



PATHWAYS IN TECHNOLOGY EARLY COLLEGE HIGH SCHOOL

Pathways in Technology Early College High School Roadmap to Opening

Overview of the Pathways in Technology Early College High School Roadmap to Opening

The Pathways in Technology Early College High School (P-TECH) Roadmap to Opening serves as a companion guide to the P-TECH Blueprint. The Roadmap to Opening prioritizes a set of actions for P-TECH leadership teams to take during the onboarding and planning phases for the new P-TECH. Each action aligns to a P-TECH Blueprint design element, an outcomes-based measure (OBM), and/or a required artifact.

The Roadmap to Opening does not address all design elements and OBMs required in the P-TECH Blueprint. Rather, the actions listed herein create an effective foundation for the rigorous process of developing a successful P-TECH. District/campus, IHE, and Business/Industry (B/I) partners are expected to complete each of the activities with support from their TEA technical assistance provider.

The Roadmap to Opening is designed for use by the entire P-TECH leadership team, with a particular focus on campus- and district-level staff with decision-making authority. The Roadmap to Opening aims to ensure P-TECH students meet access, achievement, and attainment OBMs by detailing actions necessary to support the following:

- Regularly convened leadership teams
- P-TECH staffing
- Recruitment and enrollment of targeted populations of cohorts
- Academic infrastructure effectiveness
- Strong partnership development
- Work-based learning development
- Implementation of all P-TECH design elements with fidelity to the P-TECH Blueprint
- Annual curation of P-TECH artifacts

P-TECH BLUEPRINT

Benchmark 1:
School Design

Benchmark 2:
Partnerships

Benchmark 3:
Target Population

Benchmark 4:
Academic Infrastructure

Benchmark 5:
Student Supports

Benchmark 6:
Work-based Learning

P-TECH Artifacts
P-TECH OBMs

P-TECH RESOURCES

[TEA CCRSM website](#)
[P-TECH Designation](#)
[P-TECH Learning Community](#)
[TEA CTE Programs of Study](#)
[Tri-Agency Work-Based Learning Framework](#)

June, July, and August Actions (Onboarding)

BLUEPRINT DEEP DIVE

Develop an operational understanding of the Blueprint design elements, OBMs, and artifacts as well as the CCRSM P-TECH resources.

- Explore the following via technical assistance provider-facilitated discussions with the leadership team (district/campus and IHE partner):
 - P-TECH key design elements
 - P-TECH artifacts
 - P-TECH OBMs
 - P-TECH resources (pg. 1)

- Analyze the systems, policies, and practices that currently exist to support implementing the Blueprint with fidelity to support students meeting OBMs and determine those that need to be developed (1.6)

NOTES AND NEXT STEPS:

June, July, and August Actions (Onboarding)

BENCHMARK 1: SCHOOL DESIGN

Build school capacity and identify members and roles of P-TECH leadership team to lay a strong foundation for a successful P-TECH.

- Identify existing staff member to serve as the P-TECH leader or post and hire for the position. The P-TECH leader must have autonomy for course and instructor scheduling, staff and faculty hiring, and budget development (1.8)
- Onboard P-TECH leader to the P-TECH Blueprint and district vision for the P-TECH (1.8)
- Identify members of the leadership team to include leaders from the district, campus, CTE team, IHE, and Business/Industry (B/I) partner who have decision-making authority to execute change (1.7, 1.8)
- Identify members of the P-TECH Advisory Board (1.11)
- Connect P-TECH leader with the IHE liaison and B/I liaison(s) who have decision-making authority and will interact directly and frequently with the P-TECH leader (1.8)
- Discuss P-TECH artifact posting and identify process to upload web artifacts periodically as required in the P-TECH Blueprint (p. 16 – 18)

NOTES AND NEXT STEPS:

June, July, and August Actions (Onboarding)

BENCHMARK 4: ACADEMIC INFRASTRUCTURE

Plan for student success beginning with the end in mind.

