Aldo Aragón Martínez with the thesis entitled "Design and construction of a haptic glove with force feedback". The award ceremony was held as part of the closing ceremony of the 16th National Congress of Mechatronics held at the Faculty of Higher Education (FES) Aragon of the UNAM, on October 28, 2017.

- UTM. First place for the project "Salsa de capulín" and second place for "Mermelada de mango y jamaica" in the 7th Concurso de Innovación de Alimentos Procesados held at the Universidad of La Cañada on June 09, 2017.

- UTM. Best Master's thesis protocol to I.Q. Yésica Ruiz Ramírez, student of Master of Science: Natural Products and Food, UTM, in the framework of the XVII National Congress of Biotechnology and Bioengineering, held June 25-30, 2017 in Puerto Vallarta, Jalisco, Mexico. The work is entitled "Probiotic potential and production of in vitro antimicrobial peptides from pulque lactic acid bacteria"; directed by Dr. Rogelio Valadez Blanco and co-directed by Dr. Paula Cecilia Guadarrma Mendoza.

- UTM. Third place in the Higher Level category of the National Mathematics Competition Pierre Fermat 2017, to the student of Applied Physics Engineering, Pedro Fernando Ocaña García; awarded out of 1700 participants. Competition organized by the Higher School of Physics and Mathematics of the National Polytechnic Institute on November 17, 2017.

- UMAR. Student Yazmin Virgen Malpica was awarded the prize for the best thesis on "Protected natural areas and climate change" of the Bachelor's Degree in Biology.

- UNSIS. Enactus-UNSIS is one of the 7 teams selected among 33 universities across the country, to be supported in seed capital in the Special Competition Enactus Mexico and Walmart USA "Women's Economic Empowerment (WEE)", Project Accelerator 2016-2017.

- UNSIS. Tenth semester students of the Bachelor's Degree in Nutrition: Cruz Jiménez Lino René, Flores García Angélica and Reyes Hernandez Rocío, won third place in the Didactic Material Contest organized at the XXXII National Congress of the Mexican Association of Members of Schools and Faculties of Nutrition (AMMFEN), held on April 07, 2017.

- UNSIS. The tenth semester students of the Bachelor's Degree in Nutrition: Carreño Rodríguez Edith Abigail, García Reyes Keila Marleni, Martínez Martínez Areli, Ríos Díaz Gabriela and Rios Ortiz Misael, won third place in the New Food Product Development Contest organized at the XXXII National Congress of the Mexican Association of Members of Schools and Faculties of Nutrition A.C. (AMMFEN), held on April 07, 2017.

- UNSIS. UNSIS receives a Special Mention as a Higher Education Institution that has stood out for its academic work linked to the Agenda for Municipal Development Program, in the framework of the 2017 Awards Ceremony of the Agenda for Municipal Development Program, held at the Ministry of Education on December 07, 2017.

- UNSIS. Rodrigo Silva Martínez, a graduate of UNSIS, received the National Research Award: Impulso al desarrollo de las finanzas estatales, for his thesis research work "Análisis de la capacidad recaudatoria de los ingresos fiscales municipales de los años 2013 y 2014 en Santa Catarina Cuixtla, Oaxaca" (Analysis of the collection capacity of municipal tax revenues for the years 2013 and 2014 in Santa Catarina Cuixtla, Oaxaca).

- UNSIS. The Bachelor's Degree in Nursing is awarded the First National Place for Performance of Excellence EGEL.

- UNSIS. EGEL Excellence Performance Awards.

- UTM. Awards for Excellence in EGEL Performance.

- UTM. CIEES Level 1 Quality Recognition for an additional year for the Mechatronics Engineering Program, Computer Engineering and Bachelor's Degree in Applied Mathematics.

- UMAR. EGEL Excellence Performance Awards.

- UNISTMO. Level 2 in the EGEL High Academic Performance Nursing Program, for the Bachelor's Degree in Nursing.

- UNPA. Awards for Excellence in EGEL Performance.

2016

- UTM. The Enactus Team from the Technological University of the Mixteca is a finalist in the Knorr Company Special Competition.
- UTM. Students of Electronics Engineering and Mechatronics Engineering participated in the First Robotics Tournament held at the Instituto Tecnológico del Istmo. They obtained awards in the following categories: 1st place in Line Followers, 1st and 2nd place in Minu-Sumo, 1st place in Mega-Sumo, 1st place in Free Robot.
- UTM. The ENACTUS team won 2nd place in the First State Contest of Sustainable Productive Projects "Employ your Ideas." This contest was organized by the Fundación para el Desarrollo "Coatlicue", A.C., the Coordinación del Servicio Nacional de Empleo-Oaxaca (CSNEO). Instituto de la Juventud de Oaxaca (INJEO), Consejo Oaxaqueño de Ciencia y Tecnología (COCYT), Universidad Tecnológica de los Valles Centrales de Oaxaca (UTVCO), Delegación de la Secretaría de Economía (SE) en el Estado de Oaxaca and Notary Public No.48.
- UTM. Recognition of the ENACTUS team for its participation in the XI Santander Award for Business Innovation, where the "KUILI" project was chosen among the first 20 places out of a total of 1,066 projects registered and evaluated at the national level.
- UTM. Rafael Adrián García García and Juan Pablo Avendaño Santiago, graduates of the Mechatronics Engineering program at the Technological University of the Mixteca, won first and second place in the national Mechatronics Engineering thesis competition "Dr. José Emilio Vargas Soto Award" granted by the Asociación Mexicana de Mecatrónica A. C.
- UTM. The Enactus Team participated in and was the winner of the "Jóvenes ECOSOL" call from INAES, IMJUVE and SEDESOL, for the accompaniment and orientation of Social Enterprises of Collective Youth Entrepreneurship.
- UTM. Dr. Ana Laura Medina Conde Professor-Researcher of the Institute of Social Sciences and Humanities of the Technological University of the Mixteca, was a finalist in the Raquel Bernal Award for Female Resilience 2016 (INMUJERES), (AMPIEP).
- UMAR. María José Fernández Aldecua won the "Eduardo Ibarra Colado" Award for best paper at the 6th Latinamerican and European Meeting on Organization Studies (LAEMOS). Viña del Mar, Chile.
- UNISTMO. Erick Álvarez López, a student of the Bachelor's Degree in Computer Science, won a scholarship from the S.R.E. Proyecta 100,000, for a stay in the United States, from October 29 to December 10, 2016.
- UNPA. First place in the Newton Fund Video Competition, organized by the Royal Academy of Engineering in London, England with the project entitled: Eco-efficient construction system for social housing.
- UNSIS. Team Enactus was one of 7 selected among 33 projects in the Enactus Special Competition - Walmart Women's Economic Empowerment (WEE), Project Accelerator 2016-2017.
- UNSIS. The ENACTUS-UNSIS team won 3rd place for university social entrepreneurship in the Enactus National Competition 2016.
- UNSIS. First place at the national level in the HACKATHON OpenStack, held in Guadalajara, Jalisco. Participating students Benito Alfredo Reyes Hernández and graduate Luis Ángel Pérez Herrera, from the Bachelor's Degree in Computer Science, who developed an application for Electronic Health Records in the cloud. The application was presented in October 2016 in Barcelona, Spain.
- UNSIS. First place in the Didactic Material Contest organized at the XXXI National Congress of the Mexican Association of Members of Schools and Faculties of Nutrition (AMMFEN). Participating students from the Bachelor's Degree in Nutrition were: Díaz López Vianey, Flores García Angélica and Reyes Hernández Rocío.
- UNISJ. Identification of a new insect species belonging to the order Psocoptera. It was named "Lachesilla casasolai", in recognition of Dr. José Arturo Casasola González, professor-researcher of the University of Sierra Juárez (UNSIJ) for his dedication in the last 10 years to the study of this group of insects in the Sierra Norte region of the state of Oaxaca.

- UNSIJ. The student Gerardo Cruz Jiménez of the Bachelor's Degree in Biology participated in the International Forum PROTIST 2016 held in Lomonosov Moscow State University, Moscow, Russia from June 06 to 10, 2016, presenting part of his thesis work entitled First records of moss ciliates in Mexico, which was selected to receive the HOLZ- CONNER AWARD recognition granted by the International Society of Protistologists (ISOP). 2016.
- UNSIJ. José Jiménez Ramírez, a student of the Bachelor's Degree in Environmental Sciences, won first place for the state of Oaxaca in the second "Let's gather actions for water" contest, Puebla, Oaxaca and Tlaxcala edition. With the objective of encouraging the generation of multidisciplinary university proposals that contribute to the discussion, analysis and solution of the water problems of the participating states.
- UNCA. Third place in the Student Design Competition at the VI Mexican Congress of Human-Computer Interaction (MexIHC 2016), held in Colima. Winning project: "Kui Xékua: Help for older adults". "Kui Xékua", translated from the Mazatec indigenous language means "help".
- UNCA. First place in the Vive ConCiencia 2016 contest, at the state level with the projects "Study, conservation and utilization of the huacle chile in Oaxaca" in the challenge 'Food Security' presented by students from UNCA and NovaUniversity.
- UNCA. First place in the Vive ConCiencia 2016 competition, with the project "Conservation of Pochocuil (Arsenura armida) and reforestation of its host trees of pochote (Bombacopsis quinata) and Jonote (Trema micrantha)".
- UNCA. First place in the Vive ConCiencia 2016 contest, with the project "Separa y gana" in the "environment" challenge.
- UNCOS. First place in the first short film contest, organized by the University of La Cañada (Soy negro Soy blanco).
- UTM. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degrees in Business Sciences and Industrial Engineering.
- UMAR. CENEVAL Award for Excellence-EGEL Performance in the Bachelor's Degrees in Tourism Administration, International Relations and Bachelor's Degree in Communication Sciences.
- UNPA. CENEVAL Award for Excellence-EGEL Performance in Nursing and Mechatronics.
- UNSIS. CENEVAL Award for Performance of Excellence EGEL in Nursing and Business Sciences.

