Web Page:	https://studyinmexico.tec.mx/
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Undergraduate Research Program

Project Name	EEG-based Brain-Computer Interfaces
Campus & Location in Mexico	Guadalajara
Faculty	Engineering and Science
Research Area	Neurotechnologies, Biomedical Engineering, Computer Science.
Research Responsible	Javier M. Antelis
Description of the Project	P300-based brain-machine interface for a robotic hand-orthosis control for patients with amyotrophic lateral sclerosis - Motor Imagery-based BCI coupled with a FES system as neurorehabilitation after spinal cord injury - Decoding of self-paced and self-selected movements from EEG/EMG. - Detection of braking situations from driver's EEG signals.
Training Provided	Electroencephalogram (EEG) recording and experiments. -@ Online BCI experiments (P333, SSVEP, MI and Hybrid) with healthy individuals and/@or patients with ALS or SCI. -@ EEG singal processing. - Time, frequency, and Time-@frequency domain analysis of EEG. -@ Use and implementation of machine learning models (emphasis in spatial filters) for BCI. - Offereed during summer, winter and semester

Offered during:

SUMMER	X	**WINTER**		**SEMESTER**	X

Student

Tasks/Responsibilities	To carry out EEG and BCI experiments -@ To analize EEG recordings -@ To develop code in Matlab and/@or Python
Required Language Proficiency	English: basic to intermadiate level Spanish: basic to intermadiate level
Required Skills and Abilities	Basis of digital signal processing (e.g., Fourier analysis) -@ Basis of machine learning -@ Matlab/@Python
Other Documents	1) Being at least in your 2nd year of bachelor 2) Accumulative grade point average (GPA) 2.5 3) Official Transcript 4) 2 letters of recommendation of faculty members 5) Resume 6) Letter of intention explaining the reason why you would like to participate in the research program