

**UDLAP<sup>®</sup>**

UNIVERSIDAD DE LAS AMÉRICAS PUEBLA



[www.udlap.mx](http://www.udlap.mx)

**MECHATRONICS ENGINEERING**

**EDEI**

SCHOOL OF  
ENGINEERING



# STUDY MECHATRONICS ENGINEERING AT UDLAP

As a graduate from the Bachelor in Mechatronics Engineering you will be able to analyze, design, evaluate, innovate, and implement mechatronic systems, with tools and methodologies of electronics, programming, manufacturing systems, electrical machines, automation, industrial robotics, mechanisms, and automotive networks. You will develop and improve automated equipment and implement technological alternatives in the production, service, and computer processes for the design of mechatronic systems, with ethics and social commitment and responding to the challenges of globalization.

Once you have finished your study program, you will have a bachelor's degree in addition to a licenciatura degree. Therefore, your studies will be recognized worldwide.



## JOB MARKET

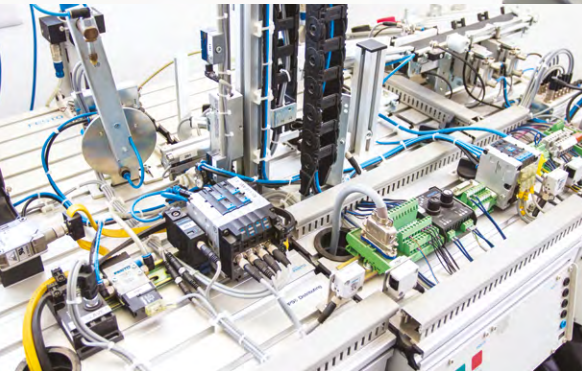
- *Assembly plants for electronic components.*
- *Research, teaching, and technological innovation centers.*
- *Metal, automotive, oil, and steel industry.*
- *Consulting firms.*
- *Decentralized organizations.*





## UDLAP OUTREACH

Prestigious national and international companies have a relationship with the university. As an UDLAP student you have the best opportunities to access and succeed in the working world, either through professional practices or research projects that will help you enter the job market once you graduate.



## BE PART OF THE UDLAP COMMUNITY



Your academic formation can be complemented through extracurricular workshops offered at the university, as well as by participating in student organizations and cultural and sports activities that will contribute to your growth as a student and future practicing specialist.

If you live in one of the five residential colleges, you will enjoy the university environment thoroughly and be able to socialize with students of other bachelors and other

cultures, thus complementing your academic formation with significant experiences that will have a great impact in your personal and professional relationships. Living at UDLAP provides recreational areas and all the services you need, in addition to the amenities found in an apartment.

The university also has dining services, *snack* areas, and ATMs, among other facilities.

# AN **UDLAP** STUDENT HAS

- Conviction to work for the greater good and to achieve success.
- Ability to reach goals through continuous learning.
- Ability to face the challenges of an increasingly competitive world.
- Has aptitude and inclination for physics and math.
- Is interested and likes to understand and develop technology.



Thanks to more than 200 agreements with prestigious international universities, you will be able to make academic exchanges or complete a double degree program.

## **UDLAP ACADEMIC EXCELLENCE**

The prestige of our faculty is backed by their extensive teaching experience. 99% of our full-time professors have a graduate degree and one in three is a member of the National System for Researchers (Sistema Nacional de Investigadores - SNI). Given the faculty's experience and their academic quality, they will be able to guide you in finding new ways to express yourself and be critical, innovative, and creative.

UDLAP is accredited at a national and international level by the Mexican Federation of Private Institutions of Higher Education (Federación de Instituciones Mexicanas

Particulares de Educación Superior - FIMPES) and, since 1959, by the *Southern Association of Colleges and Schools Commission on Colleges* (SACSCOC). The accreditation agency *Quacquarelli Symonds* (QS) awarded 5 global stars to our university, making it the first one-campus university in Latin America to achieve this recognition. UDLAP earned 5 stars in the teaching, alumni employability, internationalization, inclusiveness, and art and culture categories; this means that we offer the highest standards of academic quality and educational services when compared to the best universities in Mexico and the world.



