

ENDORSEMENTS OFFERED IN 2019-2020

	Endorsement	Program of Study
	<p style="text-align: center;">STEM</p> <p style="text-align: center;">Science, Technology, Engineering, and Math</p> <p>CTE Career Clusters Included: -S.T.E.M.</p>	<ul style="list-style-type: none"> ➤ Engineering ➤ Advanced Math ➤ Advanced Science ➤ Computer Science ➤ Cyber Security
	<p style="text-align: center;">Business and Industry</p> <p>CTE Career Clusters Included: -Business Management & Administration -Finance -Marketing -Agriculture, Food, & Natural Resources -Architecture & Construction -Arts, Audio/Video Technology, & Communication -Information Technology -Hospitality & Tourism</p>	<ul style="list-style-type: none"> ➤ Business and Finance ➤ Marketing ➤ Agri-Business ➤ Agriculture Mechanics ➤ Architecture Design ➤ Animal Science & Veterinary Technology ➤ Environmental, Floriculture, & Plant Sciences ➤ Arts, AV/Technology ➤ Information Technology ➤ Culinary Arts ➤ Fashion ➤ Journalism and Communication
	<p style="text-align: center;">Public Services</p> <p>CTE Career Clusters Included: -Health Science -Education & Training -Human Services -Law, Public Safety, Corrections, & Security</p>	<ul style="list-style-type: none"> ➤ Health Science Occupations ➤ Education and Counseling ➤ Law Enforcement ➤ JROTC
	<p style="text-align: center;">Arts and Humanities</p>	<ul style="list-style-type: none"> ➤ Social Studies ➤ Fine Arts ➤ English ➤ Languages Other Than English (LOTE)
	<p style="text-align: center;">Multidisciplinary</p>	<ul style="list-style-type: none"> ➤ Career Preparation ➤ Advanced Academics ➤ International Baccalaureate - IB (Clemens only)

ENDORSEMENT COURSE SEQUENCES

Select the endorsement in which you are interested. The coherent course sequence you need to follow is listed by grade level. You must meet pre-requisites before enrolling in a course. **Unless otherwise listed, you will need to complete four credits within the endorsement sequence.**



STEM



Science, Technology, Engineering, and Math

Students who select the STEM endorsement must take Biology, Chemistry, and Physics as three of their science courses AND a coherent sequence of 4 credits unless otherwise indicated.

Program of Study	9 th Grade	10 th Grade	11 th and 12 th Grade	
Engineering	-Principles of Applied Engineering	-Engineering Design & Presentation I -Robotics I	Students must meet all pre-requisites -Engineering Design & Presentation I -Robotics I -Engineering Design & Presentation II -Robotics II -Engineering Design & Problem Solving -Scientific Research & Design -Project Based Research -Practicum in STEM -Career Prep	
Advanced Math	You must complete three credits in Mathematics by successfully completing Algebra II and two additional mathematics courses for which Algebra II is a pre-requisite (beyond Algebra I and Geometry): Pre-Calculus Calculus Statistics AP Computer Science IB Math Engineering Math Dual Enrollment College Algebra Math Reasoning AP Statistics			
Advanced Science	You must complete Biology, Physics, Chemistry, and two additional science credits from the courses listed below. Many of these courses are offered at a regular and advanced level. Check prerequisites. AP Chemistry Astronomy Anatomy & Physiology (CTE) AP Physics 2 Aquatic Science Environmental Systems AP Physics C Earth & Space Medical Microbiology (CTE) AP Biology 2 IPC Pathophysiology (CTE) Environmental Science Earth & Space Science Forensic Science (CTE) Scientific Research (CTE) Advanced Animal Science (CTE) Food Science (CTE) Advanced Plant & Soil Science (CTE) Engineering Des. & Prob. Solving (CTE)			
Computer Science	-Computer Science -AP Computer Science Principles	-Computer Science -AP Computer Science -Video Game Design	-Computer Science -AP Computer Science -Engineering Design & Problem Solving	-Video Game Design I or II -Project Based Research -Practicum in STEM -Career Prep
Cyber Security	-Principles of Cyber Security	-Computer Maintenance -Computer Science -AP Computer Science	Computer Science -AP Computer Science -Computer Technician -Web Technologies -Career Prep	-Networking w/Lab -IT Practicum -Practicum in STEM -Advanced Practicum in Computer Science

