



# Highlands P-TECH Aerospace Crosswalk



ALAMO COLLEGES DISTRICT  
St. Philip's College

Program of Study	IHE Partner	Expected Program Student Outcomes
Aircraft Technician Airframe	Alamo Colleges District: St. Philip's College	Associate of Applied Science – Aircraft Technician Airframe
		Level 1 Certificate – Aircraft Structures Mechanic Level 2 Certificate – Aircraft Mechanic Airframe

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		Aerospace and Aviation Courses at SPC SW Campus 7-9 Hours p/Week Non-Traditional School Day	3.5	AERM 1310	Ground Operations	3	
				AERM 1208	Federal Aviation Regulations	2	
				AERM 1241	Wood, Fabric, and Finishes	2	
				AERM 1303	Shop Practices	3	
SUMMER		Summer Bridge PE	1.0				
<b>Total Year 1 High School Credits</b>			<b>10.5</b>	<b>Total Year 1 College Credit Hours</b>		<b>10.0</b>	
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		Aerospace and Aviation Courses at SPC SW Campus 8-12 Hours p/Week Non-Traditional School Day	5.0	AERM 1315	Aviation Science	3	
				AERM 1205	Weight and Balance	2	
				AERM 1347	Aircraft Auxiliary Systems	3	
				AERM 1243	Instruments and Navigation/Communication	2	
				AERM 2233	Assembly and Rigging	2	
SUMMER		World History	1.0				
SUMMER		Aviation Course/Internship 112 Hours Total (14 p/Week)		AERM 1491	Special Topics in Aircraft Mech.	4	
<b>Total Year 2 High School Credits</b>			<b>11.0</b>	<b>Total Year 2 College Credit Hours</b>		<b>19.0</b>	

\*\*\*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.\*\*\*



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St. Philip's College

Year / Grade Level	PEIMS Course/ Code #	High School Course			Post-Secondary 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		Science	1.0				
Year 3/ Grade 11		US History	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		<b>Aerospace and Aviation Courses at SPC SW Campus 12 Hours p/Week Non-Traditional School Day</b>	<b>4.0</b>	AERM 1414	Basic Electricity	4	
				AERM 1254	Aircraft Composites	2	
				AERM 1352	Aircraft Sheet Metal	3	
				AERM 1253	Aircraft Welding	2	
SUMMER		<b>Practicum in Transportation Systems - 320 Hour Internship</b>	<b>3.0</b>	AERM 2486	Internship – Airframe Mechanics and Aircraft Maintenance Technology	4	None
<b>Total Year 3 High School Credits</b>			<b>8.0</b>	<b>Total Year 3 College Credit Hours</b>			<b>21.0</b>
Year 4/ Grade 12		English IV	1.0				
Year 4/ Grade 12		Pre-Calculus or Calculus	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 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 4/ Grade 12		<b>Aerospace and Aviation Courses at SPC SW Campus 12 Hours p/Week Non-Traditional School Day</b>	<b>5.0</b>	AERM 1449	Hydraulic, Pneumatic and Fuel Systems	4	
				AERM 1350	Landing Gear Systems	3	
				AERM 1345	Airframe Electrical Systems	3	
				AERM 2331	Aircraft Inspection	3	
<b>Total Year 4 High School Credits</b>			<b>10.0</b>	<b>Total Year 4 College Credit Hours</b>			<b>22.0</b>
<b>Total High School Credits</b>			<b>42.5</b>	<b>Total College Credit Hours</b>			<b>72.0*</b>

As an FAA regulated program, Highlands P-TECH Aerospace program requires students to attend all AERM courses at St. Philip's College Southwest Campus and may require following a non-traditional school day. Additional hours will be required as noted in the crosswalk above. Exact times will vary depending on SPC dual credit course schedule.

\*Summer internships/courses and credits may vary. Students must complete AERM 1491 OR AERM 2486 to complete the certificate. Students may have the option to take both courses, depending on availability of internships and courses in summer of each year.

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