

# Highlands P-TECH with St. Philip's College – ENGINEERING – Class of 2025

Name: \_\_\_\_\_

Student ID# \_\_\_\_\_

Last Updated: \_\_\_\_\_

Foundation + Endorsement	Freshman 9 <sup>th</sup> Grade		Sophomore 10 <sup>th</sup> Grade		Junior 11 <sup>th</sup> Grade		Senior 12 <sup>th</sup> Grade	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
<b>High School</b>	<b>Fall</b>	<b>Spring</b>	<b>Fall</b>	<b>Spring</b>	<b>Fall</b>	<b>Spring</b>	<b>Fall</b>	<b>Spring</b>
<b>English</b> English 1 (1) English 2 (1) English 3 (1) English 4 (1)	English 1 (.5)	English 1 (.5)	English 2 (.5)	English 2 (.5)	English 3 (.5) <b>English 1301</b> <b>Freshman Comp1</b> <b>(3 hours)</b>	English 3 (.5) <b>English 1302</b> <b>Freshman Comp2</b> <b>(3 hours)</b>	English 4 (.5)	English 4 (.5)
<b>Math</b> Algebra 1 (1) Geometry (1) Algebra 2 (1) Pre-Calculus (1) Calculus (1)	Algebra 1 (.5)	Algebra 1 (.5)	Geometry (.5) or Algebraic Reasoning (.5)	Geometry (.5) or Algebraic Reasoning (.5)	Algebra 2 DC <b>(1)</b>  <b>*Math 1414 College</b> <b>Algebra Pre-Cal</b> <b>Track (4 hours)</b>	Pre-Calculus DC <b>(1)</b>  <b>*Math 2412</b> <b>Pre-Calc (4 hours)</b>	Calculus DC (.5)  <b>*Math 2413</b> <b>Calculus</b> <b>(4 hours)</b>	Calculus DC (.5)
<b>Science</b> Biology (1) IPC (1) Chemistry (1) Physics (1)	Biology (.5)	Biology (.5)	Integrated Physics & Chemistry (.5)	Integrated Physics & Chemistry (.5)	Chemistry DC (.5)	Chemistry DC (.5) <b>*CHEM 1411 Gen</b> <b>Chem 1</b> <b>(4 hours)</b>	Physics 1 (.5)	Physics 1 (.5) <b>*PHYS 2425</b> <b>University Physics 1</b> <b>(4 hours)</b>
<b>Social Studies</b> W. Hist. or W. Geo.(1) U.S. History (1) Government (1) Economics (1)	World Geography (.5)	World Geography (.5)	World History (.5)	World History (.5)	US History DC (.5) <b>HIST 1301 US</b> <b>History 1</b> <b>(3 hours)</b>	US History DC (.5) <b>HIST 1302 US</b> <b>History 2</b> <b>(3 hours)</b>	Government I (.5) <b>GOV 2306 Texas</b> <b>Government</b> <b>(3 hours)</b> <b>AND</b>	Special Topics (.5) <b>GOV 2305 Federal</b> <b>Government</b> <b>(3 hours)</b> <b>AND</b>
<b>World Language, Fine Arts &amp; PE</b> LOTE 1 (1) LOTE 2 (1)	Spanish I (.5) or ASL I (.5)	Spanish I (.5) or ASL I (.5)	Spanish II (.5) or ASL II (.5)  AND/OR	Spanish II (.5) or ASL II (.5)  AND/OR	<i>(if needed)</i> Art I (.5)	<i>(if needed)</i> Art I (.5) <b>ARTS 1301</b> <b>Appreciation</b> <b>(3 hours)</b>	Economics (.5) <b>ECON 2302</b> <b>Principles of</b> <b>Microeconomics</b> <b>(3 hours)</b>	Special Topics (.5)
Fine Arts (1) PE (1)	Physical Education (.5)	Physical Education (.5)	Art I (.5)	Art I (.5) <b>ARTS 1301</b> <b>Appreciation</b> <b>(3 hours)</b>				
<b>Career &amp; Technical Education</b> Years 1-3 (1) = (3 total) Year 4 (2)	Engineering Design 1 (.5)	Engineering Design 1 (.5)	Robotics 1 (.5)	Robotics 1 (.5)	Engineering Design & Problem Solving (.5)	Engineering Design & Problem Solving (.5)	Engineering Design 2 DC (1) <b>ENGR 1201</b> <b>Intro to Engineering</b> <b>(2 hours - 34)</b>	Engineering Design 2 DC (1) <b>ENGR 1304 or 2304</b> <b>Graphics/Programming</b> <b>(3 hours - 96)</b>
<b>AVID &amp; Electives</b> AVID (4) / Electives (0-3) <b>Total: 30-33 Credits</b>	AVID (.5)	AVID (.5)	AVID (.5)	AVID (.5)	AVID (.5)	AVID (.5)	AVID (.5)	AVID (.5)
	<i>Possible room for 1 elective</i>		<i>Possible room for 1 elective</i>		<i>Possible room for 1 elective</i>		<i>No room for electives</i>	

Completed Courses in **Purple**  
Current Courses in **Green**  
Projected HS Courses in **Black**

College Courses are in **Blue or Orange**. Contact hours for CTE courses vary – 96 contact hours = 1 credit per semester. Engineering dual credit offerings will vary depending on student degree plan and goals.

**\*MATH and SCIENCE** are priority subjects for Engineering students. **TSIA Alert - students must meet TSIA exam score requirements to take dual credit courses.**

## Highlands P-TECH with St. Philip's College – ENGINEERING – Class of 2025

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Highlands P-TECH can support up to 6 years of dual credit studies. Student who select the 5-6 year plan will be able to finish the full Associate Degree. The schedule for Years 5-6 will be based on student goals, college graduation plan, and internship availability and schedule.

*Student would participate in all high school graduation ceremonies and receive a completion of high school requirements certificate. Student would remain enrolled in SAISD for Year 5 and 6 for funding and support and receive official diploma and Associate Degree upon completion of all coursework. If student chooses, they can exit the program at any time and receive their official high school diploma if they have met all high school graduation requirements according to the state of Texas.*

Year 5 – College ONLY			Year 6 – College ONLY
Summer	Fall	Spring	Fall
<p><b>MATH 2412 Calculus 2 (4 credits)</b></p> <p><i>*Math 2412 may be required to ensure entry into Engineering degree program at University is seamless (goal is to accelerate Bachelor Degree timeline by approximately 1 year – varies by University and Engineering discipline/major)</i></p>	<p><b>Begin at University - Bachelor's Degree OR Continue at SPC to finish Associate Degree</b></p> <p><i>*Courses required to finish Associate Degree will vary based on student transcript and academic readiness</i></p>	<p><b>Continue Bachelor's Degree OR Associate Degree</b></p>	<p><b>Continue Bachelor's Degree OR Associate Degree</b></p>
<p><b>College Course Recovery (if needed)</b></p>			
<p><b>Engineering Internship – Practicum in STEM (2 credits - HS only)</b></p> <p><i>*All internship placement is based on availability, student certifications, student professionalism skills, and successful application. Student may be required to provide own transportation. Students are not guaranteed internship placement and internships may be paid or unpaid.</i></p>			

Date Reviewed/Updated: \_\_\_\_\_

Student: \_\_\_\_\_

Parent/Guardian: \_\_\_\_\_

Counselor/P-TECH Coordinator/IHE Partner: \_\_\_\_\_