2015

- UTM. Tetra Enactus National Champion 2015. UTM won its fourth consecutive national championship. The project is named ÑU'U-SAÁ (from the Mixtec "New Land"); which seeks a holistic development of the region through youth development and university outreach.
- UTM. First place in the National ENACTUS National Competition and was awarded the KPMG "Empowering Change" trophy, which symbolizes the impact of an entrepreneurial culture in favor of society.
- UTM. The UTM Entrepreneurship Team represented Mexico at the Enactus World Cup, held in Johannesburg, South Africa, from October 14 to 16, 2015, where they won third place in the league.
- UTM. First, second and fourth place in the Latin American Congress on Human-Computer Interaction (CLIHC), held in Cordoba, Argentina.
- UTM. Municipal Excellence Award 2015, held October 28-30 in Chihuahua, Chihuahua. Recognition for the project: "Inclusive, Dignified and Productive Recycling for the Sustainability of Huajuapan de León" (KUILI), a project initiated by the ENACTUS team of the Technological University of the Mixteca, working jointly with the Department of Ecology of the Municipality of Huajuapan de León, the organization KANDA International Solidarity and the city's recyclers.
- UTM. Recognition for the ENACTUS team's participation in the third World Forum on Local Economic Development in Turin, Italy, October 13-16. Organized by the Municipality and the city of Turin, the global network of United Cities and Local Governments (UCLG) and its LED working group, the Andalusian Municipalities Fund for International Solidarity (FAMSI), the United Regions Organization (ORU, FOGAR), the Brazilian Service of Support to Small and Medium Enterprises (SEBRAE), the International Labor Organization (ILO) and the United Nations Development Program (UNDP).

- UTM. Report The Grasshoppers of Hope in the prestigious British weekly The Economist, published on its cover on September 19.
- Which is a reference to Oaxaca and its State University System.
- UTM. ENACTUS team wins 5th place in the third edition of the Walmart + Ibero Sustainable Innovation Award, organized by Walmart de México y Centroamérica, together with the Universidad Iberoamericana.
- UTM. Fourth place in the Mexican Human-Computer Interaction Competition held in Colima, Colima, Mexico.
- UMAR. Student Cindy Reyes Gonzalez of the Marine Biology program obtains the Pedro Mercado Sanchez National Oceanography Award, during the XVIII National Oceanography Congress held in La Paz, Baja California Sur.
- UNISTMO. Students Zanya Vera Gross, Emmanuel Velázquez Sánchez, Ariadne Mardely Díaz Cortés and José Alberto Aragón won first place in 6° Certamen Nacional Universitarios por el Servicio Social y Desarrollo Agrario, held in the Senate Chamber in December 2015.
- UNSIS. The ENACTUS-UNSIS team is a national finalist in the special competition "Inheriting Health and Flavor" organized by ENACTUS Mexico and Unilever Corporate, through its Knorr brand, for its campaign "Cocinando rico con mamá" which consisted of developing a social program that promotes proper nutrition for Mexican families.
- UNSIS. Integration of UNSIS into the National University Extension and Innovation Network, which arose as a binational cooperation agreement between SAGARPA and the University of Arizona to contribute to rural development.
- UNSIJ. Luz Bernardita Silva, a student of the Bachelor's Degree in Environmental Sciences, won first place for the state of Oaxaca in the first contest "Let's gather actions for water: Puebla, Oaxaca and Tlaxcala edition". With the objective of encouraging the generation of multidisciplinary university proposals that contribute to the discussion, analysis and solution of the water problems of the participating states. Organized by the Program to Support the Hydraulic Development of the States of Puebla, Oaxaca and Tlaxcala (PADHPOT), the UNAM Water Network and the Program for the Management, Use and Reuse of Water at UNAM (PUMAGUA).
- UNSIJ. M.I.T.I Florentino Orocio Méndez, Professor-Researcher at IEA, won third place in the 22nd SNCyT 2015, with the project "Wireless control of devices that work with alternating current."
- NOVAUNIVERSITY. Students from the Bachelor's Degree in Computer Science and Bachelor's Degree in Administration won first place in the Hackaton organized at the state level by the Ministry of Administration as part of the 2015 Digital Fair.
- NOVAUNIVERSITY. Students from the Bachelor's Degree in Computer Science won first place in the 5th Cprog-UNCA 2015 Programming Contest.
- UTM. Number 1 nationally in the Bachelor's Degrees in Business Science, CENEVAL, EGEL-ADMON, and Computer Engineering, CENEVAL, EGEL-COMPU.
- UMAR. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degrees in Tourism Administration, International Relations and Marine Biology.
- UMAR. 1st place nationally in the Bachelor's Degree in Tourism Administration, EGEL-CENEVAL.
- UNISTMO. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degrees in Business Administration and Law.
- UNPA. CENEVAL Award for Excellence-EGEL Performance in the Bachelor's Degree in Business Administration.
- UNSIS. CENEVAL Award for Excellence-EGEL Performance in the Bachelor's Degree in Business Sciences.

2014

- UTM. Three-time Enactus 2014 National Champion with its sustainable proposals "Crece" and "Kuili", focused on business creation and development.
- UTM, first and third place in the Mexican Congress on Human-Computer Interaction (MexIHC 2014) and the Mexican Computing Encounter (ENC 2014), respectively.

- UTM. UTM's Enactus Team won 3rd place in its league at the 2014 Enactus World Cup International Competition held October 22-24 in Beijing, China.
- UTM. The ENACTUS team from the Technological University of the Mixteca qualified as a finalist in the NESTLÉ "nurturing young people" competition.
- UMAR. Student Hernández Hernández Alejandra Gricelda, representing UMAR, at the first University Meeting on Foreign Policy, organized by the Ministry of Foreign Affairs and the Matías Romero Institute.
- UNISTMO. The Creator Team of the obtained the 1st Place in the Creativity Contest of Science and Technology and Innovation 2014. Organized by the Technological Institute of Salina Cruz,
- UNISTMO. The students Alejandra Clavel Martínez, Sarahí Alonso Miguel and Sandra Muñoz Martínez, from the Law Career, obtained the pass to the regional stage of the II National Oral Litigation Competition, organized by the Institute of Criminal Sciences "INACIPE" and the American Bar Association's Rule of Law Initiative "ABA ROLI".
- UNSIS. The UNSIS- ENACTUS team, with the participation of students from the Bachelor's Degrees in Nutrition, Business Sciences, Municipal Administration and Computer Science, won 1st place in the National Competition as "Amateur of the Year".
- UNSIS. The Bachelor's Degrees in Nursing and Nutrition, as well as the Master's Degree in Public Health have a favorable Academic Technical Opinion issued by the Interinstitutional Commission for the Formation of Human Resources in Health (CIFRHS).
- UNSIS. M.P.E.M. Emanuel Lorenzo Arellanes, a graduate of the Master's Program in Strategic Municipal Planning, was awarded the Luciano Parejo Prize for Studies on Urban Management, Promotion and Land Planning, in San Juan, Argentina.
- UNSIS. Santiago Landeta Velázquez, a graduate student of the Master's program in Public Health, won 2nd place in the State Research Award in the Public Health category.
- UNSIS. Fourteen students of the Bachelor's Degrees in Business Sciences and Municipal Administration were winners of the stimulus to recognize productive projects of social groups integrated by young university students between 18 and 28 years of age by INAES.
- UNSIJ. Students from the University of Sierra Juárez won first place in the area of Environmental Protection in category A of the National Call for Youth Initiative-Es por México issued by the Youth Commission of the LXII Legislature and the Electoral Institute.
- UNSIJ. Students Daniel Cruz Paz and Erick Ramirez Lopez, students of the Bachelor's Degree in Computer Science won first place in the fourth programming contest held at the University of La Cañada on the occasion of the V Computer Science Week.
- UNCA. Obtains 1st and 3rd place in the contest of creativity in Science, Technology and Innovation in the State of Oaxaca. Oaxaca State Expo-Sciences 2014.
- UNCA. The UNCA team won 1st place in the science and technology event held November 18-20, 2014 in Tepic, Nayarit.
- UTM. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degrees in Business Science and Mechatronics Engineering.
- UMAR. CENEVAL Award for Excellence-EGEL Performance in the Bachelor's Degrees in Communication Sciences and International Relations.
- UMAR. 2nd place nationally in the Bachelor's Degree in Tourism Administration, CENEVAL-EGEL.
- UNISTMO. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degree in Business Sciences.
- UNSIS. CENEVAL Award for Performance of Excellence EGEL in the Bachelor's Degree in Nursing.

2013

- UTM. It obtained 1st place in its league and 1st place Nationally in the Enactus Mexico 2013 National Competition, so Enactus- UTM represented Mexico as National Champion in the World Cup Enactus 2012 World Competition,

which was held for the first time in a Latin American venue, Cancun City, Qro.

