

<b>Web Page:</b>	<a href="https://studyinmexico.tec.mx/">https://studyinmexico.tec.mx/</a>
<b>Contact Information:</b>	<a href="mailto:studyinmexico@itesm.mx">studyinmexico@itesm.mx</a>

### Undergraduate Research Program

<b>Project Name</b>	Analysis and synthesis of automation controllers
<b>Campus &amp; Location in Mexico</b>	Guadalajara
<b>Faculty</b>	Engineering and Sciences
<b>Research Area</b>	Automation & Mechatronics
<b>Research Responsible</b>	Carlos Renato Vázquez
<b>Description of the Project</b>	In this project, we are developing a mathematical theory that allows an efficient, correct and automatic design of code (PLC) programs for automation systems. We are developing an automation platform for the validation of the proposed algorithms.
<b>Training Provided</b>	Discrete dynamical systems, algorithms, electro-pneumatic systems, PLC programming, industrial networks.

#### Offered during:

SUMMER

WINTER

SEMESTER

### Student

<b>Tasks/Responsibilities</b>	Validate code programming algorithms in an automated manufacturing cell. Develop & modify existing algorithms to include new scenarios.
<b>Required Language Proficiency</b>	Spoken and written English
<b>Required Skills and Abilities</b>	Basic knowledge on automation: sensors, actuators and PLC devices.
<b>Other Documents</b>	<ol style="list-style-type: none"> <li>1) Being at least in your 2nd year of bachelor</li> <li>2) Accumulative grade point average (GPA) 2.5</li> <li>3) Official Transcript</li> <li>4) 2 letters of recommendation of faculty members</li> <li>5) Resume</li> <li>6) Letter of intention explaining the reason why you would like to participate in the research program</li> </ol>