# CURRICULUM MECHATRONICS ENGINEERING

	Course	Credits
1 Term	Algorithms And Programming .....	6
	General Chemistry Lab .....	3
	Foreign Language I .....	6
	University Math .....	6
	General Studies Elective In Math * .....	6
	General Chemistry .....	6
	Information Technologies In The Construction Of Knowledge .....	6
2 Term	Linear Algebra .....	6
	Academic Reasoning .....	6
	Calculus I .....	6
	General Physics I .....	6
	Computerized Drawing Lab .....	6
	General Physics Lab I .....	3
	Foreign Language II .....	6
	General Studies Elective In Arts * .....	6
3 Term	Calculus II .....	6
	Electronic Circuits .....	6
	Digital Design .....	6
	Academic Writing .....	6
	General Physics II .....	6
	Electronic Circuits Lab .....	2
	General Physics Lab II .....	3
	Foreign Language III .....	6
4 Term	Calculus III .....	6
	Ordinary Differential Equations .....	6
	Integrated Electronics .....	6
	Equilibrium Of Rigid Bodies .....	6
	Integrated Electronics Lab .....	2
	Probability And Statistics .....	6
	Object Oriented Programming .....	6
	Material Properties .....	6

	Course	Credits
5 Term	Kinematics And Kinetics Of Rigid Bodies .....	6
	Kinematics And Kinetics Of Rigid Bodies Lab .....	3
	Signals And Instrumentation Lab .....	3
	General Studies Elective In Behavioral Sciences * .....	6
	General Studies Elective In Natural Sciences * .....	6
	General Studies Elective In Humanities * .....	6
	Professional Practices 1 .....	6
	Signals And Instrumentation .....	6
6 Term	Technological Innovation .....	6
	Machines And Mechanisms Lab .....	2
	Electrical Machines .....	6
	Solid Mechanics I .....	6
	Control Systems .....	6
	Thermofluids .....	6
7 Term	Industrial Automation .....	6
	Power Electronics .....	6
	Professional Practices 2 .....	6
	Manufacturing Systems .....	6
	Select Topics 1 .....	6
8 Term	Design Of Mechatronic Systems .....	6
	Automotive Networks .....	6
	Industrial Robotics .....	6
	Select Topics 2 .....	6
	Select Topics 3 .....	6

TOTAL CREDITS 303

# YOUR TIME IS NOW. JOIN US

## ADMISSION PROCESS

- Take the admission exam.
- Students from high schools that have an agreement with UDLAP do not have to take the admission exam. Consult the list of participating high schools at: **[www.udlap.mx/preparatoriasdeconvenio](http://www.udlap.mx/preparatoriasdeconvenio)**
- Deliver the basic documents for admission: **[www.udlap.mx/solicitudes](http://www.udlap.mx/solicitudes)**
- Information and deadlines for scholarships can be found at: **[www.udlap.mx/becas](http://www.udlap.mx/becas)**
- Current fees and tuition: **[www.udlap.mx/finanzas](http://www.udlap.mx/finanzas)**

## We Want to Hear From You

### Student Recruitment:

Tel.: 222 229 21 12

[informes.nuevoingreso@udlap.mx](mailto:informes.nuevoingreso@udlap.mx)

☎ (+52) 222 577 38 29

### Scholarships:

Tel.: 222 229 27 02

[informacion.beca@udlap.mx](mailto:informacion.beca@udlap.mx)

### Switchboard:

Tel.: 222 229 20 00

Ext. 4792 • 4799 • 4260 • 2189



/universidaddelasamericaspuebla



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THE **UDLAP** ACADEMIC  
QUALITY AND PRESTIGE  
ARE ENDORSED BY **QS**,  
**SACSCOC** AND **FIMPE**



# UDLAP®

**Universidad de las Américas Puebla**

Ex hacienda Santa Catarina Mártir • C.P. 72810  
San Andrés Cholula, Puebla, México