



# P-TECH CURRICULUM BOARD MEETING

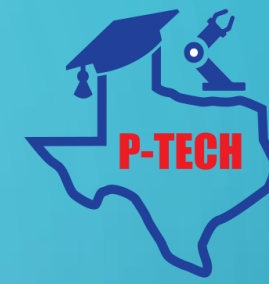


**PATHWAYS IN  
TECHNOLOGY  
EARLY COLLEGE  
HIGH SCHOOL**



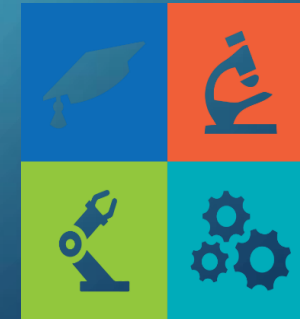
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READINESS  
SCHOOL  
MODELS**

# WHAT IS P-TECH?



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- I. Texas Education Agency (TEA) Initiative
  - in collaboration with the Texas Workforce Commission
  - and Texas Higher Education Coordinating Board
- II. Open-enrollment programs that provide students an opportunity to earn an associate's degree and/or certifications and a work-based education
- III. Programs to prepare students for the workforce in four of the high-demand fields designated by the Texas Governor:
  - Advanced technologies and manufacturing (Porter ECHS)
  - Biotechnology and life sciences (Hanna ECHS)
  - Information and computer technology
  - Petroleum refining and chemical products
- IV. Allows students to gain work experience through an internship, apprenticeship, or other job training program



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# WHAT IS WORK BASED LEARNING?



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## What is Work-Based Learning?

Career Awareness	Career Exploration	Career Preparation	Career Training
<ul style="list-style-type: none"><li>• Increasing knowledge of career possibilities</li><li>• Identifying possible areas of interest</li></ul>	<ul style="list-style-type: none"><li>• Preparing to make informed choices about educational and career options</li></ul>	<ul style="list-style-type: none"><li>• Gaining employability skills</li><li>• Increasing knowledge of field of interest</li><li>• Academic learning</li><li>• Temporary employment</li></ul>	<ul style="list-style-type: none"><li>• Gaining specific skills needed to work in a particular industry</li><li>• Academic learning</li><li>• Permanent employment</li></ul>

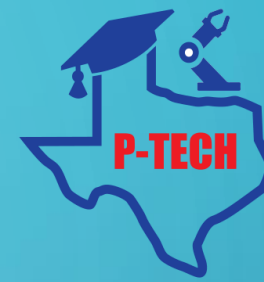
The expectation in P-Tech is that a student will receive work based mentoring all 4 years.



PORTER ECHS  
P-TECH

**Advanced  
Manufacturing  
(Mechatronics)**

# PORTER P-TECH



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## What is Mechatronics?

It is a field of Engineering that includes study with a combination of various Engineering disciplines such as mechanical, electrical, telecommunication, control and computer engineering.

Example: Robotics



## → Courses

- Principles of Manufacturing
- DC Circuits/ AC Circuits
- Digital Fundamentals/ Programmable Logic Controllers
- Basic Fluid Power/ Industrial Animation
- ADV Programmable Logic Controllers/ Robotics

## → Dual Enrollment

In Collaboration with TSTC  
Junior and Senior Year

- ## → Associates Degree in Mechatronics and/or Industrial Systems Technology Certificate

Students will begin taking their academic dual courses with TSC beginning in the 9<sup>th</sup> grade.



HANNA ECHS  
P-TECH

Health Services and Biotechnology

# WHAT IS THE HEALTH SERVICES PATHWAY?



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The Health Services pathway focuses on providing students the necessary academic and social skills to thrive in a career in healthcare such as nursing or physician assistant. The pathway focuses on science, math, ethics, and clinical experience.



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# WHAT IS THE BIOTECHNOLOGY PATHWAY?

The Biotechnology Pathway focuses on learning about the study of biology and how technology can help improve people's lives. Biotechnology aims to prepare students for careers in pharmaceuticals or laboratory research. The Pathway also has a component for Biomedical Equipment Technology. The pathway focuses on biology, chemistry, math, ethics, and laboratory experience.



# EARLY COLLEGE HIGH SCHOOL VS. P-TECH VS. DUAL ENROLLMENT

Early College High School	P-Tech	Dual Enrollment
Students must apply to be part of the ECHS cohort	Students must apply to be part of the P-Tech cohort	Open to all BISD students
Students will begin taking dual credit courses in the 9 <sup>th</sup> grade	Students will begin taking dual credit courses in the 9 <sup>th</sup> grade	Students may begin taking dual credit courses in the 9 <sup>th</sup> grade
Students will be grouped in core academic courses with other ECHS students	Students will be grouped in core academic courses with other P-tech students	Students will take courses with all other students
Students will receive additional support through AVID	Students will receive additional support through AVID	AVID is not available
The expectation is that all students will graduate with an associate degree	The expectation is that all students will graduate with an associate degree and/or work credential	Student may earn up to an associate degree
Work study may be part of the program	Work study will be part of the program	Word study may be part of the program
Mentorships may be available	Mentorships will be available for all four years	Mentorships may be available

# CURRENT PATHWAYS WITH TSC

- Associate of Science
  - Preparation for application to the Chevron Engineering Academy or another university engineering degree program
- Associate of Arts in Business
- Associate of Arts in Criminal Justice
- Associate of Arts in General Studies
- Associate of Arts in Teaching
  - Early Childhood – 6<sup>th</sup> Grade
- Pre-Health Pathway

# FUTURE PLANS FOR ECHS AND P-TECH

- Work with higher institute of education partners (IHE) to insure that all courses are available that lead to certification and/or an associate degree
- Develop more pathways leading to associated degrees and/or certifications
- Research and examine the feasibility of developing and opening a Pre-law academy



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