- UTM. Technological University of the Mixteca placed second in the 2013 World Usability Competition (HCI or Human-Computer Interaction) held in Paris, France from April 27 to May 2, 2013.
- UMAR. Student Elizabeth Santiago Hernandez won 4th place in the National Francophonie by the French Embassy in a poetry contest.
- UMAR. Students Joel Ricci López and Jennifer Abascal Vázquez obtained second place for the oral presentation of the paper "Evaluation of the effectiveness of fungicides in the cultivation of carica papaya in the Oaxacan coastal area for the control of Colletothrichum sp" which was presented at the XV International Congress of the Mexican Society of Phytopathology, July 2013.
- UNISTMO. Inauguration of the National Wind Energy Training Center "CNCE" in conjunction with the Gamesa Group, Global Technological Leader in the Wind Energy Industry. The CNCE is the first of its kind nationwide. Its purpose is to train personnel in the region at no cost.
- UNSIS. Sindy Monserrat Zavaleta, a student of the Bachelor's Degree in Computer Science, was awarded a prize in the Technological Challenge contest for developing the "System for cognitive rehabilitation in the elderly".
- UNSIS. The QFB. Santiago Landeta Velázquez, student of the Master's Degree in Public Health, won 1st Place in the State Research Award in the Public Health modality.
- UNSIS. First place for the thesis "A software for low-cost haptic interfaces for motor evaluation and rehabilitation" by Luis Ángel González Rojas, from the Bachelor's Degree in Computer Science, awarded by the National Association of Information Technology Education Institutions (ANIEI), during the XXVI National Congress and XII International Congress of Informatics and Computing".
- UNSIS. The student Heriberto Ramírez López, member of the UTM-UNSIS team, obtained 3rd place in the International Human-Computer Interaction Contest, held in Costa Rica.
- UNSIS. 1st Place of the team of students of the Bachelor's Degree in Computer Science in the Hackathon, held as part of the Oaxaca Digital Fair, for developing the "Control system for services for people with motor disabilities using voice commands".
- UNSIJ. Enrique Hernández Rodríguez, a graduate of the Bachelor's Degree in Biology, won 3rd place among all categories at the undergraduate level in the contest organized by COCYT, the National Network of Youth Activities in Science and Technology and the International Movement for Scientific and Technical Recreation (MILSET) in the framework of the XX National Week of Science and Technology.
- UNSIJ. Students of the Environmental Sciences degree obtained first place in the area of Environmental Protection in category A of the National Call for Youth Initiative-Es por México, issued by the Youth Commission of the LXII Legislature and the National Electoral Institute.
- UNCA. Oaxaca Technological Challenge Award.
- UNCA. Obtains 2nd place in the contest of creativity in Science, Technology and Innovation in the State of Oaxaca. Oaxaca State Science Expo-Science 2013.
- UNCA. 1st Place in the Student Design of the Latin American Congress of Human-Computer Interaction (CLIHC 2013). Held in Costa Rica.
- UTM. CENEVAL Award for Performance of Excellence- EGEL in Mechatronics Engineering and Business Sciences.
- UMAR. No. 1 in the Bachelor's Degree in Tourism Administration at the national level, EGEL-CENEVAL.
- UMAR. CENEVAL Award for Performance of Excellence EGEL in the Bachelor's Degree in International Relations.
- UNPA. CENEVAL Award for Performance Excellence- EGEL in the Bachelor's Degree in Business Administration.
- UNSIS. CENEVAL Award for Performance of EXCELLENCE - EGEL in the Bachelor's Degree in Business Sciences.

2012

- UTM. Finalist in the ACM-ICPC competition in its world phase to be held at the University of Warsaw, Poland.
- UTM. Winner of the 1st National Place in the Enactus Mexico 2012 National Competition; therefore Enactus-UTM represented Mexico as National Champion in the World Cup Enactus 2012 World Competition held in Washington DC in October 2012.
- UTM. First and third place in the Mexican Congress of Human-Computer Interaction (MexIHC), held at ITAM, Mexico City.
- UTM. Received the RASHID award for best scientific paper at the 22nd International Conference on Electronics, Communications and Computing. CONIELECOMP 2012.
- UTM. Obtained his pass to attend the final phase of the multimedia project 2012, within the framework of the VI Latin American Contest of Computing Projects.
- UTM. Won 1st Place in the Walmart Women's Economic Empowerment Project Partnership 2011-2012 Competition.
- UTM. First Place in the SIFE Mexico National Competition by the Students in Free Enterprise (SIFE) Team held at the Banamex Convention Center in Mexico City on May 27 and 28, 2012.
- UTM. A student of the Bachelor's Degree in Business Sciences won the 2011 State Youth Award for designing the ITA-YAJI system, which encourages the creation of productive projects for Mixtec women in highly marginalized communities.
- UMAR. Ilda Olivia Santos Mendoza, graduate of the Bachelor's Degree in Marine Biology, won 1st place for the best thesis in Electrochemistry 2012, during the XXVII Congress of the Mexican Society of Electrochemistry and 5th Meeting of Mexican Section of the ECS.
- UMAR. Cervando Sánchez Muñoz, graduate of the Master's Degree in Environmental Sciences, obtained 3rd place for the best Master's thesis in Electrochemistry 2012, during the XXVII Congress of the Mexican Society of Electrochemistry and 5th Meeting of Mexican Section of the ECS.
- UMAR. Isabel Raymundo González, a graduate student of the Bachelor's Degree in Marine Biology, won third place in the discipline of research papers in the 2012 National Contest of University Papers organized by the Natural Areas Commission (CONANP).
- UNISTMO. The Tehuanos team won 3rd place at the national level in the National Programming Contest, organized by the Universidad del Golfo de México, Campus Oaxaca.
- UNSIS. The Biosafety Commission has the favorable opinion issued by the Inter-Secretarial Commission for Biosafety of Genetically Modified Organisms (CIBIOGEM), the National Commission for the Knowledge and Use of Biodiversity (CONABIO), the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) and the Ministry of Environment and Natural Resources (SEMARNAT) as a quality organization in Biosafety.
- UNSIS. Juan Manuel Jiménez Canseco, a graduate in Computer Science, won first place in the National Computer Science Thesis Contest organized by the Asociación Nacional de Instituciones de Educación en Tecnologías de la Información A.C. (ANIEI). (ANIEI).
- UNCA. National Youth Award to the Agroindustrial Engineering student Arturo Sánchez Anastasio.
- UTM. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degrees in Business Sciences, Mechatronics Engineering and Industrial Engineering.
- UMAR. Number one in the country in Tourism Administration, EGEL-CENEVAL.
- UNPA. CENEVAL Award for Performance of Excellence-EGEL in the Bachelor's Degree in Business Sciences.
- UNSIS. 3rd place at the national level for the Bachelor's Degree in Computer Science, EGEL-CENEVAL.
- UNSIS. 2nd place nationally in the Bachelor's Degree in Nursing, EGEL-CENEVAL.

2011

- UTM. Third regional place in Mexico and Central America in 2011 in the Competition organized by the ACM and the Special Interest Coup of Computer-Human Interaction. Obtaining the pass to the world final held in Warsaw, Poland.
- UTM. Ranked among the 10 best in the world by the ACM SIGCHI in its Student Design Competition, for the project called VITU, held in Vancouver, Canada.
- UTM. Ranked among the top 5 in the world by ACM SIGCHI in its Student Design Competition for the TIMI Project, held by UPA in Atlanta in May 2011.
- UTM. Wins 1st Place in its league and 2nd Place Nationally in the Enactus Mexico 2011 National Competition. Special invitation as runner-up to be part of the Mexican Delegation in the World Competition held in Kuala Lumpur, Malaysia.
- UTM. 1st and 2nd Place in the Design category for Graduate level students at the X Symposium on Human Factors in Computer Systems and the V Latin American Congress on Human-Computer Interaction, held in Porto de Galinhas, Brazil.
- UTM. First place in the Isdc contest organized by the UXPA (User Experience Professional Association), held in Atlanta, Georgia.
- UTM. 1st place in the ACM ICPC Cities Finals of Mexico Occident & Pacific, held at ITESO University, Guadalajara.
- UTM. 3rd place in the Mexico & Central America Regional Contest, held at ITESO University, Guadalajara.
- UTM. Obtained the award: Dr. Olexandr Glot and Dr. Marco Polo Tello Velasco in the framework of the State Prize for Science and Technology 2011.
- UTM. UTM professors were awarded the project Design and construction of a prototype of a portable equipment for field diagnosis of the modules that make up the automatic piloting (pa) of 135 khz, for the Metro Collective Transportation System of Mexico City.
- UTM. Paola Viridiana Espinosa Gordillo, Business Science student, received the UVM award for Social Development 2011 and the state youth award 2012.
- UTM. In October, David Alberto Benítez González, a student of Applied Mathematics at the Technological University of the Mixteca, won 3rd place in the Pierre Fermat National Mathematics Competition organized by the Escuela Superior de Física y Matemáticas of the Instituto Politécnico Nacional.
- UMAR. Ricardo Adrián Gallegos Lara, a graduate of the Bachelor's Degree in Animal Husbandry, won the Isabel Guerrero prize, with first place in the poster modality with the thesis "Effect of the Stunning Method on the Sensitivity and Quality of Pork Meat", during the 5th National Colloquium on Meat Science and Technology.
- UMAR. Students Alí Hassan Cruz Galicia and Evelio Matus Martínez, from the Computer Science degree program, obtained second place in the "Sumo" category, in the 5th State Contest of Minirobotics, at the Technological University of the Mixteca (UTM).
- UNISTMO. The Team "RJ-LMU" integrated by the students José Luis González Gálvez, Erwis Melchor Pérez and José Pablo Santiago Cabrera, obtained the 3rd place in the V State Contest of Minirobótica. Event organized by the Technological University of the Mixteca.
- UNPA. The LOBOAX team, made up of students from the Mechatronics Engineering career, won first place in the V State Contest of Mini-Robotics, held at the Technological University of the Mixteca in Huajuapan de León, Oaxaca.
- UNPA. The H2R team, integrated by students of the Mechatronics Engineering career, obtained the 2nd place in the V State Contest of Mini-Robotics, held at the Technological University of the Mixteca in Huajuapan de León, Oaxaca.
- UNSIS. Carlos Flores Aguilar, a student of the Bachelor's Degree in Nutrition, won 1st place in the research work contest with the topic: Nutritional quality of a hamburger made from black kite (Euthynnus lineatus). During the 26th National Congress of the AMMFEN, held at the Casino de la Feria de Aguascalientes.
- UTM. 2nd place nationally in the Computer Engineering EGEL-CENEVAL.
- UTM. 2nd place nationally in Mechatronics Engineering, EGEL-CENEVAL.
- UTM. Bachelor's Degree in Business Sciences

obtains 10th place at the national level, EGEL-CENEVAL.

