FOOTHILL COLLEGE

NextGEN

Empower Future Innovators Today!

Foothill's NextGen Innovators Club Presents

Mission

Teach young students the design and engineering process through hands-on bridge-building activities so they can discover the importance of planning, designing, effective communication, and prototyping.

Curriculum

Day 1

Introductions; let students experiment with bridge-building without guidance. Discuss the importance of planning.

Day 2

Each student creates a bridge design but builds another student's. Reflect on clear communication.

Day 3

Replace segments on a bridge kit with flexible material to explore how bridge design impacts forces in the bridge.

Day 4

Learn to adapt designs to unexpected challenges, like water resistance, by rethinking design and material choices.

Day 5

Introduce final project to build an ideal bridge for a given scenario. Learn to ask questions and develop their own rubric.

Day 6

Build and test their first prototype. Improve their design and start working on the final prototype.

Day 7

Test and evaluate each bridge, present awards, and reflect on our learning as a group. With permission from the school, we may bring some snacks for a fun celebration.

For further details, please scan the QR code or contact Devi Amarsaikhan, the club president, at **deviamar622@gmail.com** or **650-307-3864**