

# IP Academic Bulletin for Mexico: 2015-16

## Introduction

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The IP Academic Bulletin (also known as “IP Bulletin” or “Bulletin”) is the International Programs (IP) “catalog” and provides academic information about the program in Mexico.

The Bulletin must read in conjunction with the two publications listed below.

- [Academic Planning, Crediting and Reporting](#). This publication contains information on academic planning, how courses get credited to your degree, and the academic reporting process including when to expect your academic report at the end of your year abroad.
- [Academic Policies](#). This publication contains academic policies which will be applied to all IP participants. Topics include but are not limited to CSU Registration, Enrollment Requirements, Attendance, Examinations, Assignment of Grades, Grading Symbols, Credit/No Credit Option and Course Withdrawals.

To access the above publications, refer to the IP website under “Study Abroad”, and “Academic Program Information” or click on either of the document names above which are linked to our website.

To access general information about your program and study center, refer to the IP website under [“Programs”](#) and click on the specific program to which you have been accepted.

## Academic Program

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The IP program in Mexico is affiliated with the Tecnológico de Monterrey System (known as the Tec) which a multi-campus university system unique in Latin America, operating 31 campuses throughout Mexico. CSU students attend the Querétaro campus of the Tec. The Tec is accredited in the United States by the Southern Association of Colleges and Schools to award bachelor’s, master’s and doctoral degrees. It is affiliated with the International Association of Universities, the National Association of Mexican Universities and Institutions of Higher Learning, and is a founding member of the Mexican Association for International Education. One of the Tec’s major priorities is internationalization, which is promoted by fostering a global outlook as an essential component of its academic programs.

The fall semester starts early in August and ends early December. Spring semester begins around the beginning of January and concludes mid to late May. The calendar is an approximate idea of beginning and ending dates and the specific dates will change from year to year.

Students are placed in one of four different programs as listed below.

### 1. The Direct Enrollment Program

The Direct Enrollment Program is for students with advanced proficiency in Spanish reading, writing, listening and speaking and who are ready to study in the native language side-by-side with local students. In order to ensure that students will be able to follow the Spanish speaking courses, the Tec provides a Spanish Placement Test (prior to your arrival) to assess the student’s Spanish language level.

Students must meet course pre-requisites in order to enroll in any of the courses offered at the Tec in the Direct Enrollment program. The International Programs staff in Querétaro will assist with course registration during the on-site orientation.

### 2. The “La META” Program (Learn About Mexican Education and Teaching in Action)

Students enroll in Spanish language courses appropriate to their level in addition to courses in Latin American Civilization, intercultural communication and the Mexican education system as outlined below. Each semester, students also experience education in Mexico as classroom teaching assistants in public and private schools in Querétaro.

Below is the schedule for students in the La META program:

<b>Fall Semester</b>		<b>Units</b>
Spanish Language		6
H3019	Education, Culture and Thought in Mexico*	3
EP3000	Internship in Mexican Private Schools *	3
RI2019	Social and Cultural History of Latin America	<u>3</u>
TOTAL UNITS		15

<b>Spring Semester</b>		
Spanish Language		6
CO00832	Intercultural Communication*	3
EP3000	Internship in Mexican Public Schools*	3
Elective		<u>3</u>
TOTAL UNITS		15

\* Must be taken in combination

### 3. Study in English/Learn Spanish Program

This program is for beginning and intermediate students whose goals are to focus on Spanish language and culture supplemented with courses offered in English.

Each semester, students enroll in Spanish language classes offered by the *Programas Internacionales*, supplemented by courses either taught in Spanish (designed for students who are learning Spanish) or courses taught in English offered by academic departments.

All language acquisition courses (Basic, Intermediate and Advanced Spanish I and II) are 6-unit courses and must be taken for a letter grade.

<b>Fall / Spring Semesters</b>	<b>Units</b>
Spanish Language	6
Electives	<u>9</u>
TOTAL	15

There are about approximately 70 courses offered in English at the Tec and academic offerings vary from year to year. The Tec has been increasing the number of classes taught in English so continue to check their website. Keep in mind that classes **need a minimum enrollment of 8 students to remain open**.

