






COHORT 2023 AND THEREAFTER - ENDORSEMENTS

	Endorsement	Program of Study/Pathway
	<p style="text-align: center;">STEM Science, Technology, Engineering, and Math</p>	<ul style="list-style-type: none"> ➤ Advanced Math ➤ Advanced Science ➤ Engineering Design ➤ Programming & Software Development ➤ Cyber Security
	<p style="text-align: center;">Business and Industry</p>	<ul style="list-style-type: none"> ➤ Applied Agricultural Engineering ➤ Animal Science ➤ Plant Science ➤ Architectural Design ➤ Digital Communications ➤ Design & Multimedia Arts-Graphic Design ➤ Design & Multimedia Arts-Animation ➤ Design & Multimedia Arts-Video Game Design ➤ Fashion Design ➤ Marketing and Sales ➤ Accounting and Financial Services ➤ Business Management ➤ Entrepreneurship ➤ Culinary Arts ➤ Information Technology Support & Services ➤ Advanced Manufacturing & Machinery Mechanics ➤ Journalism and Communication
	<p style="text-align: center;">Public Services</p>	<ul style="list-style-type: none"> ➤ Teaching and Training ➤ Family and Community Services ➤ Health Informatics (Medical Billing & Coding) ➤ Nursing Science (CNA) ➤ Healthcare Therapeutic Services (CCMA) ➤ Healthcare Diagnostics (Radiology) ➤ Law Enforcement ➤ Legal Studies ➤ 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 and Development ➤ 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 Grade	12 th Grade
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 Algebraic Reasoning			
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)			
Engineering Design	Principles of Applied Engineering (1)	Engineering Design & Presentation I (1)	Engineering Design & Presentation II (2)	-Engineering Design & Problem Solving (1) -Practicum in STEM (2) -Career Prep (2-3)
Programming and Software Development	Computer Science I (1)	AP Computer Science Principles (1)	-AP Computer Science A (2) -Computer Science II (1)	-Practicum in IT (2) -Practicum in Audio/Video Production () -Career Prep (2-3)
Cyber Security	Principles of Information Technology (1)	Foundations of Cyber Security	Networking with Lab (2)	-Cybersecurity Capstone (1) -Project Based Research (1)

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
Applied Agricultural Engineering	Principles of Agricultural, Food, & Natural Resources(1)	Agricultural Mechanics & Metal Technologies (1)	Agricultural Structures Design & Fabrication (1)	-Agricultural Equipment Design & Fabrication (2) - Practicum in Agriculture, Food, and Natural Resources (2) -Project Based Research (1)
Animal Science	Principles of Agricultural, Food, & Natural Resources(1)	-Small Animal Management (.5) -Equine Science (.5)	-Livestock Production (1) --Veterinary Medical Applications (1)	Practicum in Agriculture, Food, and Natural Resources (2)
Plant Science	Principles of Agricultural, Food, & Natural Resources(1)	Greenhouse Operation and Production (1)	-Horticultural Science (1) -Floral Design (1)	-Advanced Plant & Soil Science (1) - Practicum in Agriculture, Food, and Natural Resources (2) -Project Based Research
Architectural Design	Principles of Architecture (1)	Architectural Design I (1)	Architectural Design II (2)	-Practicum in Architectural Design (2) -Career Prep (2-3)
Digital Communications	Principles of Arts, Audio/Video Technology, & Communication (1)	Audio/Video Production I (1)	Audio/Video Production II (2)	Practicum in Audio/Video Production (2)
Design & Multimedia Arts – Graphic Design	Principles of Arts, Audio/Video Technology, & Communication (1)	Graphic Design and Illustration I (1)	Graphic Design and Illustration II (2)	Practicum in Audio/Video Production (2)
Design & Multimedia Arts – Animation	Principles of Arts, Audio/Video Technology, & Communication (1)	Animation I (1)	Animation II (2)	Practicum in Audio/Video Production (2)
Design & Multimedia Arts – Video Game Design	Principles of Arts, Audio/Video Technology, & Communication (1)	Video Game Design I (1)	Video Game Programming (1)	Advanced Video Game Programming (1)
Fashion Design	Principles of Arts, Audio/Video Technology, & Communication (1)	Fashion Design I (1)	Fashion Design II (2)	Career Prep (2-3)

