

# Laura Martin Mendez

Amherst, Massachusetts

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## Summary

Organized and reliable biomedical engineering student with a strong foundation in Python, Microsoft Office, and Chemistry lab techniques. Effective problem-solver with solid technical skills, teamwork, and leadership skills.

## Education

University of Massachusetts Amherst

Bachelor of Science in Biomedical Engineering

Member of the Honor Society of Phi Kappa Phi

Chancellor's Award Scholarship

Dean's List (Fall 2023, Spring 2024, Fall 2024, Spring 2025)

Anticipated May 2027

**GPA: 4.0**

## Skills

SolidWorks, MATLAB, Microsoft Office; Python; Canva; Laboratory skills; Languages: Spanish, English, Catalan

## Relevant Courses

Strength of Materials, Material Science, Musculoskeletal Biomechanics, Anatomy & Physiology I, Introduction to Bioengineering, Statics and Dynamics, Introduction to Python, Differential Equations, Calculus III, General Chemistry II, Physics II

## Academic Projects

Biomedical device design final project, Strength of Materials

Spring 2025

- Designed a microneedle patch for drug delivery on SolidWorks, analyzing the optimal material, geometry and dimensions
- Applied engineering principles to ensure safety and efficacy under physiological conditions

Poster presentation, Introduction to Biology for Engineers

Fall 2024

- Conducted exhaustive research on the role of mitochondria in cancer development, created an academic poster, and presented it to classmates, professors, and faculty members

Game development in Python, Computer Science (Introduction to Python)

Spring 2024

- Coded and tested videogames in Python, including Hangman and Wordle

## Relevant Experience

Xian Du Research Lab Assistant, Amherst, MA

December 2024-Present

- Researched light-based 3D-printed drug delivery systems, and designed microneedle patches
- Learned about ANYCUBIC Photon Mono 3 and MONO3Z1 3D printers, and created a Standard Operating Procedure
- Prepared resin formulations, 3D printed microneedle patches, and measured the dimensions after printing
- Will drug-load the microneedle patches and analyze their mechanical properties

Department of Mathematics and Statistics office assistant, Amherst, MA

September 2024-Present

- Contribute to the building of relationships within the Mathematics and Statistics Department by preparing the Department's weekly tea and maintaining a clean and organized learning environment
- Implemented an efficient inventory of office supplies, ensuring adequate stock levels and optimization

Summer camp counselor (Camp Ozanam), Carsonville, MI

June-August 2024

- Coordinated and lead different activities for children aged 8 to 14
- Developed leadership skills and planned events and activities, while ensuring the safety and well-being of all participants

## Leadership Experience

Society of Hispanic Professional Engineers (SHPE), Amherst, MA

Spring 2024-Present

- Executive Board Member, served as Social Media Coordinator and now as Treasurer
- Manage the club's finances, including budgeting and coordinating fundraising activities

BME Diversity Equity and Inclusion (DEI) committee, Amherst, MA

Spring 2024-Present

- Junior representative of the BME DEI committee
- Organize and lead social and professional events, as well as design promotional materials

## Affiliations and Activities

Revolutionary, Inclusive, Sustainable Engineering (RISE) Scholars Program; Society of Women Engineers (SWE); Society of Hispanic Professional Engineers (SHPE), BME DEI committee.

Gymnastics club, ice skating club, traveling, skiing, cooking