COURSES OFFERED IN ENGLISH
FALL SEMESTER

SECRETARÍA DE INNOVACIÓN E INTEGRACIÓN SOCIAL
DIRECCIÓN DE RELACIONES INTERNACIONALES

SCHOOL	ACADEMIC PROGRAM	SEMESTER	SUBJECTS TAUGHT IN ENGLISH
Escuela Superior de Comercio y Administración Campus Santo Tomás (ESCA) Location: Mexico City escasto.ipn.mx/	Public Accountant Total of semesters: 8	5th 7th	International accounting standards International trade
	Bachelor's in Business Administration and Development Total of semesters: 8	3th 3th 5th	Strategic management Main international economies Business English
	Bachelor's in Digital Marketing Total of semesters: 8	5th 7th	Branding and digital marketing Design thinking and innovation
	Bachelor's in Digital Business Total of semesters: 8	7th 7th	Digital business entrepreneurship Clean and renewable energies
	Bachelor's in International Business Total of semesters: 8	5th 5th 7th 7th	Marketing and international promotion Foreign investment Business analysis and geopolitics Business intelligence
	Bachelor's in Commercial Relations Total of semesters: 8	5th 5th 7th	Market analysis and measurement Supply chain management Marketing advanced topics

SCHOOL	ACADEMIC PROGRAM	SEMESTER	SUBJECTS TAUGHT IN ENGLISH
Escuela Superior de Cómputo (ESCOM) Location: Mexico City escom.ipn.mx/	MSc. in Artificial Intelligence and Data Science Total of semesters: 4	1th 2th	Algorithms, data structures and programming Evolutionary computing
	Computer Systems Engineering Total of semesters: 8	6th 6th 6th 6th 6th 6th 6th 6th 6th 6th 6th 6th 6th 6th 7th 7th 7th 7th 7th 7th 7th 7th 7th 7th 7th 7th 7th	Cellular Automata Computer Graphics Genetic Algorithms Non-relational Databases Machine learning Machine learning Software Quality Assurance and Desing Patterns Statical Tools for Data Analytics Embedded Systems Virtual Instrumentation Introduction to Cryptography Computer Security High Technology Enterprise Management Computing Selected Topics I Complex Systems Virtual and Augmented Reality Bioinformatics Big Data Natural Language Processing Image Analysis Web Client and Backend Data Mining Internet of Things Virtual Instrumentation Applications Selected topics in Crytography IT Governance Economic Engineering Computing Selected Topics II

SCHOOL	ACADEMIC PROGRAM	SEMESTER	SUBJECTS TAUGHT IN ENGLISH
Centro de Investigación y Desarrollo de Tecnología Digital (CITEDI) Location: Baja California citedi.ipn.mx/	MSc. in Digital Systems Total of semesters: 4	A & B A & B A & B A & B	Digital optical systems for image processing Digital image processing Telecommunication services and networks Three-dimensional scanning and digital gringe-projection technology
	PhD. in Digital Systems Total of semesters: 4	A & B A & B A & B A & B A & B	Digital optical systems for image processing Image analysis Image phase demodulation for digital fringe projection profilometry Mathematical modeling of advanced multi-device vision systems Three-dimensional scanning and digital fringe-projection technology