### 4. The "Study Engineering In Mexico" Program

Students enroll in Spanish language courses appropriate to their level in addition to a defined set of engineering courses. This is a set curriculum and students in this program must enroll in all of the courses listed below (unless otherwise pre-approved by OIP).

Below is the schedule for students in the Study Engineering in Mexico program:

<b>Fall Semester</b>		<b>Units</b>
Spanish Language		6
Calculus III/Multi-variable Calculus (in English)		3
Differential Equations (in English)		3
Statics (in English)		<u>3</u>
TOTAL UNITS		15

<b>Spring Semester</b>		
Spanish Language		6
Solid Mechanics (in English)		3
Dynamics (in English)		3
Fluid Mechanics and/or Thermodynamics (in English)		<u>3-6</u>
TOTAL UNITS		15-18

### Unit Conversion Guidelines

All CSU students, regardless of which program they are in, are required to take a minimum of 40 Tec units each semester which is equivalent to 15 CSU semester units.

Tec Unit	CSU Semester Unit
8 units	3 units
16 units	6 units

To convert the value of CSU semester units into CSU quarter units, multiply the CSU semester units by 1.5.

## Academic Culture

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The relatively small average class size at this mid-sized campus allows mentoring relationships to develop. Course instructors are accessible and open to assisting international program students on an individual basis. It is important, however, for students to take the initiative in maintaining open, clear communication with their professors. If there is any doubt or questions about assignments, deadlines, or expectations, the student should make an appointment to speak with the professor. Student effort, responsibility, and punctuality with meeting deadlines are valued. There are strict policies regarding class attendance. Students with excessive absences from class or tardy arrivals are denied the right to take the final exam.

As students make friends with Mexican students on campus they will learn that degree programs are highly structured such that Tec students follow a prescribed course of study, taking courses pertaining to their major over a nine to ten semester period with little room for elective courses. Degree program courses, however, are open to International Program students at the advanced Spanish level. In addition to the opportunity to take academic courses with Mexican students, there are also many extracurricular activities offered on campus in which students studying at the Tec may participate without additional fees.

## Assessment and Grading

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Below is the grade conversion table that is used to convert grades earned at the Tec to the CSU.

Tec Grade	CSU Grade Equivalent
95 - 100	A
90 - 94	A-
87 - 89	B+
83 - 86	B
80 - 82	B-
77 - 79	C+
73 - 76	C
70 - 72	C-
67 - 69	D+
63 - 66	D
60 - 62	D-
0 - 59	F

Class attendance is mandatory, and absences are considered in determining grades. The attendance policy is very strict and only a limited number of absences is permitted. Absences in excess of the number of absences allowed for a given course will result in a failing grade regardless of grades received for assignments and exams.

## Courses in the *Programas Internacionales*

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Courses are subject to change, and normally need an enrollment of twelve students in order to be taught. Descriptions and course syllabi can be found on the web or contact the staff at Queretaro. (Refer to contact information at the end of this Bulletin.)

The courses listed below are especially offered to International students. Courses are subject to change, and normally need an enrollment of twelve students in order to be taught. Detailed course descriptions can be found on the web at [www.study-in-mexico.com](http://www.study-in-mexico.com). Click on "Study Abroad Mexico" on the menu on the left.

Click on "Catalogue 2015. To obtain course information, place your cursor over the course code and click. This catalogue offers a brief description of the course content.

CSU unit values are listed in parenthesis following the course title.

**HI1004 Basic Spanish I (6)**

Development of language patterns, Real language, oral and written, is linked to grammar. Application of basic grammatical knowledge to written production and reading comprehension. Reading comprehension introduces students to authentic Spanish texts. Lower division. Offered on demand. (Previously IP1001.)