- UMAR. Bachelor's Degree in Tourism Administration, no.1 at national level, EGEL-CENEVAL.

2010

- UTM. First place at national level in the interface design contest in MexIHC 2010, with the project called TIMI: A system to help indigenous groups in the use of public transportation. Held in San Luis Potosí.
- UTM. UTM's SIFE team wins 1st place in its league and 3rd place nationally in the SIFE Mexico National Competition and the honor of being invited to observe in the world competition on October 10 and 12 in Los Angeles, California.
- UTM. UTM's SIFE team obtains 2nd place overall nationally and an economic prize of 2,500 dollars in the Let's can Hunger, Campbell's competition.
- UTM. 1st and 2nd place in the 4th Mini Robotics Contest organized by UNPA.
- UTM. 1st, 2nd, 3rd and 4th place in the Second National Programming Contest 2010 organized by the Instituto de Estudios Superiores del Golfo de México, in Oaxaca.
- UMAR. Honorable Mention for the thesis Biological activity of plant species of the state of Oaxaca: Sycyos bulbosus (Curcurbilaceae), Encyclia michuacana (Orchidaceae) and Acalypha cuspidata (Euphorbiaceae), of the Bachelor of Biology by the graduate Mayra Herrera Martínez, in the thesis contest of the solemn session of the Botanical Society of Mexico 2010.
- UMAR. Lorenzo Ruiz Santos, student of the Master of Wildlife, UMAR, obtained 2nd place in "Oral Presentations" with "Avifauna of the low deciduous forest in Santa María Colotepec, Oaxaca", at the X Congress for the Study and Conservation of Birds in Mexico, Xalapa, Veracruz.
- UMAR. Viewhaus, a Guadalajara-based video equipment supplier, sponsored a special award for the best university documentary, which was won by the short film "Trazos de resistencia," produced by students from the University of the Sea, Huatulco campus, directed by Alma Cizaña.
- UNISTMO. 2nd Place in the Bioprocess and Sustainability Poster Category, organized by the Latin American Society of Environmental and Algal Biotechnology.
- UNISTMO. Alan Carrasco Caballero, a Chemistry Engineering student, won the "Gold Medal" in the XV Iberoamerican Chemistry Olympics, which was held at the Faculty of Chemistry of the National Autonomous University of Mexico, on November 1, 2010.
- UNSIS. Paula Cortés Acacia, a graduate of the Bachelor's Degree in Business Administration received the Honorable Mention in the XXVI International Financial Research Award, IMEF-DELOITTE, Category: Research Papers, with the Thesis "Analysis of the Financing of Microenterprises in the Commerce Subsector of the City of Oaxaca de Juárez".
- NovaUniversity. Sixth semester students of the Bachelor's Degree in Administration program prepared the Municipal Development Plan for San Pedro Apóstol, Ocotlán, thus enabling the municipality to comply with one of its municipal requirements before the state government.
- UTM. 4th place nationally in Computer Engineering, EGEL-CENEVAL.
- UTM: 1st place nationally in Electronics Engineering, EGEL-CENEVAL.
- UTM. 9th place nationally in the Bachelor's Degree in Business Science, EGEL-CENEVAL.
- UMAR. 1st place nationally in the Bachelor's Degree in Tourism Administration, EGEL-CENEVAL.

2009

- UTM. Finalist in the ACMI-ICPC competition in its world phase, held in Stockholm, Sweden.
- UTM. A student of the Food Engineering program receives an Honorable Mention in the National Student Poster Contest from the Chemical Society of Mexico, A.C. for her work: Dehydration of saladette tomatoes in a rotating tray dryer.
- UNISTMO. First place in the design of the logo for the Gastroenterology Service of the Centro Médico Nacional 20 de noviembre. Obtained by student Dhanaé Alheli Pérez Arellanes.

- UNISTMO. Team Shunco, made up of students Getsemaní Arista López, Josué Cervantes Sánchez and Carlos Mijangos Jiménez, won third place in the "Robots following trajectories" contest at the International Mechatronics Congress and Second National Polytechnic Congress held at the Technological University of the Mixteca on April 24, 2009.
- UTM. 5th place nationally in the Bachelor's Degree in Electronics Engineering, EGEL-CENEVAL.
- UTM. 1st place nationally in the Bachelor's Degree in Computer Engineering, EGEL-CENEVAL.
- UMAR. 2nd place nationally in the Bachelor's Degree in Communication Sciences, EGEL-CENEVAL.

2008

- UTM. First place in the Student Design Competition within the CHI, a worldwide student competition. Organized by the ACM and the Special Interest Group of Computer-Human Interaction, it is the most prestigious competition in the world in this area. Held in Florence, Italy. The project with which UTM participated is Ñuu Xaa with the title A System to Support Homeless People's Self Subsistence.
- UTM. 1st place in the SIMUL-AT competition at the Sixth International Congress of Mechatronics Engineering, held at the ITESM, Monterrey, Nuevo Leon.
- UTM. Second regional place in the ACM-ICPC (Association of Computing Machinery-International Collegiate Programming Contest) in the regional phase of Mexico-Central America, obtaining the pass to the world phase held in Stockholm, Sweden in 2009.
- UMAR. Student Juan Pablo Gutiérrez de la Mora won second place in the University Advertising Award in the print category, an event sponsored by the National Advertising Association. With the theme: Alcohol marks the end of the road.
- UMAR. Elizondo Paredes Luis Constantino was selected as Mexico's delegate to the "World Youth Congress of Peace Child International and UNICEF, Quebec, Canada.
- UNISTMO. Students José Yedid Aguilar López, Martha del Carmen Ferra González and María del Rosario Santiago Carrasco, won first place in the "Robots following trajectories" contest, within the framework of the International Congress of Mechatronics and Second National Congress of Polytechnics. Held at the Polytechnic University of Chiapas from April 02 to 04, 2008.
- UNPA. Rodolfo Morales Ramírez, a student of the Design Engineering career obtained the fifth place in the 2nd National Furniture Design Contest organized by the Universidad Autónoma Metropolitana (UAM) and the Asociación Mexicana de Proveedores de la Industria de la Madera y Mueblera (AMPIMM). Held in Mexico City on June 14, 2008.
- UNSIJ. Elizabeth Judid Vázquez Pérez, student of the Bachelor's Degree in Environmental Sciences received the 2008 National Indigenous Youth Award in the area of Conservation and Use of Natural Resources.
- UTM. 1st place nationally in Electronics Engineering, EGEL-CENEVAL.
- UTM: 1st place nationally in the Bachelor's Degree in Industrial Engineering, EGEL-CENEVAL.
- UTM: Among the first places nationally in the Computer Engineering Degree EGEL-CENEVAL

2007

- UTM. Second place in the Student Design Competition within Computer Human Interaction held in San Jose California, USA.
- UTM. Finalist in the ACM-ICPC competition in its world phase, held in April in Tokyo, Japan.
- UTM. Finalist in the Google Code Jam Latin America 2007 held in Belo Horizonte, Brazil.
- UTM. Students of the Bachelor's Degree in Business Sciences obtained 1st place at the national level as the best investment project in the Industrial Economics area, with the COCOVID project, a coconut water bottling company. In the framework of Espacio Vanguardia 2007 organized by Televisa.
- UTM. A student in the 7th Semester of Design Engineering won the Instituto Estatal de la Juventud award, with the project: Ergonomic Base for Lap top.

- UMAR. Student Sanchez Garcia Lucila, Youth Delegate of Mexico in the 62nd General Assembly of the United Nations.
- UNISTMO. Dhanaé Alehli Pérez Arellanes, student of Design Engineering, won first place in the 1st Student Design Contest "Logo and Slogan", held at the University of Sonora, Division of Social Sciences, on November 7, 2007.
- UNPA. Carlos Manuel Copto del Puerto and Gerardo Roque Celis, Computer Engineering students, obtained fourth place in the 2nd Minirobotics Contest, organized by the Technological University of the Mixtecaa on April 12, 2007.
- UNPA. The students Pedro Camacho Díaz and Luis Fernando López Castillo, students of Computer Engineering obtained the third place in the 2nd Minirobotics Contest, organized by the Technological University of the Mixteca on April 12, 2007.
- UNPA. Carlos Manuel Copto and Gerardo Roque Celis, Computer Engineering students, obtained fourth place in the Minirobotics Contest organized by the Instituto Tecnológico de Oaxaca (ITO) on May 19, 2007.
- UNPA. Students Pedro Camacho Díaz and Luis Fernando López Castillo, from the Computer Engineering program, won fourth place in the Minirobotics Contest of the Instituto Tecnológico de Oaxaca (ITO) on May 19, 2007.
- UNPA. National Award for the Best Doctoral Thesis in Chemical Sciences to Dr. Eduardo Baez Garcia. Awarded by the Chemical Society of Mexico.
- UNPA. National Award to the Best Doctoral Thesis in Polymers, to Dr. Eduardo Báez García, summoned by the Polymer Society of Mexico.
- UNSIS. Elizabeth Judid Vázquez Pérez, a student of the Environmental Sciences degree received the 2007 National Youth Award in the field of Environment.