- Explore how the P-TECH academic plan, targeted postsecondary certificates, and industry-based certifications connect with the local economic needs and regional high-demand occupations using local labor market information (4.1)
- Discuss and capture initial crosswalk concepts that ensure alignment of high school requirements with industry-based certifications and college-level courses for postsecondary attainment (4.2). Consider the following:
 - Degree plans, postsecondary certificates, industry-based certifications, and/or college credentials to offer (2.4, 4.2)
 - Career and Technical Education (CTE) goals, including if students will graduate as CTE concentrators or completers
 - Requirements and needs of local B/I partner(s)
 - Location and modality of the college courses (virtual, hybrid, face-to-face, at the college, at the P-TECH) (2.6, 4.5)
 - How the college courses' contact hours fit into the high school master schedule (1.4)
 - Staffing for college courses (2.7, 4.5)
 - Facilitators for online courses (if applicable) (2.7, 4.5)
 - Funding for courses, textbooks, and supplies, including dual credit tuition funding through the Financial Aid for Swift Transfer (FAST) program (if applicable) (2.3)
 - Need for specialized facilities and equipment for workforce education course manual (WECM) postsecondary attainment courses (4.2)
 - Work-based learning opportunities at each grade level aligned to academic coursework (4.2)

NOTES AND NEXT STEPS:

June, July, and August Actions (Onboarding)

BENCHMARK 6: WORK-BASED LEARNING

Discuss plan for student enrichment, extracurricular activities, and work-based learning.

- Initiate conversations with district CTE staff, Texas Workforce Solutions, regional Education Service Center, and identified and potential B/I partner(s) to explore Career and Technical Student Organizations, competitions, and special initiatives aligned to each program of study being planned (6.4)
- Initiate conversations with identified and potential B/I partner(s) around the development of a work-based learning continuum of offerings (2.17)
- Explore options for virtual work-based learning experiences via online platforms and/or B/I partner(s) (6.1)

NOTES AND NEXT STEPS:

September and October Actions

BENCHMARK 1: SCHOOL DESIGN

Determine leadership team meeting cadence and develop strategic priorities.

- Identify roles and responsibilities of each member in the design, governance, operations, accountability, sustainability, and continuous monitoring and improvement of the P-TECH and in curriculum development, professional development, and outreach (1.6)
- Determine cadence and types of regularly scheduled internal (district/campus) and external (district/campus/IHE/business/industry) leadership and advisory team meetings (1.6)
- Educate new leadership team members and key stakeholders about the P-TECH Blueprint, design elements, and OBMs (1.6)
- Develop short-term and long-term strategic priorities for the P-TECH along with a work-flow plan to achieve programmatic goals in alignment with district/campus continuous improvement planning (1.6)
- Finalize P-TECH model and location (1.2)

NOTES AND NEXT STEPS:

September and October Actions

BENCHMARK 2: PARTNERSHIPS

Engage in memorandum of understanding (MOU)/Interlocal agreement (ILA) development and/or revision conversations with the IHE.

- Deconstruct the district’s current MOU/ILA to ensure all P-TECH design elements are addressed, and/or begin initial discussions with IHE to develop an MOU/ILA that meets all of the P-TECH Blueprint requirements, including: (BM2):
 - Goals of higher education partnership (2.1)
 - Roles and responsibilities for ensuring quality and rigor of the dual credit program (2.2)
 - Sources of funding (2.3)
 - Academic plan (2.4)
 - Transcription of credit (2.5)
 - Course delivery and scheduling (2.6)
 - Staffing plan (2.7)
 - Instructional materials (2.8)
 - Access to higher education resources (2.9)
 - Transportation (2.10)
 - Collaborative outreach efforts (2.11)
 - Student participation (2.12)
 - Academic supports (2.13)
 - Data sharing and data analysis (2.14, 2.15)

Engage in B/I partner agreement discussions.

- Identify the existing B/I partnerships and continue outreach to secure B/I partner(s) that will provide work-based learning opportunities for each program of study offered in the P-TECH and for each grade level (BM 2)

NOTES AND NEXT STEPS:

September and October Actions

BENCHMARK 2: PARTNERSHIPS

Engage in B/I partner agreement discussions to determine the following:

- Vision of the partnership (2.16)
- Roles and responsibilities for work-based learning (2.16)
- Work-based learning continuum of offerings (6.1)
 - Work-based learning experiences aligned to academic coursework and industry-based certifications (2.17)
 - Grade-level appropriate work-based learning offerings (2.18, 6.2)
 - Mentorship plan to include support for Career and Technical Student Organizations (CTSOs), competitions, and special initiatives that promote skills attainment (2.19)
- Access to B/I resources (2.20)
- Transportation roles and costs (2.21)
- Interview prioritization of qualified P-TECH graduates for open positions (2.22)
- Partnership monitoring and feedback for continuous improvement (2.23, 4.8)

Complete documentation required for TEA P-TECH Program Application Cycle (PAC).

