

# ARCHITECTURE ENGINEERING MATH

By Kids In Design  
www.kidsindesign.com

Fall Semester 2024, PS 527, on site      Thursdays (120 mins, dismissal- 5 pm)

<b>Section 1: Grades K-1<sup>st</sup></b>	<b>Section 2: Grades 2<sup>nd</sup>-5<sup>th</sup></b>
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September 12- January 23.

Many celebrated architects in history (Pythagoras, Vitruvius, Michelangelo, Leonardo) were also remarkable engineers, mathematicians, and inventors. This course teaches critical skills and thinking in the same cross-disciplinary spirit. We introduce students to a variety of overlapping ideas in architecture, engineering, and math. Each concept is presented via a hands-on project. The course fosters the ability to recognize complex mathematical patterns and creatively solve challenging real-world problems.

Kids In Design celebrates its 6th year of instruction at PS 527. It is currently taught in other top NYC schools such as PS 6, NEST +M, Avenues, Spence, St. David's, Columbia Grammar, and many others.

### Some of our curriculum' topics:

- Become an innovator! Could you design your own measuring instruments? Could the axel of the wheel be moved without compromising the wheel's efficiency? Could you design your own building materials? Could you design architecture that moves?
- Multiple engineering challenges involving structural engineering (materials, columns, bridges, skyscrapers, simple and compound machines).
- Various topics from two- and three-dimensional geometry, introduction to modelling, spatial thinking, and analysis.
- Explore various forces, such as tension and compression.
- Learn about and prototype various canonical buildings while exploring arches, a variety of domes, columns, beams, and other structural elements.

Cost \$ 640

### SIGN-UP SHEET

Child's Name and Grade \_\_\_\_\_

Parents' contact emails and phone numbers \_\_\_\_\_

**Please email the complete registration information to the email below and remit the payment of \$640 via Venmo issued to @Julia-Gorodetsky (0861 phone verification if needed) or via Zelle (Julia.Gorodetsky@gmail.com). Enrolment will close once all the available slots are filled.**

Questions? Please email [julia.gorodetsky@kidsindesign.com](mailto:julia.gorodetsky@kidsindesign.com)

NOTE: The class is subject to the minimal student enrolment.