BUSINESS AND INDUSTRY

4 credits in a coherent sequence with at least 1 credit at level 3 or higher

Program of Study	9 th Grade	10 th Grade	11 th Grade/12 th Grade	
			Students must meet all pre-requisites	
Business	-Principles of Business, Marketing, & Finance	-Business Management -Entrepreneurship -Money Matters -Accounting I -Financial Math	-BIM I or II -Business Management -Entrepreneurship -Money Matters -Accounting I or II	-Extended Practicum in Business -Financial Math -Practicum in Business Management -Career Prep I and II
Marketing	-Principles of Business, Marketing, & Finance	-Advertising -Sports & Entertainment Mktg. -Entrepreneurship -Fashion Design	-Advertising -Sports & Entertainment Marketing -Entrepreneurship -Fashion Design -Social Media Marketing	-Advanced Marketing -Career Prep I and II -Practicum in Marketing -Extended Practicum in Career Prep
Finance	-Principles of Business, Marketing, & Finance	Money Matters	-Accounting I or II -Project Based Research in Ag	-Financial Math -Career Prep I and II
Agriculture Mechanics	-Principles of Agricultural, Food, & Natural Resources	-Ag Mechanics & Metal Technologies -AG. Power Systems	-Ag. Equipment & Design Fabrication -Ag Mechanics & Metal Technologies -AG. Power Systems	-Ag Structures Design & Fabrication -Practicum in Ag -Career Prep I and II -Ag. Equipment & Design
Architecture Design	-Principles of Architecture	-Architectural Design I	-Architectural Design I -Architectural Design II -Career Prep I and II	-Practicum in Architectural Design -Project Based Research in Architecture
Animal Science & Veterinary Technology	-Principles of Agricultural, Food, & Natural Resources	-Small Animal Mgmt. -Livestock Production -Equine Science	-Advanced Animal Science -Small Animal Management -Livestock Production -Equine Science	-Career Prep I and II -Veterinary Medical Applications -Practicum in Ag.
Environmental, Floriculture, & Plant Sciences	-Principles of Agricultural, Food, & Natural Resources	-Floral Design -Wildlife, Fisheries, & Ecology Management -Horticulture Science -Landscape Design -Greenhouse Operation & Production	-Floral Design -Horticulture Science -Wildlife, Fisheries, & Ecology Management -Landscape Design	-Greenhouse Operation and Production -Advanced Plant & Soil Science -Career Prep I and II -Practicum in Ag.
Arts, AV/Technology	-Principles of Arts, A/V Technology, & Communication	--Audio Video Production I -Graphic Design & Illustration I -Animation I -Video Game Design	- Graphic Design & Illustration I - Graphic Design II w/Lab -Video Game Design --Audio Video Production I -Audio Video Prod. II w/Lab - -Practicum in A/V Production	-Animation I -Animation II w/Lab -Career Prep I and II -Project Based Research in Arts, A/V Tech, and Communication
Information Technology	-Principles of Information Technology	-BIM I or II -Digital Media -Web Technologies -Computer Maintenance w/Lab	-BIM I or II -Digital Media -Web Technologies -Computer Maintenance w/Lab	-Computer Technician Practicum -Networking w/Lab Career Prep I and II
Culinary Arts	-Intro to Culinary Arts	-Lifetime Nutrition & Wellness -Culinary Arts	-Lifetime Nutrition & Wellness -Culinary Arts -Food Science	-Advanced Culinary Arts -Practicum in Culinary Arts -Career Prep I and II
Fashion	-Principles of Human Services	-Fashion Design I	-Fashion Deseign II w/lab -Career Prep I and II	-Practicum in A/V Production
Journalism & Communication	You must successfully complete four English elective credits, three of which must come from one of the following course areas: Advanced Journalism Newspaper, Advanced Journalism Yearbook, Public Speaking, OR Debate.			

