

PRE-ENGINEERING PATHWAY FOR STUDENTS

Louisiana State University

LSU

INTRODUCTION

The LSU Pre-Engineering STEM Certification Pathway began in 2016 with the goal of increasing the number of students taking high quality LSU STEM courses from LSU-trained and supported teachers. The three pillars of the pathway are: computational thinking, 21st century skills, and engineering knowledge.

COURSES

9th Grade

- Introduction to Engineering (Dual Enrollment optional)
- Introduction to Computational Thinking

10th Grade

- Introduction to Robotics (VEX)
- Principles of Engineering
OR
- Engineering Design and Devel.

11th/12th Grade

- Various Electives (including AP and Dual Enrollment options)



WHY DO THIS PATHWAY?

Silver and Gold STEM Endorsement opportunity upon high school graduation

To learn more visit: <https://www.louisianabelieves.com/> and search for “STEM”.

Earn LSU credit (select courses only) and take high quality project-based courses that expose you to the safety and ethics of engineering

Engaging classes with no high stakes end of course testing like AP exams or LEAP2025!

Learn skills like soldering, drafting, circuit building, 3D modeling and printing, building robots, and programming sensors.

Earn Industry Based Certifications (select courses only)

Students have the opportunity to qualify for a \$1,500 LSU Engineering freshman scholarship