

**STEM ENDORSEMENT**

NAME: \_\_\_\_\_ GRADE: 9 10 11 12

	<b>FHSP</b>	<b>PART 1</b>	<b>PART 2</b>	<b>ALT</b>	<b>NOTES</b>
<b>ENGLISH</b>					
English 1	4				STAAR: I II III
English 2					STAAR: I II III
English 3					
4 <sup>th</sup> English					Advanced Course
4 <sup>th</sup> English: English IV; IS English; Literary Genres; Creative Writing; Humanities; Communication Applications; Debate III; Oral Interpretation III; IS Speech; IS Journalism; Newspaper III, Yearbook III; AP English Literature & Composition; Dual Credit; or College Prep English.					
<b>MATH</b>					
Algebra I	4				STAAR: I II III
Geometry					
Algebra II					
4 <sup>th</sup> Math					Advanced Course
4 <sup>th</sup> Math: Precalculus; Independent Study Math; Advanced Quantitative Reasoning; AP Statistics; College Prep Math; or Dual Credit.					
<b>SCIENCE</b>					
Biology	4				STAAR: I II III
Chemistry					Advanced Course
Physics					Advanced Course
4 <sup>th</sup> Science					Advanced Course
4 <sup>th</sup> Science: Aquatic, Astronomy, Earth & Space; Environmental Systems; AP Biology; AP Chemistry; AP Physics 1; AP Physics 2; AP Physics C; AP Environmental; Adv Animal; Anatomy & Physiology; Pathophysiology; Food Science; Forensic Science; Adv Biotechnology; Scientific Research & Design; Engineering Design & Problem Solving; EDD; Principles of Engineering; or Dual Credit.					
<b>SOCIAL STUDIES</b>					
W Geog/W History	3				
US History					STAAR: I II III
US Government					
Economics					
<b>LOTE</b>					
SP FR LN GR CH ASL	2				
SP FR LN GR CH ASL					
Sub for 2 <sup>nd</sup> credit: W Geography, W History, or LOTE; ARD/504 Sub for both credits: ELA/Math/Science/Social Studies or CTE/Tech App's					
<b>PHYSICAL ED</b>					
	1				
Foundations; Aerobics; Individual/Team Sports; Athletics; Band; Dance Team; Dance/PE; JROTC; or Alt PE Waiver					
<b>FINE ARTS</b>					
	1				
Art; AP Art; AP Art History; Band; Choir; Dance; Dance Team; Floral Design; Music Theory; AP Music Theory; Orchestra; or Theatre					

**ENDORSEMENT REQUIREMENTS AND ELECTIVES**

STEM A – CTE (*Advanced CTE 3 <sup>rd</sup> or 4 <sup>th</sup> Course)	STEM B – MATH	STEM C – SCIENCE	STEM D – COMBO (no more than 2 categories; may include AP Comp Sci)
CTE 1:	Math 5:	Science 5:	STEM Combo 1:
CTE 2:	Elective 1:	Elective 1:	STEM Combo 2:
CTE 3*:	Elective 2:	Elective 2:	STEM Combo 3:
CTE 4*:	Elective 3:	Elective 3:	Elective 1:
Elective 1:	Elective 4:	Elective 4:	Elective 2:
Elective 2:	Elective 5:	Elective 5:	Elective 3:
Elective 3:	Elective 6:	Elective 6:	Elective 4:

**ADDITIONAL CREDITS**

	<b>TOTAL CREDITS</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
	<b>SUBTOTAL</b>				
	<b>CUMULATIVE</b>				

**CTE Career Cluster: STEM****STEM A – CTE**

(A coherent sequence of courses for four or more credits in CTE, including at least one advanced CTE course)

Course #	Course Name	State #	Duration	Credit(s)	AAR	GPA	ADV
7900	INTRODUCTION TO ENGINEERING DESIGN AA	N1303742	YR	1	CTE	1	
7902	GATEWAY TO ENGINEERING I	N1303756	SM	0.5	CTE	n/a	
7903	GATEWAY TO ENGINEERING II	N1303758	SM	0.5	CTE	n/a	
7910	PRINCIPLES OF ENGINEERING AA	N1303743	YR	1	CTE	1	YES
7911	DIGITAL ELECTRICS AA	N1303744	YR	1	CTE	1	YES
7920	ARCHITECTURE & ENGINEERING AA	N1303747	YR	1	CTE	1	YES
7921	AEROSPACE ENGINEERING AA	N1303745	YR	1	CTE	1	YES
7930	ENGINEERING DESIGN & PROBLEM SOLVING	13037300	YR	1	SCI	2	YES
7940	ENGINEERING DESIGN & DEVELOPMENT AA	13037300	YR	1	SCI	1	YES
7951	FORENSIC SCIENCE	13029500	YR	1	SCI	2	YES
7961	BIOTECHNOLOGY AA	13036300	YR	1	CTE	1	
7963	ADVANCED BIOTECHNOLOGY AA	13036400	YR	1	SCI	1	YES
7970	BROADBAND COMMUNICATIONS I	13036800	YR	2	CTE	2	YES
7971	BROADBAND COMMUNICATIONS II	13036900	YR	2	CTE	2	YES
7990	PRACTICUM IN BIOTECHNOLOGY	13037410	YR	2	CTE	2	YES

