

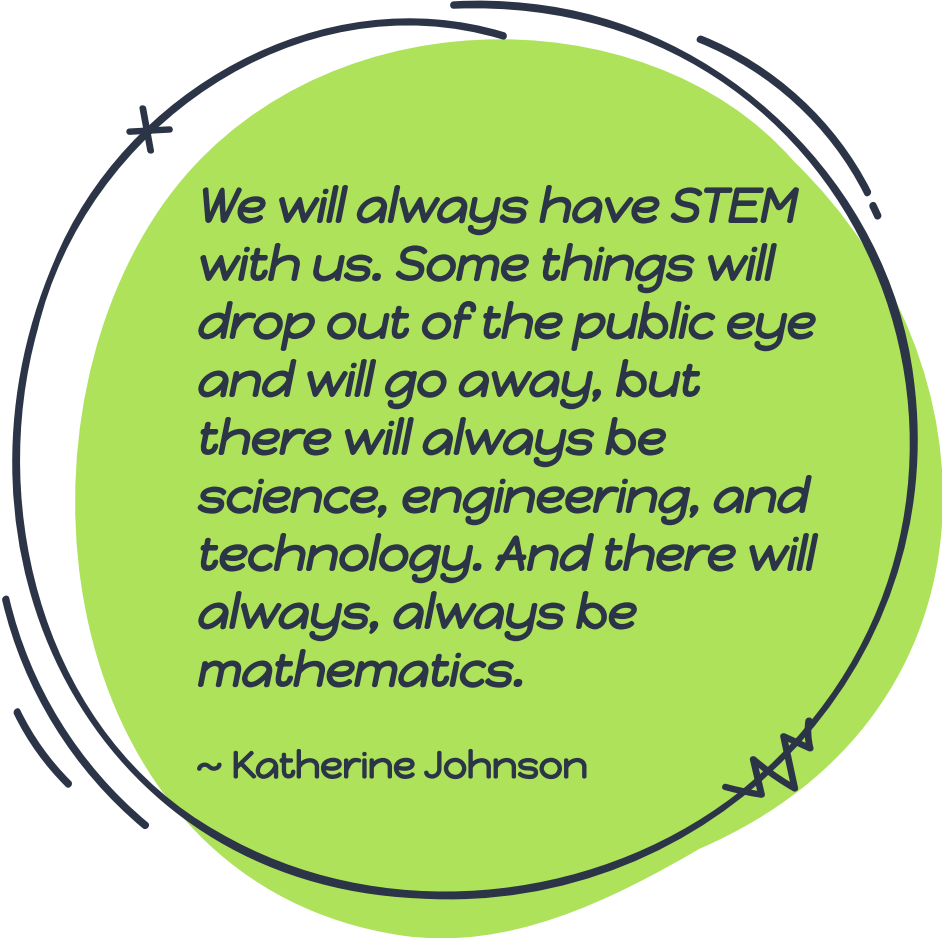


# STEM @ DPS

BOE UPDATE  
JANUARY 26, 2021

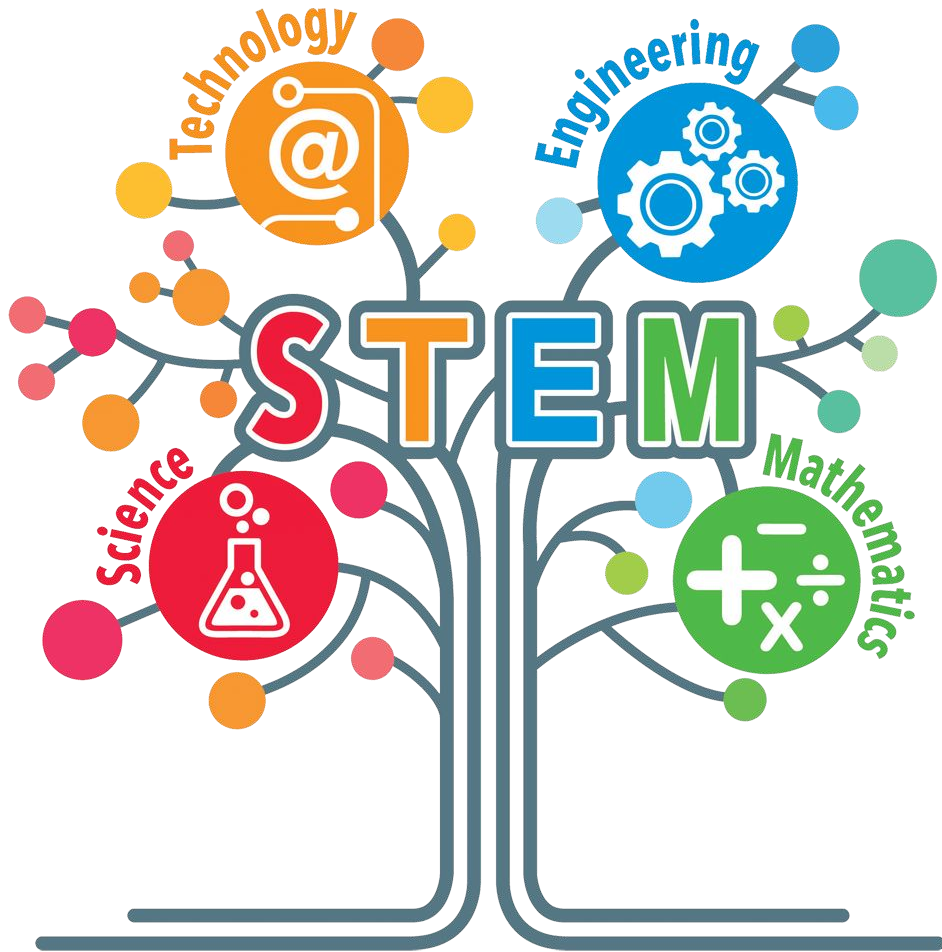
# UPDATE

- STEM Overview
- Current STEM Opportunities
- Looking Ahead



*We will always have STEM with us. Some things will drop out of the public eye and will go away, but there will always be science, engineering, and technology. And there will always, always be mathematics.*

~ Katherine Johnson



What is  
STEM?

# DPS STEM LEARNING OPPORTUNITIES AT A GLANCE

## ELEMENTARY

Science

Math

Library Experiences

Outreach HS Program

## MIDDLE SCHOOL

Science

Math

Project Lead the Way:

- Design & Modeling
- Energy & the Environment
- App Development

Global Innovators

## HIGH SCHOOL

Science

Math

Technology and Engineering

Computer Science

Business

# Next Generation Science Standards

- Three Dimensional Approach: Science and Engineering Practices, Disciplinary Core Ideas, Crosscutting Concepts
- Engineering Design Performance Expectations
- Engineering Design Process

K-2

G. 2: Which material would make the best roof for a dog house?

3-5

G: 5 How can an oil spill be cleaned up to decrease the environmental impact?

2-5

DHS STEM Outreach Program

Engineering Design Elementary Level

6-8

G. 6: How can we design a cup system to slow energy transfer into the liquid inside it?

G. 7: Considering one who has cerebral palsy, what design attributes should a therapeutic toy have?

9-12

G. 9: How does planting trees compare to other solutions for climate change?

G. 9: How can we utilize various forms of energy to move goods and people more efficiently?

## Engineering Design Secondary Level

# NEW STEM COURSES

## Accounting

Opportunity for students to deepen their understanding

Bridging Math

## App Development

Fulfills a gap/need in Computer Science

## STEM Design and Innovation

Science and Technology Education Co-curricular course