- Update narratives in P-TECH application and submit Designation – P-TECH Renewal application
- Obtain/Complete IHE Assurance pages for TEA PAC (2.1-2.15)
- Obtain/Complete B/I Assurances Pages for TEA PAC (2.16-2.23)

NOTES AND NEXT STEPS:

September and October Actions

BENCHMARK 3: TARGET POPULATION

Formulate actions for student recruitment and stakeholder engagement.

With input from key stakeholders, develop:

- Student recruitment and enrollment policies and practices to target subpopulations that are historically underrepresented in college courses (3.1-3.4, Access OBM) including:
 - Open access admission policy (3.1)
 - Open access enrollment application (3.2)
 - Timeline of annual recruiting events (3.3)
 - Lottery system that supports mirroring district demographics for students in the targeted subpopulations (3.4)
 - Communication plan for targeted audiences (3.3)
- Regular activities to educate students, counselors, principals, parents, school board and community members about the P-TECH (3.3)
- Enrollment materials for distribution at feeder middle schools and other appropriate locations in the community (3.1, 3.3):
 - Brochures and marketing materials in English and Spanish and/or other relevant languages
 - Social media outreach

NOTES AND NEXT STEPS:

September and October Actions

BENCHMARK 4: ACADEMIC INFRASTRUCTURE

Draft crosswalks with IHE for postsecondary opportunities.

- Backwards map student pathways in the new P-TECH academic program to solidify postsecondary options for certificates and/or associate degree, and industry-based certifications (4.2, 4.3)
- Explore options for course sequence and portfolio approach to earning college credits (4.3, 4.4)
- Document when students need to be “TSIA met” for the course sequence to inform TSIA preparation and testing plans (4.7)

NOTES AND NEXT STEPS:

September and October Actions

BENCHMARK 6: WORK-BASED LEARNING

Draft initial plans for student enrichment, extracurricular, and work-based learning.

- Identify the following for each proposed pathway (6.4):
 - CTSOs, competitions, and special initiatives
 - Staff to sponsor enrichment and extracurricular activities
 - Equipment and funding needed for enrichment and extracurricular activities
- Schedule frequent work-based learning mapping sessions with B/I partner(s) to develop a continuum of offerings: career awareness, career exploration, career preparation, career training (6.1, 6.2)
- Create initial draft of 9th grade work-based learning calendar of opportunities (6.1, 6.2)
 - Scaffold employability skills and technical skills to age-appropriate opportunities
 - Develop a continuum of work-based learning experiences aligned to each pathway's academic courses and B/I expectations
 - Include CTSOs, competitions, and special initiatives in the work-based learning calendar of opportunities
 - Include mentorship opportunities with B/I partner(s)
- Finalize options for virtual work-based learning experiences (if applicable) (6.2)

NOTES AND NEXT STEPS:

November and December Actions

BENCHMARK 1: SCHOOL DESIGN

Establish academic processes and staff capacity for program implementation.

Leadership team actions for strategic priorities:

