

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

Project Name	Simulation of the branched flow of light
Campus & Location in Mexico	Monterrey
Faculty	Engineering and Sciences
Research Area	Optics and Photonics
Research Responsible	Dr. Dorilián López Mago
Description of the Project	The student will develop a numerical method to simulate light's propagation inside a thin soap membrane. The objective is to reproduce a recently-discovered optical effect known as optical branched flow. The results will support the experimental realization of this effect.
Training Provided	We will provide the main theoretical background and basic numerical methods. The student will join our research group and learn from the experience of its members.

Offered during:

SUMMER

WINTER

SEMESTER

Student

Tasks/Responsibilities	The student will participate in our weekly seminars. At the end of the project, the student will present the project results and write a final report in the form of a research paper.
Required Language Proficiency	English 90%
Required Skills and Abilities	The student requires basic knowledge of optics and numerical methods.
Other Documents	<ol style="list-style-type: none"> 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