Focus on NGSS Science and Engineering Practices and UN Sustainable Development Goals.

Video Production

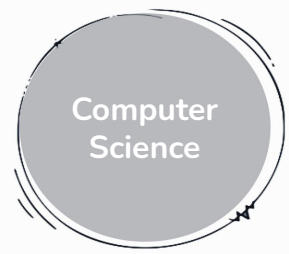


The logo for the STEM Innovation Center is a light green oval with a black border and a small star at the top. The text "STEM INNOVATION CENTER" is centered inside the oval in a bold, black, sans-serif font.

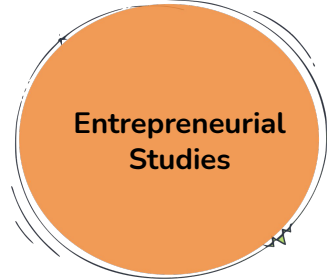
# STEM INNOVATION CENTER

1

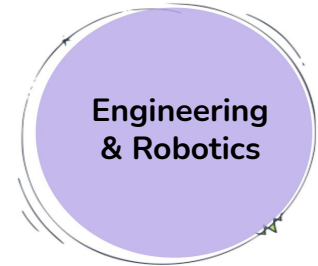
## Content & Skills

A grey circular icon with a white border and a small star at the top. The text "Computer Science" is centered inside the circle in a white, sans-serif font.

Computer  
Science

An orange circular icon with a white border and a small star at the top. The text "Entrepreneurial Studies" is centered inside the circle in a white, sans-serif font.

Entrepreneurial  
Studies

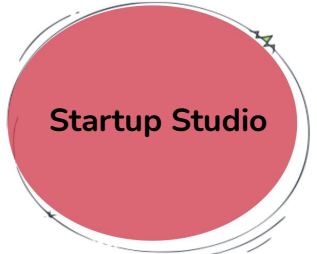
A purple circular icon with a white border and a small star at the top. The text "Engineering & Robotics" is centered inside the circle in a white, sans-serif font.

Engineering  
& Robotics

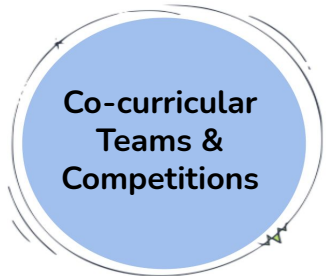
A blue circular icon with a white border and a small star at the top. The text "Video & Podcast Production" is centered inside the circle in a white, sans-serif font.

Video &  
Podcast  
Production

## Applications

A red circular icon with a white border and a small star at the top. The text "Startup Studio" is centered inside the circle in a white, sans-serif font.

Startup Studio

A light blue circular icon with a white border and a small star at the top. The text "Co-curricular Teams & Competitions" is centered inside the circle in a white, sans-serif font.

Co-curricular  
Teams &  
Competitions

An orange circular icon with a white border and a small star at the top. The text "Community Partnerships" is centered inside the circle in a white, sans-serif font.

Community  
Partnerships