- Review MOU/ILA and gather feedback (2.1-2.15)
- Finalize college and career pathway(s), industry-based certifications, Level 1 or 2 certificates, and/or an associate degree opportunities for students while engaging in work-based learning at every grade level (4.2)
- Construct a plan for:
 - End-of-Course (EOC) assessment (4.6)
 - Academic preparation classes for accepted students (5.3, 5.6)
 - Academic intervention for students who do not pass EOC assessments (4.6)
- Develop a master schedule and staffing plan for P-TECH, which includes highly qualified P-TECH teachers and counseling/advising staff (1.8)
- Initiate a 4-year sustainability plan (staffing, equipment, tuition, textbooks, and transportation, etc.) (1.6, 1.10)
- Continue researching additional B/I partnerships that align to P-TECH priorities
- Convene an Advisory Board to develop short-term and long-term strategic priorities for the P-TECH along with a work-flow plan to achieve programmatic goals (1.11)
- Solicit Advisory Board feedback on P-TECH planning to date (2.23, 4.8):
 - Degree plans, certificates, industry-based certifications (4.2, 4.3)
 - Resource acquisition (1.11)
 - Curriculum development (4.2, 4.3)
 - Work-based learning continuum: career exploration, career preparation, and career training (6.1)
 - Work-based learning offerings (6.2)
 - CTSOs (6.4)
 - Competitions (6.4)
 - Special initiatives (6.4)
 - Partnership monitoring components of B/I agreement(s) (2.23)
- Engage Advisory Board to research externship opportunities (1.8)

NOTES AND NEXT STEPS:

November and December Actions

BENCHMARK 3: TARGET POPULATION

Recruit and enroll students from subpopulations that are historically underrepresented in college.

- Launch student and parent outreach events for recruitment and enrollment of target populations

- Engage B/I partner(s) and IHE partners in recruitment activities, such as (3.2):
 - Invite B/I and IHE partner(s) to recruitment and outreach events
 - Develop B/I and IHE recruitment flyers

NOTES AND NEXT STEPS:

November and December Actions

BENCHMARK 6: WORK-BASED LEARNING

Develop plans for student enrichment, extracurricular activities, and work-based learning for grades 9-12.

- Develop a work-based learning calendar for grades 10-12 in each pathway (6.1, 6.2)
 - Scaffold employability skills and technical skills to age-appropriate opportunities
 - Develop a continuum of work-based learning experiences aligned to each pathway's academic courses and B/I expectations
 - Include CTSOs, competitions, and special initiatives
 - Include mentorship opportunities with B/I partner(s)

NOTES AND NEXT STEPS:

January and February Actions

BENCHMARK 1: SCHOOL DESIGN

Establish school systems, develop academic plans, and develop data tracking plans for the P-TECH.

- Begin the process of becoming a TSI assessment site to provide TSI testing opportunities throughout the year (1.5)

Leadership team meeting actions for P-TECH Blueprint requirements:

- Finalize P-TECH sustainability plan (1.6, 1.10)
- Plan next steps for maintaining and growing existing B/I partnerships
- Gather last round of feedback and post a fully executed MOU/ILA on website (2.1-2.15)
- Finalize B/I agreement(s) for each pathway, and post fully executed agreement(s) on website (2.16-2.23)
- Explore externship opportunities with IHE partner, B/I partner(s), education service center, Texas Workforce Solutions, non-profits, and local chambers (1.8)
- Develop a plan to collect data reflective of the OBMs
- Create P-TECH budget for the next school year
- Review the developed course of study to ensure the course of study:
 - Provides a detailed and relevant course sequence to the post-secondary opportunities
 - Includes alignment to the high school and college courses provided to the P-TECH students (4.3, 2.4)
- Establish an annual professional development plan (i.e., calendar of events/activities) for high school and dual credit teachers/staff that is:
 - Focused on research-based instructional strategies for increasing rigor and college- and career- readiness
 - Based on needs assessment of student data (1.9)

NOTES AND NEXT STEPS:

January and February Actions

BENCHMARK 5: STUDENT SUPPORT

Provide a variety of student supports to help students be successful in the P-TECH program.

Develop and implement wrap-around strategies and services such as:

- Student needs assessments (5.3)
- Connection to wrap-around student supports, including mental health and behavioral resources (5.5)
- Monitoring and follow up of student supports and needs (5.3)

Collaborate with the IHE to personalize the learning environment for students to:

- Establish a process to provide an academic bridge across two educational systems (5.1)
- Develop a robust college and career advising system to support students' academic progress that includes (5.2):
 - Identification of key advising staff
 - Creation of a student advising process and formulation of a campus advising schedule

Develop additional student supports that address:

- Advisory and/or college readiness support and skill building instruction built into the instructional sequence for all students (5.4)
- Enrichment opportunities (5.6, 5.7)

NOTES AND NEXT STEPS:

January and February Actions

BENCHMARK 6: WORK-BASED LEARNING

Develop systems, tools, and processes to support rigorous work-based learning opportunities (6.5).