2006

- UTM. First place in the ACM-ICPC (Association of Computing Machinery-International Collegiate Programming Contest) in the Mexico-Central America regional phase, obtaining a pass to the world final held in Tokyo, Japan in 2007.
- UTM. Finalist in the ACM-ICPC contest in its world phase, held in April in San Antonio, Texas, USA.
- UTM: Computer Engineering obtains accreditation from the Council for the Accreditation of Higher Education (CACEI).
- UTM. Food Engineering student wins 1st place in the National Student Poster Contest at the XLI Mexican Chemistry Congress in Mexico City.
- UTM: A student of the Bachelor's Degree in Mathematics obtained 3rd place in the National Mathematics Competition Pierre Fermat 2006 organized by IPN Escuela Superior de Física y Matemáticas.
- UMAR. Students Yahvé Cervantes, Irwing Galán, Rafaelo Balderas, Gustavo López won the National Contest in which the best short films were included in the DVD of the film "The Science of Sleep" by Michael Gondry, 2006.
- UMAR. Student Felipe Valdivieso Vega, Distinction VII Oratory, winner of the National Youth Award.
- UMAR. Student Felipe Valdivieso Vega, Youth Delegate of Mexico at the 61st General Assembly of the United Nations.

2005

- UTM. First place in the ACM-ICPC (Association of Computing Machinery-International Collegiate Programming Contest) in the regional phase of Mexico-Central America. Obtaining the pass to the final held in San Antonio Texas-USA 2006.
- UTM. Finalist in the ACM-ICPC contest in its world phase, held in Shanghai, China.
- UTM: Students of Computer Engineering and Business Administration obtained 1st place in the university entrepreneurship contest organized by the UABJO, in the project "iClock".
- UMAR. Felipe Valdivieso Vega. State Youth Award 2005, Luis Donaldo Colosio Murrieta Medal.

2004

- UTM. First prize in the national contest “Leamos la Ciencia para Todos” of the Fondo de la Cultura Económica.
- UTM. Students from the Electronics Engineering program obtained 2nd place in the IX National Mini Robotics Competition in Santiago de Querétaro.
- UTM. Second place in the ACM-ICPC (Association of Computing Machinery-International Collegiate Programming Contest) in the regional phase of Mexico-Central America. Obtained the pass to the world final, held in Shanghai, China in 2005.
- UTM. Obtained 1st place in category C in the VIII National Contest “Science for all”; contest organized by SEP, Fondo de Cultura Económica and CONACyT.
- UMAR. In December 2004, the National University Advertising Award was granted to students Juan Pablo and Jorge Ramírez de la Mora, from the Communication Sciences program, Huatulco Campus. They won first place in the television category, an event sponsored by the National Advertising Association with the theme: “Debating insecurity”.
- UTM. Number 1 nationally in the Bachelor’s Degree in Business Administration, EGEL-CENEVAL.

2002

- UTM: Ivonne Lilian Martínez Cortés, a student of the Bachelor’s Degree in Applied Mathematics, was awarded the Diario de México Medal for having obtained the best grade point average of her class. The event was organized by Artes, Letras, Ciencias Tecnología A.C. and Diario de México.
- UTM. 2nd, 3rd and 5th place in the First Democratic Culture Contest organized by the Federal Electoral Institute and the State Government.

2001

- UTM: Five Design Engineering students participated in the 100 Ideas for Mexico Contest organized by Televisa, within the framework of Espacio 2001, where they won a prize for the video “Cambiando Por México” (Changing for Mexico).

2000

- UTM: Motorola Gold Award for technological innovation with the project: Renewable energies, remote control and authorized maintenance, awarded in the framework of the II Edition of the Mission XXI Mexico competition.

The same model is applied throughout the System, so similar results are expected.

- Decentralization of higher education, thus avoiding the concentration of academic and scientific resources in areas that are becoming disproportionately stronger andincreasingly differentiated from the rest of the country;
- Preventing human decapitalization of the most disadvantaged regions, at undesirable levels. However, efforts are being made to mitigate this;
- Improving knowledge of the economic resources of the region concerned, in order to lay the foundations for sound economic and social development;
- Training social leaders in the public and private spheres
- Improving the cultural competitiveness of the university's area of influence, combining the reception of modernizing ideas and concepts, with the conservation and strengthening of the university's own values;
- Contributing to the competitiveness of the economy of Oaxaca and Mexico, seeking the highest standards of quality in teaching and research. Proof of this are the prizes and acknowledgements obtained at State, national and world level;
- The Technological University of the Mixteca, in particular, has put into operation the UTM Technology Park, built on land owned by the university, which for several years has housed software development and HCI companies.

The system has proven its effectiveness

Kadasoftware is a software development company whose purpose is to generate a greater impact through tools and development techniques to create software products with quality standards established by regulations. Operations began on February 17, 2006, with a territorial extension of 15,400 square meters.

The main objectives of Kadasoftware are: **A)** To promote the business vision through the technological definition and administrative-operational execution of the competencies of areas of the company, considering a quality standard under an agile development methodology. **B)** To provide added value to customers through the continuous improvement of the Integrated Quality Management System with the support of agile development methodology that generates support, the result of practice, and experience in models and processes. **C)** Train and promote the use of technological tools in all areas to streamline work, boost productivity, streamline communication, improve response time, release constant deliveries of value to the product and eliminate impediments within the company. **D)** Standardize UTM's platforms and systems in OSUS through the delivery of updates and training in the automation of administrative, school, financial and material processes of the departments involved. **E)** To provide Business Process Model and Notation (BPMN) services for the purpose of identifying and standardizing process modeling under a company's business architecture that allows it to transform, adopt and operate through change management.

Among the services offered by KadaSoftware are: a) Custom-made software. Development of Web software, desktop and mobile applications (iOS and android). We seek interaction and ease of navigation through the design of User Interface (UI) and User Experience (UX). The purpose is to automate repetitive and complex tasks under the determination of processes to streamline the time applied and facilitate the execution of company activities. **b)** Information Technology Consultancy: Analysis of infrastructure, network, security and processes at a technical level to gather information in order to deliver a diagnosis with areas of opportunity. In this way we implement technical solutions to the detected improvements. **c)** Business Consulting. Consultancy services, advice, management, studies and research carried out by experts in the area. As well as the elaboration of administrative tools (organisation manuals, procedures, posts, etc.), procedures, posts, etc.). **d)** IGraphic Identity. Research process on the project, history, activities, graphic elements, visual styles to elaborate a manual where the brand elements, typography, colours, dimensions, variations, non-authorised versions and general applications are defined versions and general applications.

Kadasoftware is currently promoting the following projects:

- **Cédulas Profesionales Digitales (update with improvements):** System that sends, registers and validates the electronic diplomas of OSUS students to the Dirección General de Profesiones (DGP) so they can apply online for their document in digital format, which is valid for the Secretaría de Educación Pública (Secretary of Public Education).

- **OSUS School Services Platform (SERES) (upgrade with improvements andstandardisation in OSUS):** A set of systems that includes the school portal (professors, social service and professional internships), student portal, enrolment portal (registration forms, propaedeutic and semester), Languages, Debts and SIREFI.

- **REHUS(technology update):** System of the Human Resources Department of the Technological University of theMixteca that seeks standardization in OSUS, which automates tasks related to theregistration of workers, incidents, permits and also generates templates and statistics.

- **Library (update with improvements):** Web system that allows the UTM Bookshop staff to control and monitor the entries, exits, cash cuts, orders, reports and inventory ofthe books offered by this area, allowing them to consult the stock to place the corresponding orders, as well as the generation of reports: credits, payroll discounts, cash cuts and user movements. reports: credits, payroll discounts, cash cuts and usermovements.

- **Manager of academic and professional events:** System to manage and automate inreal time the delivery of information on events, symposiums or massive professionaland/or academic meetings that have the purpose of presenting advances, presentations, works on specific topics, this considering that is carried out in a virtualmodality.

Among its products are:

SIMA **KA'VI** **ALQUIMISTA** **WEB PORTALS** **POINTS OF SALE**

http://www.kadasoftware.com/

Datyra Inc.

The software development company, based in San Diego, California, will be located in the UTM Technology Park from April 2022.

The main activity to be developed is the creation of software for companies and institutions, ad hoc, to their needs, using Artificial Intelligence tools. This will have several consequences, including being a source of employment for OSUS graduates.

Moreover, it will be possible to carry out research work. In addition, it is expected to maintain a close relationship with the Division of Postgraduate Studies, for the development ofresearch pro-

jects in Artificial Intelligence and natural language areas, recognition and processing of speech and audio, including the participation of postgraduate students postgraduate students through scholarships and support, including the equipment of laboratories.

UsaLab- Laboratory of Usability

Created in 2002 and renewed in 2010. Tests around 80 systems annually: students, thesis students, academic bodies and researchers. It offers consultancy services and analysis of results; courses on the use of tools focused on the development of usability tests.

The Usability Lab offers the following services: PUsability Testing and User Experience (UX), Cross-cultural Usability, Expert Analysis, Studies Contextual, Interface Redesign, Focus Group, Consultancy and Courses. It is also certified by the UXPA (User Experience Professionals Association) and the W3C (World Wide Web Consortium). Some of its recognised clients include: Volkswagen, Siemens, Audi, KadaSoftware, Sistemas Digitalesde Guadalajara, Motorola, LG, IMSS, Infonavit, Oaxaca State Government, Oro de MonteAlbán, Ka`vy, Palm, Mabe, Sistemas Digitales de telefonía, BlackBerry, PayPal, Infotec, Apple, Blue Line, UANL, Hoteles.com and Google.

