



**Highlands P-TECH
Manufacturing Crosswalk**



**ALAMO COLLEGES DISTRICT
St. Philip's College**

Program of Study	IHE Partner	Expected Program Student Outcomes
Manufacturing: Automated Industrial Processing	Alamo Colleges District: St. Philip's College	Associate of Applied Science - Automated Industrial Processing Mechatronics Specialization
		Level 1 Certificate – Manufacturing Maintenance Associate Level 1 Certificate – Automated Industrial Process Associate Level 2 Certificate - Automated Industrial Process Mechatronics Mechanic

Year / Grade Level	High School Course			Post-Secondary Course			
	PEIMS Course/ Code #	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		Summer Bridge/TSI Boot Camp					
Year 1 / Grade 9		English I Pre- AP	1.0				
Year 1 / Grade 9		Algebra 1 or Geometry Pre-AP	1.0				
Year 1 / Grade 9		Biology Pre-AP	1.0				
Year 1 / Grade 9		World Geography or AP Human Geography	1.0				
Year 1 / Grade 9		LOTE- Spanish I/Spanish II/ ASL I	1.0				
Year 1 / Grade 9		AVID I	1.0				
Year 1 / Grade 9		Applied Mathematics for Technical Professionals	1.0				
Year 1 / Grade 9		Principles of Manufacturing	1.0	CETT 1409	DC-AC Circuits	4	None
SUMMER		Summer Bridge PE	1.0				
Total Year 1 High School Credits			9.0	Total Year 1 College Credit Hours		4.0	
Year 2/ Grade 10		English II Pre- AP	1.0				
Year 2/ Grade 10		Geometry Pre-AP or Algebra 2 DC	1.0	MATH 1314	College Algebra	3	COLLEGE LEVEL MATH
Year 2/ Grade 10		Chemistry Pre-AP	1.0				
Year 2/ Grade 10		LOTE- Spanish II/Spanish III/ASL II or Elective	1.0				
Year 2/ Grade 10		AVID II	1.0				
Year 2/ Grade 10		Art/Music Appreciation	0.5	ARTS 1301/ MUSI 1306	Art/Music Appreciation	3	TSI R/W 310
Year 2/ Grade 10		Academic Mentoring	0.5				
Year 2/ Grade 10		Manufacturing Engineering Technology I	1.0	INTC 1357	AC/DC Motor Control	3	Pre-req. CETT 1409
Year 2/ Grade 10		Diversified Manufacturing I	1.0	RBTC 1305	Robotic Fundamentals	3	None
SUMMER		World History	1.0				
Total Year 2 High School Credits			9.0	Total Year 2 College Credit Hours		9.0	

Current as of 04-01-2021. All crosswalks are updated yearly and are subject to change based on degree plans and course offerings at both institutions.



Highlands P-TECH Manufacturing Crosswalk



ALAMO COLLEGES DISTRICT
St. Philip's College

Year / Grade Level	High School Course				Post-Secondary Course		
	PEIMS Course/ Code #	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		Science	1.0				
Year 3/ Grade 11		US History	1.0				
Year 3/ Grade 11		AVID III	1.0				
Year 3/ Grade 11		English III DC	1.0	ENGL 1301	Composition I	3	COLLEGE LEVEL ENGLISH
Year 3/ Grade 11		Algebra 2 DC or Pre-Calculus	1.0	MATH 1314	College Algebra	3	COLLEGE LEVEL MATH
Year 3/ Grade 11		Manufacturing Engineering Technology II	1.0	RBTC 1347	Electromechanical Devices	3	None
				INMT 2303	Pumps, Compressors and Mechanical Drives	3	None
Year 3/ Grade 11		Diversified Manufacturing II	1.0	CETT 1429	Solid State Devices	4	Pre-req. CETT 1409
Year 3/ Grade 11		Robotics I	1.0	ELMT 1305	Basic Fluid Power	3	None
Total Year 3 High School Credits			8.0	Total Year 3 College Credit Hours		19.0	
Year 4/ Grade 12		English IV	1.0				
Year 4/ Grade 12		Pre-Calculus or Calculus	1.0				
Year 4/ Grade 12		AVID IV	1.0				
Year 4/ Grade 12		Physics DC	1.0	PHYS 1305	Introductory Physics I Lecture	3	COLLEGE LEVEL ENGLISH & MATH
Year 4/ Grade 12		Government / Economics DC	1.0	ECON 1301	Intro to Economics	3	TSI R/W 310
Year 4/ Grade 12		Practicum in Manufacturing	3.0	RBTC 1301	Programmable Logic Controllers	3	None
				MCHN 1438	Basic Machine Shop I	4	None
				INTC 2330	Instrumentation Systems Troubleshooting	3	None
				INTC 2433	Instrumentation Systems Installation	4	None
Total Year 4 High School Credits			8.0	Total Year 4 College Credit Hours		20.0	
SUMMER or Year 5/ Grade 13		Robotics II	1.0	CPMT 1349	Computer Networking Technology	3	COLLEGE LEVEL ENGLISH & MATH
				RBTC 2339	Robot Programming and Diagnostics	3	None
SUMMER or Year 5/ Grade 13		Practicum in Manufacturing II	2.0	INTC 2288	Internship - Instrumentation Technology/Technician	2	INTC 2433
Total High School Credits			37.0	Total College Credit Hours		60.0	

Manufacturing courses may require additional hours during the school year (before and/or after school) and summer to complete contact hours required by St. Philip's College. Course location (Highlands HS or SPC Campus) will vary and will be announced each year.

Current as of 04-01-2021. All crosswalks are updated yearly and are subject to change based on degree plans and course offerings at both institutions.