

Engineering Academy – Sample Course Schedule

	9 th	10 th	11 th	12 th
Engineering	Intro to Engineering Design	Principles of Engineering	*Engineering Elective	*Engineering Elective
Science	Biology	Chemistry	AP Physics	4th Science
Math	Geometry	Algebra II	Advanced Honors Math	Calculus AB
Bible	9/10 Bible I	9/10 Bible II	11/12 Bible I	11/12 Bible II
English	English I	English II	English III or AP Language	English IV or AP Literature
LOTE	LOTE I	LOTE II	LOTE III	---
Social Studies	---	European / AP European	US History or APUSH	Government. or AP Government
Electives	PE/Health or Fine Arts	---	---	Speech/Debate
Engineering Internship	---	---	100 Hours to be completed between 11 th and 12 th grade (Encouraged to be done over summer)	
Clubs	2-years SNHS (11th & 12th) and Afterschool Capstone Project (12th)		AND	1-year of 2 of the following: - NHS - CSF - Interact - Student Ambassadors -Link
Community Service	---	10 Hours Engineering related (2-year total of 10hrs)	20 hrs Engineering related (3-year total of 30hrs)	30hrs Engineering related (4-year total of 60hrs)
Engineering Electives	<p>In Year 3 and 4 students have the option of which engineering specialty class they would like to take. New classes may be added based on student interest and program size.</p> <p>Current and Planned offerings:</p> <ul style="list-style-type: none"> Computer Science Principles (CSP) (2016-17) Civil Engineering and Architecture (CEA) (2017-18) <p>Other PLTW Engineering Classes</p> <ul style="list-style-type: none"> Environmental Sustainability Aerospace Engineering Computer Integrated Manufacturing Digital Electronics 			
Additional Notes	<p>Freshmen entering Engineering Academy need to create room in their schedule for their engineering classes in addition to other class requirements. Details of these options follow the “Protocol for STEAM/Fine Arts Students”</p> <ul style="list-style-type: none"> ➤ <u>Option #1</u>: Students complete the “PE/Health” course requirements outside their 7-course schedule. This allows students to take Fine Arts as their Elective course ➤ <u>Option #2</u>: Students plan for only 2 years of LOTE, (instead of 3 years); they would take Fine Arts instead of LOTE 1 and thus complete LOTE 2 in 11th instead of LOTE 3 in 11th. This allows PE/Health to be taken as an elective in 9th. 			

➤ Option #3: Students plan for only 2 years of LOTE, (instead of 3 years); they would take LOTE 1 and LOTE 2 in 9th/10th and then Fine Arts in 11th. This allows PE/Health to be taken as an elective in 9th.

Engineering Career Pathway (2017-18 Graduates, Transfers, or Late Start)

	9th	10th	11th	12th
Engineering		Intro to Engineering Design	Principles of Engineering	*Engineering Elective (1) Capstone Course
Science		Biology	Chemistry	AP Physics
Math		Geometry	Algebra II	Advanced Honors Math
Bible	Requirements for these courses must meet standard LCHS graduation requirements. 2-3 years Spanish is highly recommended It really all depends on what they transfer in with.			
English				
LOTE*				
Social Studies				
Electives				
Clubs	1 Year of Engineering Competition Afterschool Capstone Project (12th)	AND	<u>1-year of 1 of the following:</u> - NHS - CSF - Interact - Student Ambassadors -Link	
Community Service	---	---	20 hrs Engineering related (2-year total of 20 hrs)	30 hrs Engineering related (4-year total of 50hrs)
Internship			80 Hours to be completed between 11 th and 12 th grade (Encouraged to be done over summer)	