Partial view of the Observation Room. Usability Lab. UTM. Huajuapan de León

Agavetum

With an extension of two thousand square metres, the Agavetum of the Tecnological University of the Mixteca is a botanical garden specialised in plants of the agave genus (maguey). Its aim is the protection, conservation, propagation and study of endemic species of maguey in the state and in the future of the country, as a recognition of its great historical, cultural and economic importance in the state of Oaxaca.

Of the 150 species that Mexico has in the Agavetum, 41 species have been collected with their various uses, which already include the nine main mezcal species of Mexico and ten pulque species from Oaxaca and Puebla, as well as some species for ornamental use. It remains to collect two mezcal species, four pulqueras and four ornamentals to complement the biodiversity of Oaxacan magueyes, located in various areas (Putla, Guerrero, Tehuantepec and the Mixteca Region). The number of species remains the same. While the agave nizadenis was agave nizandensis was lost due to the high temperatures, the collection has been complemented with offspring of the established species and by five plants from the other species.

This is *ex situ* conservation (outside the natural habitat) to reduce the risk of extinction of species and to establish plantations in their natural habitat.

Partial view of the Agavetum. UTM. Huajuapan de León

UTM Photovoltaic Solar Park

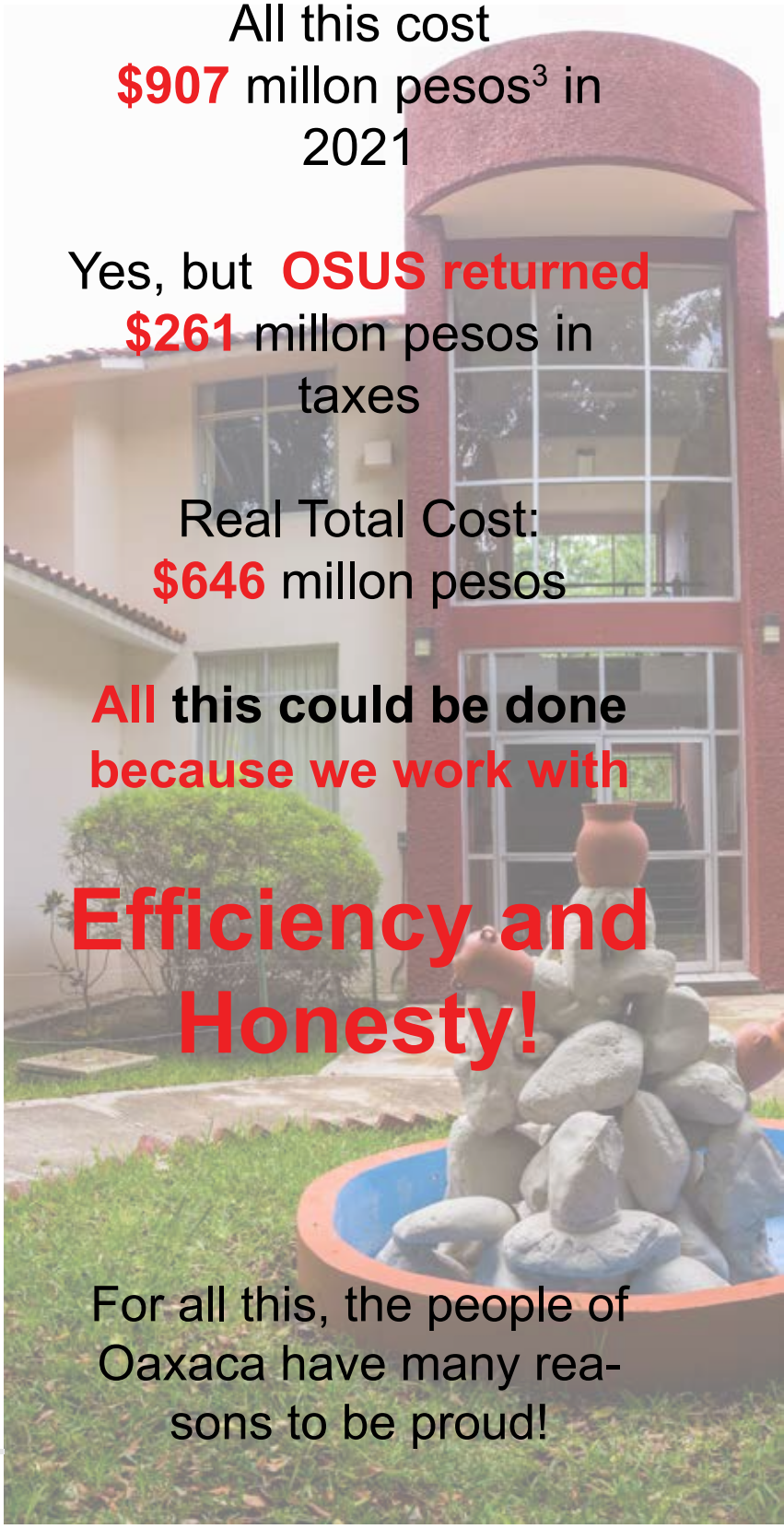
The Solar Park will contribute to the protection of the environment and to economic savings in the use of electricity, which is an important energy resource for the development of activities linked to the science and technology promoted at UTM. With an investment of 17.6 million pesos, the 6,256 square metre site has 1,560 photovoltaic modules installed that produce an average of 750,000 kWh per year, thus generating a favourable environmental impact on the environment, as they will stop omitting 516 metric tons of greenhouse gases, equivalent to burning 219,000 litres of petrol per year.

In 2022, of the total energy consumed in the facilities of the Technological University of the Mixteca, 89.37% was generated by the Solar Garden. UTM is practically self-sufficient with the energy it produces in the solar park.

Photovoltaic Solar Park. UTM. Huajuapan de León

Budget 2021

10	Universities
19	University campuses
1,100	Full-time research professors
More than 11,000	Full-time students[2]
694	Buildings
31	Research Institutes
200	Laboratories
30	Workshops
516	Hectares of land
85	Bachelor's degree
47	Posgraduate programs (12 Doctorates and 35 Masters)
13	Bookstores
22	Meteorological stations
2	Seismological stations
3	Experimental fields
2	Botanical gardens
2	Photovoltaic Solar Parks
	Public Library
	University Clinic
	State Mining History Archive
	Tourism Training Center
	Wind Energy Training Center
	Technological Park
	Agavetum



All this cost **$907** millon pesos[3] in 2021

Yes, but **OSUS returned $261** millon pesos in taxes

Real Total Cost: **$646** millon pesos

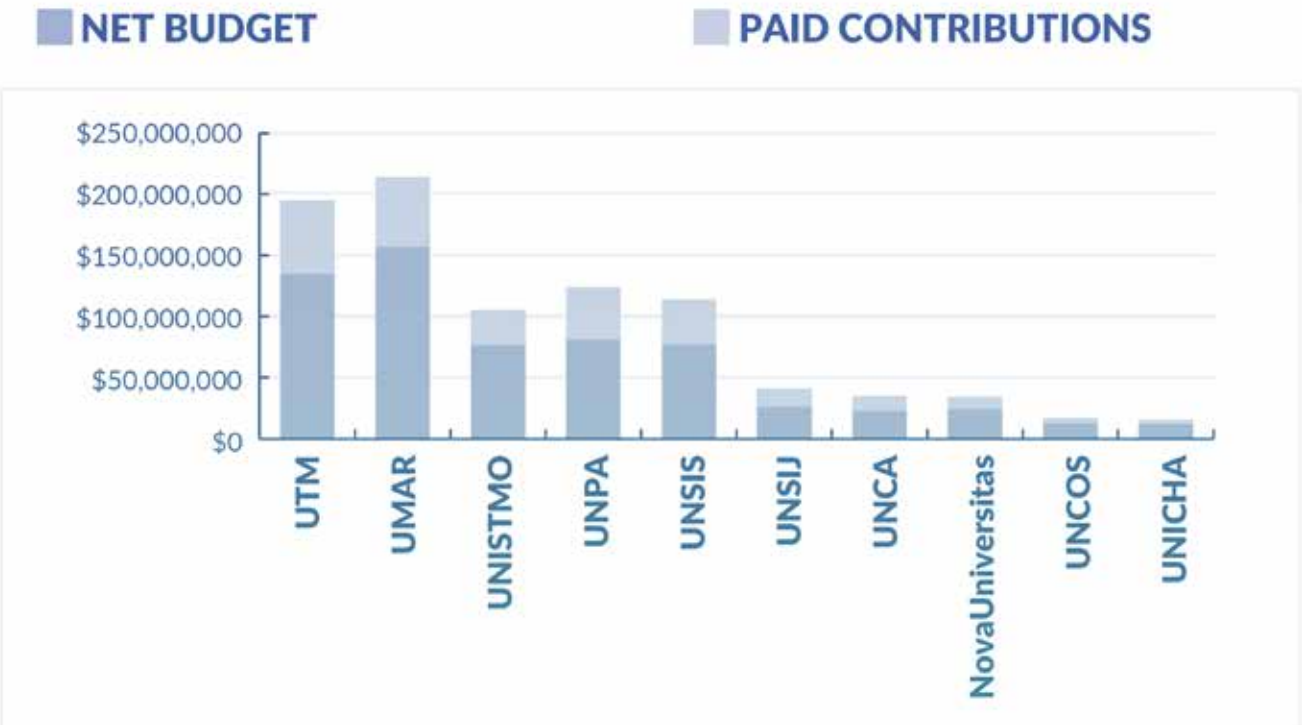
All this could be done because we work with

Efficiency and Honesty!