- Engage B/I partner(s) in developing career readiness opportunities for bridge program (5.1)
- Audit work-based learning plans for alignment to the Tri-Agency Framework for Work-Based Learning (6.5):
 - Ensure work-based learning opportunities are aligned to regional labor market demand
 - Ensure work-based learning opportunities offer complex and industry-relevant tasks that build career skills and knowledge
 - Ensure students and employers have a clear understanding of skills that will be gained through work-based learning
 - Ensure work-based learning supports and accelerates academic progress
 - Embed opportunities to build professional networks within work-based learning
 - Establish systems, tools, and processes to monitor and measure work-based learning experiences and inform continuous improvement
- Develop systems to build school capacity for work-based learning (B6)
 - Ensure a high level of engagement with local workforce boards and employers
 - Create an environment where strong collaboration exists among core academics, career and technical education, and work-based learning coordination
 - Ensure dedicated staffing roles to support work-based learning efforts
 - Create a school culture that is supportive of work-based learning with buy-in from teachers, school counselors, and administrators

NOTES AND NEXT STEPS:

March, April, and May Actions*

*Actions and processes included in the March, April, and May timeframe may extend into June and July. Actions and processes must be completed prior to the first day of the following school year.

BENCHMARK 1: SCHOOL DESIGN

Design academic and staffing actions to meet P-TECH Blueprint requirements.

Leadership team academic actions for P-TECH Blueprint requirements:

- Finalize crosswalk(s) and course sequence offerings of the high school and IHE (4.3)
- Finalize assessments measuring student progress to ensure they are on track to meet OBMs
- Determine the logistics for how required OBM data will be collected (4.8)
- Map out student interventions, including tutoring and/or Saturday school for identified students in need of academic support (5.3)
- Develop a plan to support direct-to-college student enrollment following graduation (4.10)
- Complete Master Schedule

Leadership team staffing actions for P-TECH Blueprint requirements:

- Develop teacher qualification process and staffing plan for teachers, counselors, administration, support staff, and IHE instructors (2.7)
- Finalize the annual professional development plan for P-TECH staff/teachers and IHE partners (1.9)
- Develop a mentor/induction program for newly hired P-TECH staff (1.9)
- Construct a family engagement plan (5.6)

Advisory Board actions for strategic priorities:

- Convene Advisory Board to provide feedback and input on the P-TECH program plans to date, including:
 - Externship plans for teachers, counselors, and administrators (1.9)
 - Work-based learning opportunities, including a review of the opportunities to ensure alignment with the Tri-Agency Work-based Learning Framework (BM 6)
 - Exposure to local community businesses for potential career options and internship possibilities (5.6)
 - Securing additional B/I partnerships (BM 2)
- Develop system and process for B/I partner(s) to provide feedback on the value of work-based learning (6.5)
- Develop system and process for students to (6.3):
 - Reflect on their work-based learning experiences
 - Demonstrate their learning portfolio
 - Understand the connection between work-based learning and academics

NOTES AND NEXT STEPS:

March, April, and May Actions

BENCHMARK 3: TARGET POPULATION

Recruit and enroll students from subpopulations that are historically underrepresented in college.

- Continue student/parent outreach for recruitment and enrollment of target populations
- Notify students of acceptance into the program

NOTES AND NEXT STEPS:

March, April, and May Actions

BENCHMARK 4: ACADEMIC INFRASTRUCTURE

Discuss college readiness assessment plan to ensure students can begin college courses and meet OBMs.

Establish and finalize:

- Student assessment timeline
- Yearly testing plan
- Calendar of testing dates- specifically list dates, times, and location that the assessments will be administered (TSI, ACT, SAT) (4.7)
- Outcomes-based measure data tracking process

NOTES AND NEXT STEPS:

March, April, and May Actions

BENCHMARK 5: STUDENT SUPPORTS

The P-TECH will provide wrap around strategies and services to strengthen academic, technical, and individual support for students to be successful.