Marketing and Sales	Principles of Business, Marketing, & Finance (1)	-Fashion Marketing (.5) -Sports and Entertainment Marketing (.5)	-Social Media Marketing (.5) -Advertising (.5)	-Practicum in Marketing (2) -Career Prep (2-3) -Project Based Research (1)
Accounting and Financial Services	Principles of Business, Marketing, & Finance (1)	-Accounting I (1) -Financial Mathematics (1) -Money Matters (1)	Accounting II (1)	-Practicum in Business Management (2) -Career Prep (2-3)
Business Management	-Principles of Business, Marketing, & Finance (1) -Business Information Management I (1)	-Business Information Management I (1) -Business Management (1)	Business Law (1)	-Practicum in Business Management (2) -Career Prep (2-3)
Entrepreneurship	Principles of Business, Marketing, & Finance (1)	Entrepreneurship (1)	Project Based Research (1)	-Practicum in Business Management (2) -Career Prep (2-3)
Culinary Arts	Introduction to Culinary (1)	Culinary Arts (2)	Advanced Culinary (2)	-Practicum in Culinary Arts (2) -Food Science (1) -Career Prep (2-3)
Information Technology Support & Services	Principles of Information Technology (1)	Computer Maintenance (2)	Computer Technician Practicum (2)	-Practicum in Information Technology (2) -Career Prep (2-3) -Project Based Research
Advanced Manufacturing & machinery Mechanics	Principles of Applied Engineering (1)	Robotics I (1)	Robotics II (1)	-Practicum in Manufacturing (2) -Career Prep (2-3)
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

Teaching and Training	Principles of Human Services	Child Development (1)	Instructional Practices in Education-Ready, Set, Teach (2)	-Practicum in Education & Training – Ready, Set, Teach (2) -Career Prep (2-3) -Project Based Research (1)
Family and Community Services	Principles of Human Services	-Child Development (1) -Lifetime Nutrition and Wellness (.5) -Dollars and Sense (.5)	-Counseling and Mental Health (1) -Practicum in Human Services I - PALS (2)	-Career Prep (2-3) -Project Based Research (1)
Health Informatics (Medical Billing and Coding)	Principles of Health Science (1)	Business Information Management I (1)	Health Informatics (1)	Project Based Research (1)
Nursing Science (CAN)	Principles of Health Science (1)	Medical Terminology (1)	-Health Science Theory (1) -Anatomy & Physiology (1) -Medical Microbiology (1)	-Practicum in Health Science (2) -Pathophysiology (1)
Healthcare Therapeutic Services (CCMA)	Principles of Health Science (1)	Medical Terminology (1)	-Health Science Theory (1) -Anatomy & Physiology (1) -Medical Microbiology (1)	-Practicum in Health Science (2) -Pathophysiology (1)
Healthcare Diagnostics (Radiology)	Principles of Health Science (1)	Medical Terminology (1)	-Health Science Theory (1) -Medical Microbiology (1)	-Practicum in Health Science (2) -Anatomy & Physiology (1) -Pathophysiology (1)
Law Enforcement	-Principles of Law, Public Safety, Corrections, & Security (1)	Law Enforcement I (1)	Law Enforcement II (1)	-Forensic Science (1) -Practicum in LPSCS (2) -Counseling and Mental Health (1)
Legal Studies	-Principles of Law, Public Safety, Corrections, & Security (1)	Business Law (1)	Court Systems (1)	Practicum in PLSCS (2)
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	
Social Studies	-World Geography -World History -AP Human Geography	-World Geography -World History -AP Human Geography -Psychology -AP Psychology -Sociology -Mexican-American Studies	Students must meet all pre-requisites	
			-World Geography -World History -AP Human Geography -Psychology -AP Psychology History -Mexican-American Studies	-Sociology -U.S. Government -Texas Government -Economics -AP European
	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 AP English III	English IV Dual Credit AP English IV	Literary Genres IB Language A1 HL	Creative Writing 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.			