## Clear Creek ISD Four Year Plan Foundation High School Program (FHSP) with Science, Technology, Engineering & Mathematics (STEM) Endorsement

Name:		_	-	High School:								
Discipline	Credits	Curriculum Requirements										
English	4	English 1, 2, 3; 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										
Math	4	Algebra I, Geometry, Algebra II; 4 <sup>th</sup> Math: Precalculus; IS Math; AQR; AP Statistics; College Prep Math; or Dual Credit										
Science	4	Biology, Chemistry, Physics; 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										
Social Studies	3	World Geography or World History; US History; US Government; Economics										
LOTE	2	American Sign La	American Sign Language; Chinese; French; German; Latin; or Spanish									
Physical Education	1	Foundations; Aerobics; Individual/Team Sports; Athletics; Band; Dance Team; Dance/PE; JROTC; or Alt PE Waiver										
Fine Arts	1	Art; AP Art; AP A	rt History; Band; Ch	oir; Dance; Dan	ce Team; Floral Desigi	n; Music Theory; A	P Music	Theory; Or	chestra; or Theat	re		
STEM A – CTE (*Advanced CTE 3 <sup>rd</sup> or a		STEM B – MATH (7)			STEM C – SCIENCE (7)			STEM D – COMBO (7) (no more than 2 categories; may include AP Comp Sci)				
CTE 1:				Math 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 2:				
Elective 2:		Elective 5:			Elective 5:			Elective 3:				
Elective 3:	Elective 6:	Elective 6:			Elective 6:			Elective 4:				
Total Credits 26 Distinguished Level of Achievement: Yes (Includes Algebra II)												
Intermediate					0 <sup>th</sup> Grade 11 <sup>th</sup> Grad		Grade					
Fall S	Spring	Fall	Spring	Fall	Spring	Fall	S	pring	Fall	Spring		
1												
2												
3												
4												
5												
6												
7												
Student Signature:		Signatures a		arent Signa	ture:	with STEM Endorse	ement	]	Date:	ı 		

## Clear Creek ISD Four Year Plan Foundation High School Program (FHSP) with Science, Technology, Engineering & Mathematics (STEM) Endorsement

## **CTE Career Cluster: STEM**

### (A coherent sequence of courses for four or more credits in CTE, including at least one advanced CTE course) Course # Course Name Grade Level Duration Credit(s) GPA ADV AAR INTRODUCTION TO ENGINEERING DESIGN AA 7900 9-12 YR CTE 1 1 7902 GATEWAY TO ENGINEERING I 8 SM 0.5 CTE n/a GATEWAY TO ENGINEERING II 7903 8 SM 0.5 CTE n/a 7910 PRINCIPLES OF ENGINEERING AA 10-12 YR YES 1 CTE 1 DIGITAL ELECTRICS AA 7911 10-12 YR CTE YES 1 1 7920 ARCHITECTURE & ENGINEERING AA 10-12 YR 1 CTE 1 YES 7921 YR AEROSPACE ENGINEERING AA 11-12 1 CTE 1 YES 7930 ENGINEERING DESIGN & PROBLEM SOLVING 11-12 YR SCI 2 YES 1 7940 ENGINEERING DESIGN & DEVELOPMENT AA 11-12 YR 1 SCI 1 YES 7951 FORENSIC SCIENCE 11-12 YR SCI 2 YES 1 7961 **BIOTECHNOLOGY AA** 9-12 YR 1 CTE 1 ADVANCED BIOTECHNOLOGY AA YES 7963 10-12 YR 1 SCI 1 2 7970 11-12 2 YES BROADBAND COMMUNICATIONS I YR CTE 7971 BROADBAND COMMUNICATIONS II 2 2 YES 12 YR CTE 7990 12 YR 2 PRACTICUM IN BIOTECHNOLOGY 2 CTE 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	Grade Level	Duration	Credit(s)	AAR	GPA	ADV
2211	ALGEBRA II	11	YR	1	MTH	2	YES
2221	ALGEBRA II PAPG	10-11	YR	1	MTH	1	YES
2212	IS COLLEGE ALGEBRA DUAL CREDIT	11-12	SM	0.5	MTH	n/a	YES
2216	IS: FINITE MATH DUAL CREDIT	11-12	SM	0.5	MTH	n/a	YES
2311	PRECALCULUS	11-12	YR	1	MTH	2	YES
2312	PRECALCULUS DUAL CREDIT	11-12	SM	1	MTH	n/a	YES
2321	PRECALCULUS PAPG	11-12	YR	1	MTH	1	YES
2400	IS MATH: CALCULUS	11-12	YR	1	MTH	2	YES
2421	CALCULUS AB APG	11-12	YR	1	MTH	1	YES
2521	CALCULUS BC APG	12	YR	1	MTH	1	YES
2621	STATISTICS APG	11-12	YR	1	MTH	1	YES
2731	ADVANCED QUANTITATIVE REASONING	12	YR	1	MTH	2	YES
2999	IS: MATH AA	11-12	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** Grade Level Duration Credit(s) AAR GPA ADV CHEMISTRY 3211 9-12 YR SCI 2 YES 1 3221 CHEMISTRY PAPG 9-12 YR 1 SCI 1 YES 3611 PHYSICS 10-12 YR 1 SCI 2 YES YES YR 3321 BIOLOGY APG 11-12 1 SCI 1 3521 CHEMISTRY APG 11-12 YR SCI YES 1 1 3631 PHYSICS 1 APG 10-11 YR 1 SCI 1 YES PHYSICS 2 APG YES 3641 11-12 YR 1 SCI 1 3723 PHYSICS C APG 11-12 YR 1 SCI 1 YES 3801 EARTH & SPACE SCIENCE 11-12 YR SCI 2 YES 1 2 YES 3811 ENVIRONMENTAL SYSTEMS 11-12 YR SCI 1 ENVIRONMENTAL SCIENCE APG 11-12 YR 1 YES 3821 1 SCI AQUATIC SCIENCE YES 3831 11 - 12YR 1 SCI 2 2 3851 ASTRONOMY 11-12 YR 1 SCI YES 7021 ADVANCED ANIMAL SCIENCE 11-12 YR SCI 2 YES 1 7530 PATHOPHYSIOLOGY 11-12 YR SCI 2 YES 1 2 7550 ANATOMY & PHYSIOLOGY 11-12 YR 1 SCI YES 7551 ANATOMY & PHYSIOLOGY AA 11-12 YR SCI YES 1 1 7620 FOOD SCIENCE 11-12 YR 1 SCI 2 YES 7930 2 ENGINEERING DESIGN & PROBLEM SOLVING YES 11-12 YR 1 SCI 7940 ENGINEERING DESIGN DEVELOPMENT AA 11-12 YR SCI YES 1 1 YES 7951 FORENSIC SCIENCE YR 2 11-12 1 SCI 7963 ADVANCED BIOTECHNOLOGY AA 10-12 YR 1 SCI 1 YES 7997 SCIENTIFIC RESEARCH & DESIGN YR 2 YES 11-12 1 SCI 7999 IS: SCIENTIFIC RESEARCH & DESIGN AA 11-12 YR 1 SCI 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)

# STEM A – CTE