- Develop a student bridge program (5.1) which provides:
 - TSIA preparation and TSIA testing
 - Opportunities to strengthen skills necessary for high school and college/career readiness
 - Academic interventions for those who do not pass the TSIA

- Hold family and student orientation to communicate:
 - P-TECH program expectations
 - Enrichment opportunities and supports for students (5.4, 5.6, 5.7)
 - Engagement opportunities for families (5.6)

NOTES AND NEXT STEPS:

March, April, and May Actions

BENCHMARK 6: WORK-BASED LEARNING

Continuous improvement cycle for work-based learning.

- Continue outreach for additional strategic partnerships to support work-based learning offerings (6.2)
- Revise work-based learning plan(s) based on audit and feedback from Advisory Board (6.5)

NOTES AND NEXT STEPS:

P-TECH Artifacts

This timeline outlines recommended dates for publishing artifacts as designated by the P-TECH Blueprint. As indicated by the timeline, some artifacts are required to be updated regularly throughout the school year. Unless otherwise indicated, all artifacts must be published on the P-TECH website and publicly accessible prior to the first day of serving students.

Design Element Number	Design Elements	Artifacts	Fall	Spring	Summer
1.6	Leadership Team Strategic Priorities	P-TECH/IHE leadership meeting agendas	Yes	Yes	Yes
1.6	Leadership Team Strategic Priorities	School board and board of regents presentations	Yes	Yes	
1.6	Leadership Team Strategic Priorities	Document(s) outlining the strategic priorities for the current academic year and/or long-term priorities of the P-TECH partnership	Yes		
1.7	Leadership Team Key Roles	Description of each member and leadership team role	Yes		
1.8	P-TECH Staff	P-TECH leader/IHE liaison meeting agendas and relevant materials	Yes	Yes	Yes
1.9	P-TECH Staff Professional Development	Mentor Induction Program Plans		Yes	
1.9	P-TECH Staff Professional Development	Annual training or professional development plan with P-TECH and IHE faculty		Yes	
2.1	Goal of Higher Education Partners	Memorandum of Understanding with Institution of Higher Education ¹	–	–	–
2.11	Roles and Responsibilities	Executed agreement with the B/I partner(s) ²	–	–	–
3.2	Documenting Enrollment Procedures	Written admission policy, and enrollment application	Yes		
3.2	Documenting Enrollment Procedures	Written recruitment plan and recruitment materials	Yes		
3.3	Stakeholder Engagement	Brochures and marketing in English, Spanish, and/or other relevant language(s)	Yes		
3.3	Stakeholder Engagement	Written communication plan for targeting identified audiences	Yes		

¹ Post online when fully executed

² Post online when fully executed

Design Element Number	Design Elements	Artifacts	Fall	Spring	Summer
3.4	Lottery System	Written lottery procedures (district-level or campus-level)	Yes		
4.1	Regional Need	Documentation detailing examples that outline student pathways from high school to associate degrees, certificates, or industry-based certifications and beyond		Yes	
4.1	Regional Need	Current dated regional high-demand occupation list		Yes	
4.3	Course Sequence	Crosswalk aligning high school and college courses, grades 9-12, which enable a student to earn an associate degree or up to 60 college credit hours toward a baccalaureate degree		Yes	
4.3	Course Sequence	Master schedule			Yes
4.7	College Readiness	Calendar of TSI scheduled test administration dates, sign-up process, and intervention expectations			Yes
4.7	College Readiness	Aggregate reports of TSI exam performance ³	–	–	–
4.7	College Readiness	Testing calendar and schedule for SAT, ACT, or other college readiness assessments			Yes
5.1	Bridge Programs	Bridge program curriculum and schedule		Yes	
5.2	Advising	Schedule of regularly occurring advising events		Yes	
5.3	Student Intervention	Tutoring schedules			Yes
5.4	Classroom Supports	Advisory/study skills curriculum material		Yes	
5.6	Enrichment Opportunities	Calendar of enrichment opportunities and family outreach events			Yes
6.1	Work Based Learning Continuum	Documentation of appropriate work-based learning experiences for students at all grade levels	Yes	Yes	
6.2	College Readiness	Aggregate reports of TSI exam performance ⁴	–	–	–
6.3	Work Based Learning Offerings	Aggregate data describing student participation in work-based learning experiences	Yes	Yes	

³ Post online when cohorts begin testing and update TSI data regularly

⁴ Post online when cohorts begin and update regularly