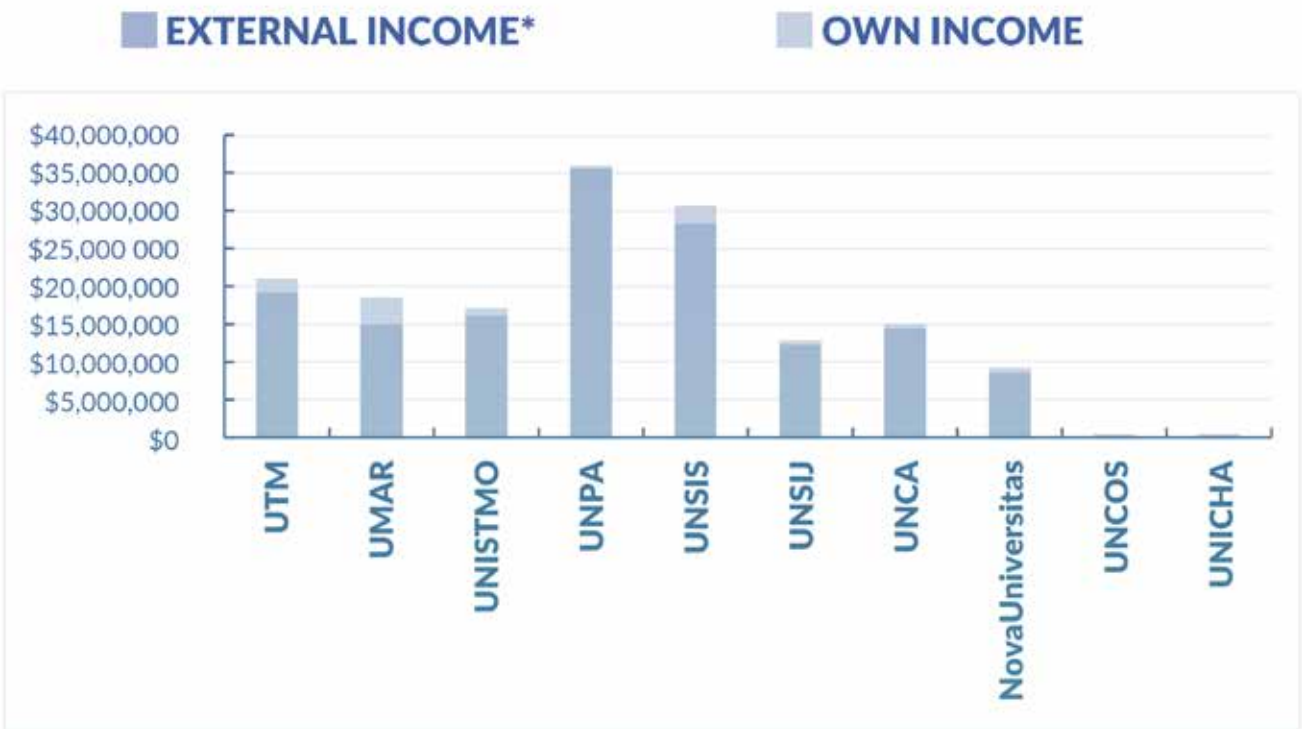
For all this, the people of Oaxaca have many reasons to be proud!

[2] The number of students varies throughout the year.
[3] Authorized budget for the year 2021.

Paid Contributions in 2021



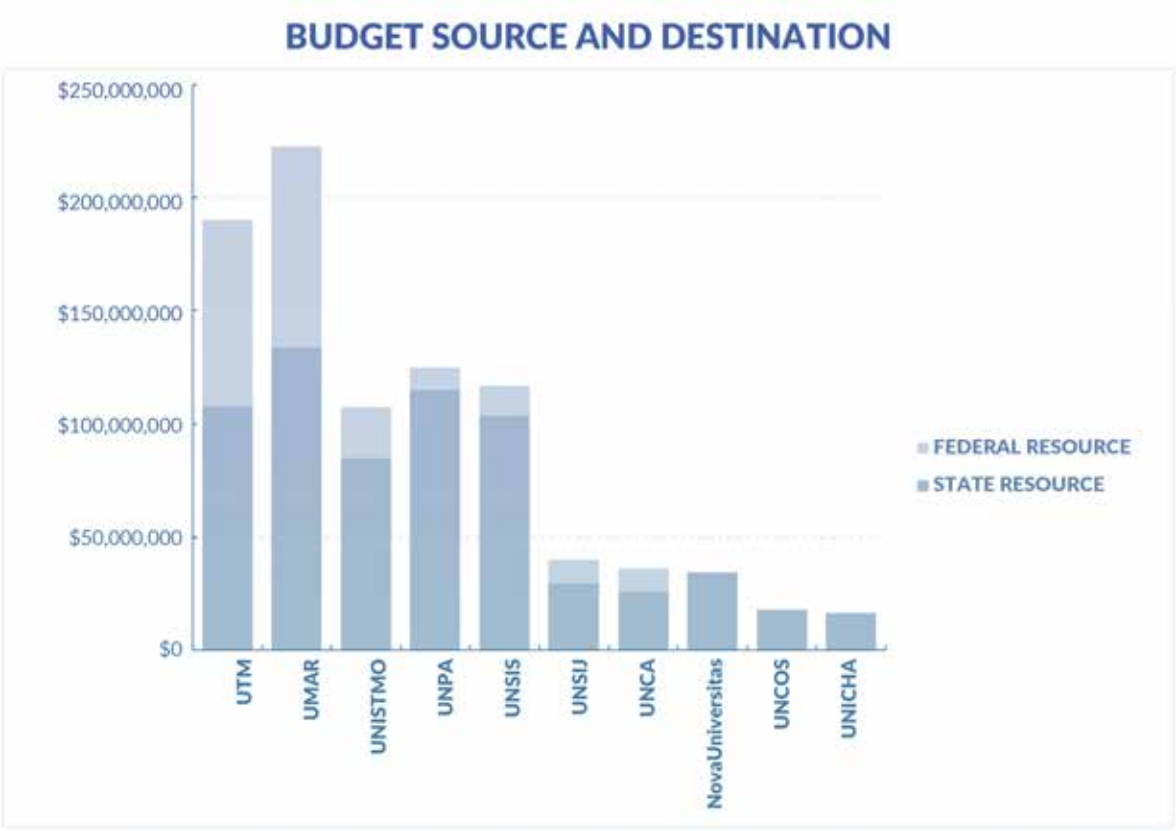
Other Income 2021*



*It Includes FAM projects, PROFOCIE (PIFI), PRODEP (PROMEP), ProExOEES (FADOEES), SEDESOL, SEMARNAT, SAGARPA , CONABIO, COCyT, and CONACyT revenues, among others.

These public universities are conceived with the purpose of transforming a society in very precarious conditions and therefore do not give priority to raising their own resources.

Budget sources and destination[4]



	UTM	UMAR	UNITSMO	UNPA	UNSIS	UNSIJ	UNCA	NovaUniversitas	UNCOS	UNICHA
TEACHING	100,894,110 53%	104,571,367 47%	50,596,613 47%	51,620,219 41%	65,051,741 56%	19,662,329 49%	12,818,229 35%	18,383,996 82%	11,429,736 64%	12,049,888 74%
RESEARCH	31,172,839 16%	53,598,042 24%	26,371,546 24%	42,192,461 34%	24,369,708 21%	10,550,254 26%	12,092,722 33%	2,434,129 2%	2,088,136 12%	2,539,092 15%
PROMOTING DEVELOPMENT	15,792,232 8%	17,799,367 8%	5,363,379 5%	11,295,897 9%	5,516,997 4%	2,642,682 7%	2,524,901 7%	220,409 1%		
PROMOTION OF CULTURAL AWARENESS	9,912,566 5%	15,574,429 7%	2,640,936 2%	6,638,147 5%	479,827 1%	1,771,301 4%	2,168,612 6%	266,190 1%		
ADMINISTRATIVE SUPPORT	32,650,473 17%	31,340,858 14%	12,758,291 12%	14,130,890 11%	21,519,673 18%	5,306,561 14%	6,875,598 19%	13,126,606 14%	4,345,718 24%	1,659,897 11%

[4] Services: Thirteen Bookstores, a Public Llibrary, two Botanical Gardens, University Clinic, two Seismological Stations, twenty-two Meteorological Stations, three Experimental Fields, Technology Park, State Mining Historical archive, Wind Energy Training Center, Tourism Training Center and Agavetum.


UNIVERSIDAD TECNOLÓGICA DE LA MIXTECA


UNIVERSIDAD


UNIVERSIDAD DEL MAR
CAMPUS PUERTO ANGEL

Control of the use of financial resources

As pubic institutions, Oaxaca's state universities must and do mantain a strict control system, both in planning and in controlling spending.

A. The controls are internal and external:

Internally, each university has:

Internal auditor, with the function of verifying the correct functioning of the administration, from the-point of view of both honesty and efficiency, and who must make the observations he considers appropriate to the administrative authorities. In addition, there are,

Audit committees made up of five university auditors of which the auditor of the audited university is never a member. The results of these audits must be submitted to the corresponding university authorities and communicated to the Academic Council of the said universities.