**HI1005 Basic Spanish II (6)**

Progress in the development of language patterns. Real language, oral and written, is linked to basic and intermediate grammar. Application of grammatical knowledge to written production and reading comprehension. Reading comprehension will introduce students to authentic Spanish texts. Lower division. Offered Fall/Spring. (Previously IP1002.)

**HI1003 Communication Skills Development I (3)**

Development of oral and written communicative skills at the elementary level. Students listen, talk, write and read about daily situations in order to survive in a Spanish-speaking community. Lower division. Offered on demand. (Previously IP1003.)

**HI2015 Intermediate Spanish I (6)**

Review of basic concepts and study of intermediate grammar. Real language, oral and written, is linked to grammar. Lower division. Offered Fall/Spring. (Previously IP2004.)

**HI2016 Intermediate Spanish II (6)**

Study of grammar in greater depth in order to produce correct structures using all verb tenses. Correct use of pronouns, prepositions, conjunctions, all *se* functions, and written accents. Lower division. Offered Fall/Spring. (Previously IP2005.)

**HI2013 Communication Skills Development II (3)**

Development of oral and written communicative skills at the intermediate level. Students listen, talk, write and read about social and cultural topics taken from the media and other material. Lower division. Offered Fall/Spring. (Previously IP2006.)

**HI2011 Composition II (3)**

Designed for development of writing skills at the intermediate level. Creation of paragraphs and short texts by combining basic syntactic structures and the use of cohesive elements. Lower division. Offered Fall/Spring. (Previously IP2017.)

**HI3004 Spanish for Bilinguals (3)**

Designed for Mexican-American students to improve their use of formal Spanish. Reading and writing skills, vocabulary enrichment; impromptu and formal speeches. Differences in social dialects. Upper division. Offered on demand. (Previously IP3002.)

**HI3010 Advanced Spanish I (6)**

Intensive advanced grammar for non-native speakers. Designed to give students confidence in their second language or foreign language performance. A selection of problems common to non-native speakers will be covered and linked to real language. Upper division. Offered Fall/Spring. (Previously IP3005.)

**HI3011 Advanced Spanish II (6)**

Intensive advanced grammar for non-native speakers. Designed to give students confidence in their second language or foreign language performance. A selection of problems common to non-native speakers will be covered and linked to real language. Further development of speaking skills; Spanish at a superior level. Upper division. Offered on demand. (Previously IP3006.)

**HI3007 Composition III (3)**

Designed for development of writing skills at a native-like level. Production of real texts by combining basic and complex syntactic structures, and the use of cohesive elements. Upper division. Offered Fall/Spring. (Previously IP3007.)

**HI3008 Communication Skills Development III (3)**

Development of oral and written communicative skills at the advanced level. Students listen, talk, write and read about social, political, economical and cultural topics taken from the media and other material. Upper division. Offered Fall/Spring. (Previously IP3008.)

**HI3012 Spanish for Business (3)**

Intensive practice of Spanish using business terminology and vocabulary. Readings on current business issues. Presentations of oral and written reports and simulations of real-life situations. Upper division. Offered on demand. (Previously IP3009.)

**HI3009 Academic Spanish (3)**

Introduction to the Spanish-speaking university classroom. Improvement of reading skills, note-taking, formal papers and essay exams. Formal presentations and reports as expected in the Mexican educational system. Offered on demand. (Previously IP3010.)

**HI3019 Spanish Phonetics and Phonology (3)**

Analysis of Spanish phonemic and phonological system and contrast with English. Study of different pronunciations of Spanish dialects. Practice to improve accent. Upper division. Offered Spring. (Previously IP3013.)

**HI1011 Introduction to Mexican Culture (3)**

This is an introductory course for students who have little knowledge of Mexican culture. The course presents an overview of the culture, from its roots to nowadays, presenting distinctive characteristics of the psychology of Mexicans. Taught in English. Lower division. Offered Fall/Spring. (Previously IP1004.)