**STEM B – MATH**

(Three credits in mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is a prerequisite)

Course #	Course Name	State #	Duration	Credit(s)	AAR	GPA	ADV
2211/2214	ALGEBRA II/SHELTERED	03100600	YR	1	MTH	2	YES
2221	ALGEBRA II PAPG	03100600	YR	1	MTH	1	YES
2212	IS COLLEGE ALGEBRA DUAL CREDIT	03102500	SM	0.5	MTH	n/a	YES
2216	IS: FINITE MATH DUAL CREDIT	03102501	SM	0.5	MTH	n/a	YES
2311	PRECALCULUS	03101100	YR	1	MTH	2	YES
2312	PRECALCULUS DUAL CREDIT	03101100	SM	1	MTH	n/a	YES
2314	PRECALCULUS SHELTERED	03101100	YR	1	MTH	2	YES
2321	PRECALCULUS PAPG	03101100	YR	1	MTH	1	YES
2322	PRECALCULUS PAPG SHELTERED	03101100	YR	1	MTH	1	YES
2400	IS MATH: CALCULUS	03102500	YR	1	MTH	2	YES
2421	CALCULUS AB APG	A3100101	YR	1	MTH	1	YES
2521	CALCULUS BC APG	A3100102	YR	1	MTH	1	YES
2621	STATISTICS APG	A3100200	YR	1	MTH	1	YES
2731	ADVANCED QUANTITATIVE REASONING	03102510	YR	1	MTH	2	YES
2734	ADVANCED QUANTITATIVE REASONING SHELTERED	03102510	YR	1	MTH	2	YES
2999	IS: MATH AA	03102500	SM	0.5	MTH	1	YES

**STEM C – SCIENCE**

(Four credits in science by successfully completing Chemistry, Physics and two additional science courses)

Course #	Course Name	State #	Duration	Credit(s)	AAR	GPA	ADV
3211/3214	CHEMISTRY/SHELTERED	03040000	YR	1	SCI	2	YES
3221	CHEMISTRY PAPG	03040000	YR	1	SCI	1	YES
3611	PHYSICS	03050000	YR	1	SCI	2	YES
3321	BIOLOGY APG	A3010200	YR	1	SCI	1	YES
3521	CHEMISTRY APG	A3040000	YR	1	SCI	1	YES
3631	PHYSICS 1 APG		YR	1	SCI	1	YES
3641	PHYSICS 2 APG		YR	1	SCI	1	YES
3723	PHYSICS C APG	A3050002	YR	1	SCI	1	YES
3801	EARTH & SPACE SCIENCE	03060200	YR	1	SCI	2	YES
3811	ENVIRONMENTAL SYSTEMS	03020000	YR	1	SCI	2	YES
3814	ENVIRONMENTAL SYSTEMS SHELTERED	03020000	YR	1	SCI	2	YES
3821	ENVIRONMENTAL SCIENCE APG	A3020000	YR	1	SCI	1	YES
3831	AQUATIC SCIENCE	03030000	YR	1	SCI	2	YES
3834	AQUATIC SCIENCE SHELTERED	03030000	YR	1	SCI	2	YES
3851	ASTRONOMY	03060100	YR	1	SCI	2	YES
3861	SCIENTIFIC RESEARCH & DESIGN	13037200	YR	1	SCI	2	YES
7021	ADVANCED ANIMAL SCIENCE	13000700	YR	1	SCI	2	YES
7530	PATHOPHYSIOLOGY	13020800	YR	1	SCI	2	YES
7550	ANATOMY & PHYSIOLOGY	13020600	YR	1	SCI	2	YES
7551	ANATOMY & PHYSIOLOGY AA	13020600	YR	1	SCI	1	YES
7620	FOOD SCIENCE	13023000	YR	1	SCI	2	YES
7930	ENGINEERING DESIGN & PROBLEM SOLVING	13037300	YR	1	SCI	2	YES
7940	ENGINEERING DESIGN DEVELOPMENT AA	13037300	YR	1	SCI	1	YES
7951	FORENSIC SCIENCE	13029500	YR	1	SCI	2	YES
7963	ADVANCED BIOTECHNOLOGY AA	13036400	YR	1	SCI	1	YES
7997	SCIENTIFIC RESEARCH & DESIGN	13037210	YR	1	SCI	2	YES
7999	IS: SCIENTIFIC RESEARCH & DESIGN AA	13037210	YR	1	SCI	1	YES

**STEM D – COMBINATION**

(A coherent sequence of three credits from no more than two of the categories represented A, B, or C.

AP Computer Science may be combined with one additional category A, B, or C)