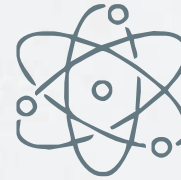




**NLK ACADEMY**  
AFFILIATED TO CBSE

# STEAM COFFEE BOOK





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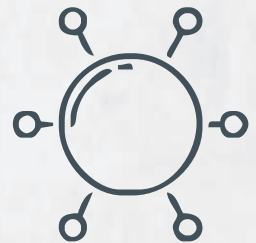
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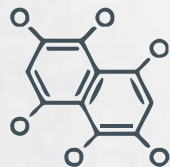
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Academy's Steam Lab



# ABOUT OUR STEAM PROGRAM

Welcome to STEAM - where Science, Technology, Engineering, Arts, and Mathematics come together to ignite creativity and innovation. Through our hands-on programs like Engineering Design and Coding: App and Game Development, we empower learners to turn ideas into real-world solutions. Join us on this exciting journey to build skills, solve challenges, and shape the future with imagination and technology.





# • READY ? •

## HERE WE GO!

"The future belongs to those who imagine, design, and build - that's the power of STEAM."

# CODING: APP AND GAME DEVELOPMENT



The App & Game Development program for Grades 6 to 8 empowers students to become creators of technology, not just consumers. Through an engaging, project-based approach, students learn the fundamentals of programming, logic, and user-centered design. They explore coding concepts by building their own apps, games, and interactive experiences, using tools that make complex ideas accessible and fun. As they design, test, and refine their digital creations, students develop essential skills like computational thinking, problem-solving, and creativity. This program ignites a passion for innovation while laying the groundwork for future exploration in computer science and digital technology.

## CODING: APP AND GAME DEVELOPMENT

Help the Needy

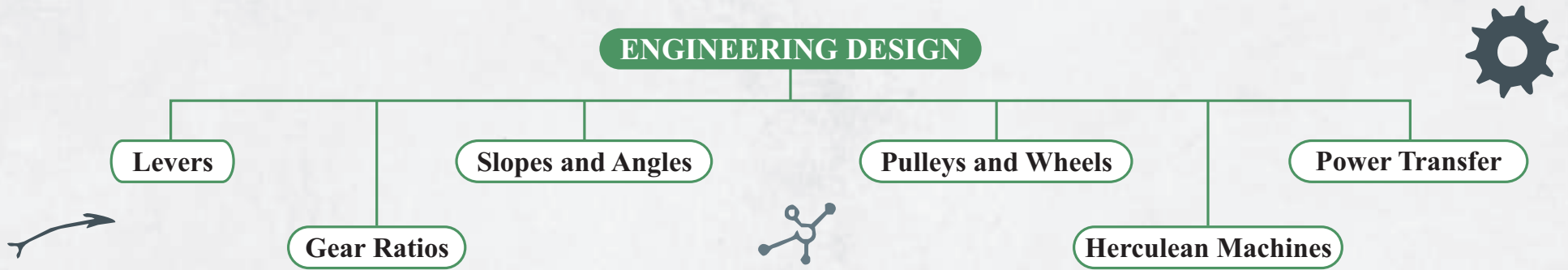
Cannon Tales

Pirate Games



# ENGINEERING DESIGN

The Engineering Design program for Grades 6 to 8 introduces students to the dynamic world of engineering through hands-on, challenge-based learning. Guided by the engineering design process—ask, imagine, plan, create, and improve—students explore core principles in mechanical, structural, and environmental engineering. Each project encourages creative problem-solving, teamwork, and iteration, helping students develop key skills such as critical thinking, collaboration, and resilience. Designed to inspire curiosity and innovation, this program builds a strong foundation in STEAM, showing learners how their ideas can lead to meaningful, real-world impact.



# OUR CAPSTONE PROCESS

**Define:** Clearly identifying the problem or challenge to solve. It involves understanding the need, setting goals, and outlining the purpose of project.

**Ideate:** Generating a variety of creative ideas and possible solutions to the defined problem. It encourages brainstorming, exploring new possibilities, and thinking beyond the obvious to design innovative approaches.

**Prototype:** Building a working model or a rough version of solution. It helps in testing ideas, exploring how they function in real life, and making improvements based on how well the prototype performs.

**Evaluate:** Testing prototype to see how well it solves the problem. It involves gathering feedback, analyzing results, and identifying improvements to make the solution more effective and reliable.

**Reflect:** Looking back at entire project journey to assess what worked, what didn't, and what students learned. It helps in recognizing growth, refining ideas, and preparing for future problem-solving challenges.



# ACADEMY'S STEAM LAB

Our STEAM Lab is a dynamic, student-centered space designed to promote collaborative and hands-on learning. The layout of our STEAM Lab encourages teamwork and peer interaction. Each group is equipped with tablets and a range of engineering tools and equipment, enabling students to engage in both digital creation and physical prototyping. The bright, well-lit environment, paired with vibrant furniture, creates an energetic and engaging atmosphere. Teachers act as facilitators, guiding students through the learning process while encouraging independence. Organized resources and visual learning aids further enhance the experience, making the lab a hub of creativity, curiosity, and innovation.





**THANK YOU**

*"STEAM is not just about what we learn-it's about how we think, create, and change the world."*