



## Highlands P-TECH Manufacturing Crosswalk 2024-2025



Program of Study	IHE Partner	Expected Program Student Outcomes	
<b>Advanced Manufacturing and Machinery Mechanics</b>	<b>Alamo College District: St. Philip's College</b>	<b>Year 4: Level 1 Certificate</b>	<b>Automated Industrial Process Associate</b>
		<b>Year 5: Level 2 Certificate</b>	<b>Automated Industrial Process Associate, Mechatronics</b>
		<b>Year 5: Associate of Applied Science (A.A.S.)</b>	<b>Automated Industrial Processing, Mechatronics</b>


Year / Grade Level	High School Course				Post-Secondary Course		
	PEIMS Course #	High School Course Name	High School Credits	Texas Common Course Numbering System Number	College Course Name	College Credit Hours	TSI & Pre-requisite requirements
Year 0 / Grade 8		Required Summer Bridge					
<b>Total Year 0 High School Credits</b>			<b>0.0</b>	<b>Total Year 0 College Credit Hours</b>			<b>0.0</b>
Year 1 / Grade 9		English I or English I HON	1.0				
		Algebra 1 or Algebra 2 HON	1.0				
		Environmental Systems or Biology HON	1.0				
		World Geography or Human Geography AP	1.0				
		LOTE- Spanish I/II or ASL I/II	1.0				
		AVID I	1.0				
		PE or Phys Ed Elective	1.0				
	P-TECH Robotics 1	1.0					
<b>Total Year 1 High School Credits</b>			<b>8.0</b>	<b>Total Year 1 College Credit Hours</b>			<b>0.0</b>
Year 2 / Grade 10	<p>It is <b>highly recommended</b> that all P-TECH student complete Algebra I, Algebra II, and Geometry by the end of 10<sup>th</sup> grade. Students can take two math classes in 10<sup>th</sup> grade if they did not take Algebra I in middle school. SAISD Flex HS is also available for online evening classes to complete credits for HS graduation requirements.</p>						
		English II or English II HON	1.0				
		Algebra 2 <b>and/or</b> Geometry HON	1.0				
		Biology or Chemistry HON	1.0				
		World History or AP World History	1.0				
		LOTE- Spanish I/II or ASL I/II or PE/Elective	1.0				
		AVID II	1.0				
		<b>Basic Fluid Power DC</b>	1.0	ELMT 1305	Basic Fluid Power	3	None
		<b>Principles of Manufacturing DC</b>	1.0	CETT 1409	DC-AC Circuits	4	None
<b>Total Year 2 High School Credits</b>			<b>8.0</b>	<b>Total Year 2 College Credit Hours</b>			<b>7.0</b>



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Year / Grade Level	High School Course				Post-Secondary Course		
	PEIMS Course #	High School Course Name	High School Credits	Texas Common Course Numbering System Number	College Course Name	College Credit Hours	TSI & Pre-requisite requirements
Year 3/ Grade 11		English III or <i>English III DC</i>	1.0	ENGL 1301	Composition I	3	COLLEGE LEVEL ENGLISH
		Geometry or <i>Algebra II DC</i>	1.0	MATH 1314/1332	College Algebra or Contemporary Math	3	COLLEGE LEVEL MATH
		Chemistry or Chemistry OnRamps	1.0				
		US History or AP US History	1.0				
		LOTE/PE or Elective	1.0				
		AVID III	1.0				
		<i>Solid State Devices DC</i>	1.0	CETT 1429	Solid State Devices	4	CETT 1409
	<i>Manufacturing Engineering Technology I DC</i>	1.0	RBTC 1305	Robotic Fundamentals	3	None	
<b>Total Year 3 High School Credits</b>			<b>8.0</b>	<b>Total Year 3 College Credit Hours</b>		<b>13.0</b>	
Year 4/ Grade 12		English IV or English IV AP Literature	1.0				
		Pre-Calculus or Other Math	1.0				
		Science or <i>Physics I DC</i>	1.0	PHYS 1305	Introductory Physics	3	COLLEGE LEVEL MATH
		Government and Economics	1.0				
		<i>Art or Music Appreciation DC</i>	1.0	ARTS 1301/1306	Art or Music Appreciation	3	None
		AVID IV	1.0				
		<i>Manufacturing Engineering Technology II DC</i>	1.0	INTC 1357	AC/DC Motor Control	3	CETT 1409
	<i>Diversified Manufacturing I DC</i>	1.0	RBTC 1347	Electromechanical Devices	3	None	
<b>Total Year 4 High School Credits</b>			<b>8.0</b>	<b>Total Year 4 College Credit Hours</b>		<b>12.0</b>	
<b>Total High School Credits</b>			<b>32.0</b>	<b>Total College Credit Hours</b>		<b>32.0</b>	
<b>High School Graduation Ceremony</b>				<b>Automated Industrial Process Associate, Level 1 Certificate</b>			

Year / Grade Level	High School Course				Post-Secondary Course		
	PEIMS Course #	High School Course Name	High School Credits	Texas Common Course Numbering System Number	College Course Name	College Credit Hours	TSI & Pre-requisite requirements
Year 5/ Grade 13	No high school credit awarded during Year 5. Student reports to college campus only. Student must utilize Financial Aid process – FAFSA and Alamo Promise.				Additional Manufacturing Courses Core Subject Courses Required for AAS Degree Internships/Workforce Entry		
<b>Total Year 5 College Credit Hours</b>						<b>TBD</b>	
<b>Total College Credit Hours</b>						<b>TBD</b>	
Visit the St. Philip's College Automated Industrial Process website for additional information on degrees and certificates.  <a href="http://tinyurl.com/bdhrfn2">http://tinyurl.com/bdhrfn2</a>				  <b>Level 2 Certificates and/or A.A.S Degree</b> <i>* Certificates and Degrees awarded will vary based on student academic performance, course selection, and persistence in college degree plans</i>			