**H2028 Mexican Culture (3)**

Overview of Mexican history and of the Mexican way of thinking. Analysis of cultural elements and concepts on topics such as family, art, time, work, death, religion, music and cuisine. Upper division. Offered Fall/Spring. (Previously IP2008.)

**RI2019 Social and Cultural History of Latin America (3):**

This course will examine the growth and development of civilizations in the Latin American region from the pre-Hispanic period to the revolutionary period in the twentieth century. Participants will analyze historic, political, sociological and cultural factors in order to gain an understanding of the culture of Mexico and Latin America. Upper division. Offered Fall. (Previously IP2009.)

**AR2014 Art and Architecture in Mexico (3)**

Important periods in art and architecture; important painters and sculptors throughout Mexico's history with special attention to pre-colonial and colonial architecture. Includes field trips to ruins, historical sites and museums. Upper division. Offered on demand. (Previously IP2010.)

**RI3008 Mexican History (3)**

An overview of Mexican History, from pre-Hispanic culture to the consolidation of Modern Mexico in the 20th Century. Also the course examines political, economic, social and cultural aspects of each historic period. Upper division. Offered on demand. (Previously IP3017.)

**H3020 Latin American Literature (3)**

Overview of contemporary Latin American literature. Reading, analysis and discussion of the most representative works of the 20th century writers: Juan Rulfo, García Marquez, Jose Donoso, Elena Poniatowska, and Carlos Fuentes. Upper division. Offered Fall/Spring. (Previously IP3018.)

**H3021 Mexican Literature (3)**

Overview of contemporary Mexican literature. Reading, analysis and discussion of the most of the representative works of the 20th century Mexican writers. Upper division. Offered Fall/Spring. (Previously numbered IP3019.)

**NI2006 Doing Business in Mexico (3)**

To provide the student with a general knowledge regarding the history, culture and economy of Mexico, including a general understanding of the way Mexicans do business and the way foreigners can also do business in Mexico. Taught in English. Lower division. Offered Fall/Spring. (Previously IP2012.)

**RI3007 Diplomatic Relations between Mexico and the US (3)**

Examines the history of political, economic and social relations between the two countries. Emphasis on contemporary issues. Upper division. Offered Spring. (Previously IP3025.)

**EP3000 Internship A (3)**

Work-study opportunities (internships) are available in banks, wholesale and retail businesses, international, national and local business offices, education, communications/mass media and community service. Students who are interested in applying for an internship in business are required to have intermediate or advanced Spanish language proficiency. Upper division. Offered Fall/Spring. (Previously IP3021.)

**EP3001 Internship B (6)**

Same as EP3000. Upper division. Offered Fall/Spring. (Previously IP3022.)

## Courses for the "La META" Program

**Spanish Language (6):** Prior to arrival, students will take a placement test online and be placed in the appropriate level of Spanish coursework offered by the *Programas Internacionales*. Students continue with Spanish language in the second semester.

In the spring semester, participants will take one 3-unit elective course selected from the course offerings at the Querétaro campus and as approved by the student's CSU home campus advisor. (See section below for an example of course listings.)

**CO00832 Intercultural Communication (3)**

Participants will gain an understanding of how their own backgrounds as well as the diverse backgrounds of learners in Mexican schools impact communication as well as the teaching and learning process. Cultural, socio-cultural, psycho-cultural, and environmental influences on the communication process and on the development of intercultural sensitivity are explored. Taught in English. Upper division. Offered Spring.

**RI2019 Social and Cultural History of Latin America (3)**

This course will examine the growth and development of civilizations in the Latin American region from the pre-Hispanic period to the revolutionary period in the twentieth century. Participants will analyze historic, political, sociological and cultural factors in order to gain an understanding of the culture of Mexico and Latin America. Upper division. Taught in Spanish. Offered Fall. (Previously IP2009.)

