



Mountlake Terrace STEM Program Honors Diploma Guide



The Mountlake Terrace STEM Program's Honors Diploma is designed to offer an immersive four-year experience for students interested in a future career in STEM. Our Honors Diploma offers a two-year "Deep Dive" into one of three largest STEM fields in our region; Aerospace, Biotechnology, or Computer Science. In addition, students are asked to take four years of honors math, and 3 years of science. Finally, the whole experience is encapsulated by our foundations courses, where students apply their technical knowledge to original design and research projects. Once completed, students earn an Honors STEM Diploma, which represents a student who has advanced knowledge in a STEM field, who is well prepared to apply to competitive college programs, and has the academic background to succeed once admitted.

Directions

To receive a STEM Program Honors Diploma, students should begin their coursework with Introduction to Engineering Design, take 2.0cr of a STEM Deep Dive, 4.0cr of Math, follow the below science sequence, and finish with STEM English 12. If these credits are completed with a 70% (C-) or better, then you will earn a STEM Honors Diploma.

Foundations of STEM (2.0cr)	Deep Dive into STEM (2.0cr)	Math (4.0cr) (Take at MTHS)	Science (3.0-4.0cr) (Take at MTHS)			
<input type="checkbox"/> Introduction to Engineering Design (1.0cr) Students learn the basics of Design, project management, communication and other skills necessary to function in the 21st century workplace	Students choose a sequence of STEM courses which build on each other to develop a depth of understanding in a high demand job field for this region.	4.0cr total 3.0cr must be Honors/AP -Must include AP Calculus A-B or AP Statistics Courses include: <input type="checkbox"/> Honors Geometry (1.0cr) <input type="checkbox"/> Honors Alg 2 (1.0cr) <input type="checkbox"/> CHS Pre-Calculus (1.0cr) <input type="checkbox"/> AP Calculus AB (1.0cr) <input type="checkbox"/> AP Calculus BC (1.0cr) <input type="checkbox"/> AP Statistics (1.0cr)	9 th <input type="checkbox"/> Honors Biology (1.0cr)			
	<table border="1"> <tr> <td>Aerospace</td> <td> <input type="checkbox"/> Principles of Engineering (1.0cr) <input type="checkbox"/> Aerospace (1.0cr) </td> </tr> </table>		Aerospace	<input type="checkbox"/> Principles of Engineering (1.0cr) <input type="checkbox"/> Aerospace (1.0cr)	10 th <input type="checkbox"/> Chemistry (1.0cr)	
Aerospace	<input type="checkbox"/> Principles of Engineering (1.0cr) <input type="checkbox"/> Aerospace (1.0cr)					
<input type="checkbox"/> STEM English 12 (1.0cr) Students spend the year proposing, developing, and presenting a capstone project for the International Science and Engineering Fair	<table border="1"> <tr> <td>Computer Science</td> <td> <input type="checkbox"/> AP Computer Science Principles (1.0cr) <input type="checkbox"/> AP Computer Science A (1.0cr) </td> </tr> <tr> <td>Biotechnology</td> <td> <input type="checkbox"/> Biotechnology (1.0cr) <input type="checkbox"/> AP Biology (1.0cr) </td> </tr> </table>	Computer Science	<input type="checkbox"/> AP Computer Science Principles (1.0cr) <input type="checkbox"/> AP Computer Science A (1.0cr)	Biotechnology	<input type="checkbox"/> Biotechnology (1.0cr) <input type="checkbox"/> AP Biology (1.0cr)	11 th Or 12 th <input type="checkbox"/> AP Physics (1.0cr) <input type="checkbox"/> AP Chemistry (1.0cr) <input type="checkbox"/> AP Biology (1.0cr) <ul style="list-style-type: none"> • AP Biology is only accepted for the CS pathway (AP Bio already required for Bio Deep Dive)
Computer Science	<input type="checkbox"/> AP Computer Science Principles (1.0cr) <input type="checkbox"/> AP Computer Science A (1.0cr)					
Biotechnology	<input type="checkbox"/> Biotechnology (1.0cr) <input type="checkbox"/> AP Biology (1.0cr)					
			*Only Students who take the Biotechnology Deep Dive may use Anatomy and Physiology as their 11 th -12 th grade science.			