Externally, universities are subject to control by the Superior Audit Office of the Federation and the **General Comptroller of the State**

Analysis and publication of the Universities Accounts

Periodically, in accordance with state regulations, the **Finance Commission of the Academic Council** analyzes the accounts and presents a report that is read by the Administrative Vice-Rector before the Academic Council for discussion and approval, after which the statement of results is **published in the Periodico Oficial del Estado (Official State Newspaper).**

B. Budget, its approval and exercice

The budgets that are prepared in each university are submitted to the State Government (Secretary of Administration and Secretary of Finance) for approval. This includes the salary scales. There is a double control, one by the Academic Council of each university and the other by the State government, which sends it to the local Congress.

Important note: Oaxaca State Universities **have NO debt**

C. Works

The planning of the works is made to respond to the new needs, according to the rhythm of growth of the academic demand (teaching, research and cultural promotion).

1. Once the construction of a certain plant has been decided, university technicians draw up the plans, in consultation with the sectors concerned.

2. The Procurement and Public Works Committees, constituted in each university, in accordancewith state and federal regulations, carry out a cost study, which serves as the basis for the preparation of a public tender, the basis of which must be submitted for approval by the StateComptroller's Office.

3. Once the legal requirements have been met, the call for applications is published and monitored by the **Works Committee,** which finally submits its recommendation to the **Academic Council,** which makes the final decision. Normally, it tends to rule in favor of the lowest bid, but in particular cases it may not do so; for example, when there are doubts about the capacity of the builder (lack of machinery, extremly low salaries, unrealistic calculation of prices, etc.), or when the background of the builder's work with the universities is not positive. In any case, contractsalways require a **deposit** to ensure that commitments are met. In addition, the universities carry out their own **monitoring of the works,** as each university has a works manager who monitors both quality of the materials, the volume of work carried out and the compliance with the works schedule.

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4. When local circumstances allow, universities directly perform two types of work:

a. land improvement (if expansive clay soils or earthworks are involved), for which we try to get the loan of machinery (paying salaries and fuel) and the donation or sale at low cost of the improved land, and

b. the finishing touches, since it is a fact that the companies executing the contracts almost always subcontract the finishing touches to local companies, so that the universities end up assuming the indirect-costs of two contractors. This construction policy has resulted in substantial savings.

D. Equipment

Everything related to university equipment is analyzed by the Acquisition Committee and submitted to each Academic Council for authorization. The normal procedure is open public bidding, but there may be an exceptional procedure if there are particular circumstances, such as: a. no proposals, b. exceeding the amounts budgeted, or c. the equipment being so specialized that it is required to be attributed to a certain manufacturer. Depending on the case, what would proceed would be a restricted invitation to three companies or direct award. In all cases, the approval of the Academic Council, upon recommendation of the Procurement Committee, is equally mandatory.

Dissemination and transparency of information

In accordance with the legal provisions, all the universities' websites include a transparency section with the format and content required by law. In addition, the pages always present a digital version, with free access, and the brochure "Facts" which informs about all the activities of the OSUS universities, in a wider and more detailed way.

It should be stressed that, although for formal reasons, the Rector's salary is included in the budget of each university, in nine of them the Rector does not receive a salary, as indicated there, nor has he ever done so. Likewise, it should be noted that during the first three and a half years (1989, 1990, 1991 and the first half of 1992), he did not receive any salary.

Where to check the budget and tabs?

On the web sites of each of the universities, the budgets and tabs are published in the Transparency section (icon), in the section of Common Obligations Article 70 Regulations 2018, or in the following links:

http://www.utm.mx/transparencia/obligaciones.html
http://www.umar.mx/transparencia/obligaciones.html
http://www.unistmo.edu.mx/transparencia/obligaciones.html
http://www.unpa.edu.mx/transparencia/obligaciones.html
http://www.unsis.edu.mx/transparencia/obligaciones.html
http://www.unsij.edu.mx/transparencia/obligaciones.html
http://www.unca.edu.mx/transparencia/obligaciones.html
http://www.novauniversitas.edu.mx/transparencia/obligaciones.html
http://www.uncos.edu.mx/transparencia/obligaciones.html
http://www.unicha.edu.mx/transparencia/obligaciones.html

Alejandro Murat Hinojosa
Governor of the State of Oaxaca

Manuel Francisco Márquez Méndez
General Coordination of Secondary and Higher Education, Science and Technology

Modesto Seara Vázquez
Rector of the Oaxaca State University System

Technological University of the Mixteca
Dr. A. Santiago. A.
Academic Vice-Rector
B. Acy.J. J. Ruiz S.
Vice-Rector of Administration
M.A. M. A. Peralta. A.
Vice-Rector of Relations and Resources

University of the Sea
Dr. M. del R. Enríquez R.
Academic Vice-Rector
BBA. J. L. Ramos E.
Vice-Rector of Administration
Dr. A. J. Reyes T.
Vice-Rector of Relations and Resources

University of the Isthmus
Dr. C. Bonilla C.
Academic Vice-Rector
M.B.A. O. Cortés O.
Vice-Rector of Administration

University of Papaloapan
M.Sc. H. López A.
Academic Vice-Rector
B. Acy. R. Jiménez C.
Vice-Rector of Administration

University of Sierra Sur
M.Eng. S. K. Ramírez V.
Academic Vice-Rector
BBA. E. A. Ochoa V.
Vice-Rector of Administration

University of Sierra Juárez
Dr. M. E. Fuente. C.
Academic Vice-Rector
BBA. A. L. Peña M.
Vice-Rector of Administration

University of La Cañada
Dr. M. Bernabé P.
Academic Vice-Rector
BBA. A. Martínez L.
Vice-Rector of Administration

NovaUniversity
Dr. I. L. Martínez C.
Academic Vice-Rector
BBA. A. Moya S.
Vice-Rector of Administration

University of the Coast
M.Sc. J. L. Hernández H.
Academic Vice-Rector
BBA. A. Ruiz M.
Vice-Rector of Administration

University of Chalcatongo
DE. E. Cortés. C.
Academic Vice-Rector
B.Acy. I. Pérez A.
Vice-Rector of Administration

Technological University of the Mixteca

Institute of Industrial and Automotive Engineering

Cafeteria

Digital Media Lab

New Materials Research Centre/ Vidirios Workshop

Institute of Mining

University of the Sea

General Library, Huatulco Campus

Multimedia Laboratory, Huatulco Campus

Swimming pool, Puerto Angel Campus

Institute of Genetics, Puerto Escondido Campus

University of the Isthmus

Institute for Energy Studies. Tehuantepec Campus

Photovoltaic solar park. Tehuantepec Campus

Solar thermal trainer with real and simulated panels. Tehuantepec Campus

Ceramics, Serigraphy and Plastics Workshops. Ixtepec Campus

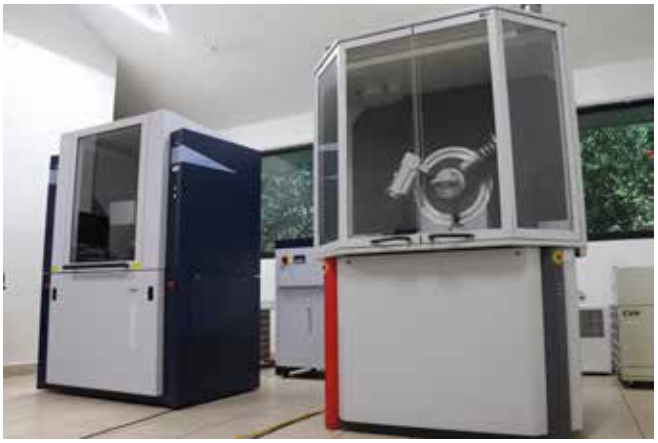
Entrance to the Juchitán Campus

University of Papaloapan

Classrooms. Tuxtepec Campus

Chemistry Laboratory. Tuxtepec Campus

Hospitalisation Area. Robotised Clinic. Tuxtepec Campus



X-ray diffractometer for crystals and X-ray diffractometer for powders. Tuxtepec Campus

Institute of Agroengineering. Loma Bonita Campus

Mechatronics Laboratory. Loma Bonita Campus

University of the Sierra Sur

Robotic Clinic

Academic Vice-Rectory

Hospitalisation Area. Robotised Clinic

Dental Centre

University of Sierra Juárez

Institute of Environmental Studies

Wood Technology Laboratory

Classrooms

Environmental Analysis Laboratory

Panoramic view of UNSIJ

University of La Cañada

Institute of Food Technology

Library

Food Workshop

Computer Labs.

NovaUniversity

Auditorium. Ocotlán Central Campus

Professors' offices. Ocotlán Central Campus

Technical Staff Offices. Juxtlahuaca Peripheral Campus

Classroom. Juxtlahuaca Peripheral Campus

Library. Juxtlahuaca Peripheral Campus

University of the Coast

Agribusiness Laboratory

Design Laboratory

Library

Departments for professors

University of Chalcatongo

Robotic Clinic

Classrooms

Professors' offices

Auditorium

Library

Centre for Scientific Research. UNPA-Tuxtepec Campus.

Molecular Characterization Laboratory

High Resolution Mass Spectrometer. Mass Spectometry laboratory

Faculty and labs Directory

Vehicular and civilian access road. UTM. Huajuapan de León

Sunset. UTM. Huajuapan de León.

Walkways. Partial view. UNICHA. Chalcatongo de Hidalgo

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Huajuapan de León
http://www.utm.mx

Universidad de la Sierra Sur
Miahuatlán
http://www.unsis.edu.mx

Universidad del Mar
Pto. Escondido, Pto. Ángel, Huatulco
http://www.umar.mx

Universidad de la Cañada
Teotitlán del Camino
http://www.unca.edu.mx

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Tehuantepec, Ixtepec, Juchitán
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