**H3019 Education, Culture and Thought in Mexico (3)**

This course will examine education in Mexico from preschool through the university system in public and private, urban, rural and indigenous settings. The course will provide an historical perspective of the development of schooling in Mexico; a review of national educational policy in regards to federal, state,

and municipal authority in the administration of education; an overview of the nationalized curriculum; and the development of universal access to basic education. Participants will examine the impact of multiple forms of diversity present in Mexican schools on student education, including cultural, linguistic, and ethnic differences as well as special education needs, biliteracy, multicultural education, and socioeconomic status. Upper division. Taught in Spanish. Offered Fall. (Previously IP3016.)

**EP3000 Internship in Mexican Education: Private Schools (3)**

During the fall semester, each participant will serve as a teaching assistant to an assigned classroom teacher in a private school (primary or secondary) for 7 hours per week. The focus will be on gaining experience working in a Mexican private school setting, assisting the classroom teacher and gaining an understanding of the educational life in Mexican private schools. Participants will engage in an associated teaching assistantship seminar for two hours per week with a seminar leader. The seminar will serve as a support seminar where participants will explore their role as teaching assistants, link theory and practice in the school setting, and engage in a series of assignments designed to

provide a framework for gaining knowledge of Mexican students and schooling in private school settings. Upper division. Offered Fall.

#### **EP3000 Internship in Mexican Education: Public Schools (3)**

During the spring semester, each participant will serve as a teaching assistant to an assigned classroom teacher in a public school at the primary level for 7 hours per week. The focus will be on gaining experience working in a Mexican public school setting, assisting the classroom teacher with the students and classroom activities, and gaining an understanding of

the educational life in Mexican public schools. Participants will engage in an associated teaching assistantship seminar for two hours per week with a seminar leader. The seminar will serve as a support seminar where participants will explore their role as teaching assistants, link theory and practice in the school setting, and engage in a series of assignments designed to provide a framework for gaining knowledge of Mexican students and schooling in a Mexican public school setting. Upper division. Offered Spring.

## **Courses for the "Study Engineering in Mexico" Program**

**Spanish Language (6):** Prior to arrival, students will take a placement test online and be placed in the appropriate level of Spanish coursework offered by the *Programas Internacionales*. Students continue with Spanish language in the second semester.

Note that in the spring semester, students may select Fluid Mechanics and/or Thermodynamics depending on the specific requirements of the student's major.

#### **CV2003 Solid Mechanics (3)**

This course provides the basic solids and structural mechanics concepts with the goal of knowing the behavior of the mechanical elements subject to deformations and/or internal and external forces. Requires previous static, differential and integral calculus, differential equations and physics elements. As learning result it is expected that the student applies the concepts, analytical resources and procedures for the understanding of the deformation and internal forces states in mechanical members. Lower division. Taught in English. Required course in Spring.

#### **MA2001 Differential Equations (3)**

This course provides students with the mathematical tools necessary to model and analyze the behavior of physical systems using differential equations. Learning outcome: students will be able to 1. Understand the basic concepts of matrix algebra. 2. Solve systems of linear equations using the tools of matrix algebra. 3. Understand the basic concepts of differential equations and the methods of solving them. 4. Understand the Laplace transform. 5. Apply the Laplace transform in solving differential equations (linear with constant coefficients). 6. Apply the concepts of differential equations to modeling and solving problems of medium complexity. Lower division. Taught in English. Required course in Fall.

#### **MA2009 Calculus III/Multi-variable Calculus (3)**

This course is intended to facilitate understanding of Engineering situations and phenomena through the development of mathematical thinking related to the ideas of variation and change, and its application to solving engineering problems involving quantities that are related to several variables. The course requires prior knowledge of differential and integral calculus of single-variable functions and elementary vector algebra. As a result of learning, the student values, understands and uses infinitesimal arguments to study concepts and build engineering formulas involving quantities related to several variables, relying on technological resources as required. Lower division. Taught in English. Required course in Fall.

#### **M1003 Statics (3)**

This is a basic course in the engineering area, in which the student applies his knowledge of physics and handling of vectors to solve problems associated with static equilibrium of rigid bodies. Lower division. Taught in English. Required course in Fall.