PUBLIC SERVICES

4 credits in a coherent sequence with at least 1 credit at level 3 or higher

Program of Study	9 th Grade	10 th Grade	11 th Grade/12 th Grade Students must meet all pre-requisites	
Health Science Occupations	Principles of Health Science	-Medical Terminology -Health Science Theory -Pathophysiology -Medical Microbiology -Anatomy & Physiology -Counseling & Mental Health	-Medical Terminology -Health Science Theory -Pathophysiology -Medical Microbiology -Anatomy & Physiology -Career Prep I and II -Practicum in HS – Radiology	-Practicum in HS – Medical Billing and Coding -Practicum in HS – Certified Nursing Assistant -Practicum in HS - Certified Clinical Medical Assistant
Education & Counseling	-Principles of Human Services	-Child Development -Lifetime Nutrition & Wellness -Counseling & Mental Health -Psychology -Sociology	-Child Development -Lifetime Nutrition & Wellness -Psychology -Sociology -Instructional Practices (RST I) -Practicum in Education & Training (RST II)	-Career Prep I and II -Practicum in Human Services (PALS I) -Practicum in Human Services (PALS II) -Peer Assistance for Students w/Disabilities
Law Enforcement	-Principles of Law, Public Safety, Corrections, & Securities	-Law Enforcement I -Federal Law Enforcement & Protective Services	-Law Enforcement I -Law Enforcement II -Criminal Justice D/C (Law II) -Forensic Science	-Federal Law Enforcement and Protective Services -Court Systems and Practices -Practicum in Law
JROTC	-AFJROTC 1	-AFJROTC 2	-AFJROTC 3	-AFJROTC 4

ARTS AND HUMANITIES

4 credits in a coherent sequence unless otherwise stated

Program of Study	9 th Grade	10 th Grade	11 th Grade/12 th Grade Students must meet all pre-requisites	
Social Studies	-World Geography -World History -AP Human Geography	-World Geography -World History -AP Human Geography -Psychology -AP Psychology -Sociology	-World Geography -World History -AP Human Geography -Psychology -AP Psychology -Mexican-American Studies	-Sociology -U.S. Government -Texas Government -Economics -AP European History
	You must successfully complete 5 credits of social studies courses. These courses may be at the regular, Advanced, AP, Dual Credit, or IB levels. Note that U.S. History must be taken during the junior year and U.S. Government and Economics must be taken during the senior year.			
Fine Arts	-Fine Arts Level 1A	-Fine Arts Level 2A	-Fine Arts Level 3A	-Fine Arts Level 4A
	-Fine Arts Level 1A	-Fine Arts Level 2A	-Fine Arts Level 1B	-Fine Arts Level 2B
English	You must successfully complete 4 credits from the courses listed: English IV English IV Dual Credit Literary Genres Creative Writing AP English III AP English IV IB Language A1 HL Independent Study in English			
Languages Other Than English (LOTE)	-LOTE Level 1	-LOTE Level 2 (same language)	-LOTE Level 3 (same language)	-LOTE Level 4 (same language)
	-LOTE A - Level 1	-LOTE A - Level 2 (same language)	LOTE B – Level 1	LOTE B – Level 2 (same language)

MULTIDISCIPLINARY
Requirements are stated below.

Program of Study	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Career Preparation	You must successfully complete a minimum of 4 advanced elective credits (beyond level 1) that will prepare you for the workforce or post-secondary education OR You must complete 4 credits in each core area that are not considered electives. I.E. English I, II, III, and IV; World Geography, World History, U.S. History, Government, and Economics; Biology, Chemistry or Physics, and two additional science credits, Algebra I, Geometry, Algebra II, and one additional math credit.			
Advanced Academics	You must successfully complete the Foundation curriculum INCLUDING 4 AP, and/or Dual Credit credits from English, math, science, social studies, languages other than English OR fine arts.			
International Baccalaureate (IB – Clemens only)	You must successfully complete the Foundation curriculum INCLUDING four International Baccalaureate credits from English, math, science, social studies, languages other than English, OR fine arts. Students must follow the outlined course sequences for the IB program.			