



# Schools of Choice Programs

## Elementary & Junior High

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### What is STEM?

STEM (Science, Technology, Engineering and Mathematics) education supports the learning and development of essential, innovative, creative and foundational skills needed to create a community of learners, thinkers and global citizens. Students work within a project-based learning framework to create solutions to real-world problems focusing on post-secondary readiness skills including continuing education and job-ready certifications. These may include innovative design solutions, mentoring by industry professionals, and internships with experts in STEM fields of study.

### What are STEM Schools of Choice?

The HEB ISD Schools of Choice programs are different by design and provide academic advantages from elementary through secondary grades and beyond. Beginning in elementary, students can begin their STEM journey in Computer Science. At junior high, they can choose Computer Science, Cybersecurity/Network Tech, or Engineering/Robotics. Each program has its own set of requirements and academic path to completion through high school.

## ELEMENTARY: Computer Science/Computational Thinking

### Harrison Lane Elementary & Midway Park Elementary



#### WHAT IS COMPUTER SCIENCE?

- The study of learning to code
- The design of computers and how they work
- The impact of computers on society

#### WHY TAKE CS IN ELEMENTARY?

- The 4 C's - creativity, collaboration, communication, critical thinking
- Exposure to multiple programming languages and devices
- Introduction to data analysis, patterns, trends

#### WHAT DOES ELEMENTARY CS LOOK LIKE?

- Grades K - 2: Bi-weekly CS lessons and CS skills integrated into core curriculum for all
- Grades 3 - 6: Opportunity to opt in and Computer Science will replace Art (Fall) and Music (Spring); Art & Music will be integrated into CS projects at each grade; New coding/robotics device yearly; Participation in coding/robotics competitions

## JUNIOR HIGH: Computer Science, Cybersecurity/Network Tech, Engineering/Robotics

### Central Junior High, Euless Junior High, Hurst Junior High

#### COMPUTER SCIENCE - EULESS JH

- Enter in 7th grade; advanced courses
- 7th Grade: CS Careers/Touch-Systems Data Entry
- 8th Grade: Fundamentals of Computer Science (5.0, Tier II)
- 9th Grade: AP Computer Science Principles (6.0, Tier III)
- American CS and Technovation Challenge competitions
- Advanced certifications and internships available (HS)

#### CYBERSECURITY/NETWORK TECH - HURST JH

- Enter in 7th grade; all classes on-level
- 7th Grade: Cyber Careers/Touch-Systems Data Entry
- 8th Grade: Principles of Information Technology
- 9th Grade: Foundations of Cybersecurity
- National CyberPatriot and CyberStart America competitions
- Industry certifications and practicums available (HS)

#### ENGINEERING/ROBOTICS - CENTRAL JH

- Enter in 7th grade; advanced courses
- 7th Grade: Investigating Robotics (1 sem) Investigating Engineering (1 sem)
- 8th Grade: Principles of Applied Engineering (5.0, Tier II)
- 9th Grade: Fundamentals of Computer Science (5.0, Tier II)
- Bell Vertical Robotics, FIRST Robotics competitions
- Advanced certifications and internships available (HS)

NOTE: All junior high STEM students are encouraged to participate in Middle School Esports!