#### **M1005 Dynamics (3)**

In this basic engineering course, students apply their knowledge of statics and calculus to solve problems associated with the plane motion of rigid bodies. This course requires prior knowledge of vectors, free-body diagrams, principles of differential and integral calculus, evaluation of support forces and reactions with or without friction. The learning outcome of this course are: to obtain the kinematic conditions (position, speed and acceleration) in the motion of rigid bodies; assess the required force and momentum to maintain or cause motion in rigid bodies; and select the most appropriate analysis method for a specific application. Lower division. Taught in English. Required course in Spring.

#### **IQ2001 Thermodynamics (3)**

This course uses mathematical analysis, algorithmic thinking and knowledge of thermodynamics (first and second law) to solve problems involving energy transformation in pure substances. Thermodynamic cycles, and the reasons why the operating efficiency of a process or thermal machine is limited, will be analyzed. Themes and concepts related to sustainable development will be included in the form of examples, problems and case studies. This course requires prior knowledge of differential and integral multivariable calculus, general chemistry and physics. The learning outcome of this course is for students to construct mathematical models explaining energy transformations in industrial processes and thermal machines. Upper division. Taught in English. Elective course in Spring.

#### **M2021 Fluid Mechanics (3)**

This is an intermediate mechanical engineering course that provides students with the tools to solve complex problems related to fluid flow, external flow, gauging, flow measurement and flow properties using mathematical analysis and thinking. This course



requires prior knowledge of differential equations. As a learning outcome, students propose solutions to problems related to fluids, using mathematical and experimental analysis. They evaluate the performance of systems that use fluids as a means of operation and

suggest improvements for these systems. Upper division. Taught in English. Elective course in Spring.

## University Courses in the Regular Departments

Most of the fields that are taught at Querétaro campus are open to international students, depending on their language proficiency and completion of prerequisite courses. The most current information can be found on the web at [www.study-in-mexico.com](http://www.study-in-mexico.com) (Not all of the courses in Spanish are included). Please note that course offerings are subject to change.

Course information is divided by field of study. Students may take any of the classes offered in Spanish if they are placed in an "Advanced Spanish I" level according to the results of the Spanish language placement exam.

Students may check the "plan de estudios" of the 21 majors offered to have a general idea of classes offered in Spanish. To do that, visit <http://sitios.itesm.mx/va/> and click on "PLANES DE ESTUDIO / "Profesional" / "Carreras DE profesional." Click on a degree major (licenciado) to see a list of courses in the degree program. To obtain more complete information available in Spanish about the Tecnológico de Monterrey degree programs, click on any of the degree codes in the left hand column.

Courses in semesters 1-4 are considered lower division and courses in semesters 5 and above are considered upper division. To view course numbers with links to course descriptions and syllabi, click on the course titles in the plan de estudios or click on "Ver detalles" at the bottom of the plan de estudios page.

Once students are accepted to the Tec, they will receive a list of courses. The final schedule of classes open and the day and time of classes will be given to students about two weeks prior to their arrival.

### Regular Courses Taught in English

Courses are offered in English in the following areas:

Architecture / Industrial Design

Business:

- Administrative Science
- Economics and Finance
- Financial and Managerial Accounting
- Financial Management
- Human Resources
- Information Systems
- International Business
- Marketing
- Organizations

Communications

Engineering:

- Agricultural Engineering
- Chemical Engineering
- Civil Engineering

- Computer Science
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering
- Systems Engineering

Humanities

Sciences

- Chemistry
- Physics

Social Sciences

- Economics and Finance
- Human Resources
- International Relations
- Political Science

For academic questions, contact Mr. Jorge Osvaldo Tandy Jimenez, Academic Advisor, at [jtandy@invitados.itesm.mx](mailto:jtandy@invitados.itesm.mx). For non-academic questions, contact Ms. Gema Procal Medina, International Student Advisor at [jgprocalme@itesm.mx](mailto:jgprocalme@itesm.mx).