

CAREER & TECHNICAL EDUCATION DIPLOMA PLANNING CHART

Student:		Graduation Year:	
Career Concentration:			
Industry Credential(s):			

Course Level: CP = College Preparatory • H = Honors • AP = Advanced Placement • DE = Dual Enrollment

ENGLISH									4 Credits
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
English 1									
English 2									
English 3									
English 4									

Requirements: Four credits of high-school English emphasizing composition, grammar, literature, research, vocabulary, critical reading, and effective written and oral communication.

Recommended Sequence: English I / Composition & Grammar → English II / Advanced Composition → American or World Literature → Technical, Professional, British, or other advanced English. Career-focused English may incorporate workplace and technical writing while maintaining substantial literature and composition.

MATHEMATICS									4 Credits
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Mathematics 1									
Mathematics 2									
Mathematics 3									
Mathematics 4									

Requirement: Four credits of high-school mathematics. The sequence should include Algebra I and Geometry and provide continued mathematical study appropriate to the student's career pathway.

Recommended Foundation: Algebra I → Geometry → Algebra II or Applied Algebra II → fourth mathematics.

Fourth-course options may include Applied Mathematics for Trades, Statistics, College Algebra, Trigonometry, Precalculus, Technical Mathematics, or another appropriate course. Students whose technical field requires advanced mathematics should follow the more rigorous sequence.

SCIENCE									3 Credits
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Science 1									
Science 2									
Science 3									

Requirement: Three credits of high-school science representing multiple science disciplines and including meaningful laboratory or hands-on investigation where appropriate.

Recommended: Biology + Lab plus two additional sciences selected to support the student's career pathway. Examples include Chemistry, Physics, Environmental Science, Earth & Space Science, Anatomy & Physiology, Food Science, Agricultural Science, Forensic Science, or another appropriate science.

SOCIAL STUDIES									3 Credits
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Social Studies 1									
Social Studies 2									
Social Studies 3									

Requirement: Three credits of history and social science providing substantial study of world history, United States history, government, economics, and related social sciences.

COMPUTER SCIENCE / ENGINEERING / TECHNOLOGY EDUCATION									1 Credit
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
CS/Technology									

Requirement: One credit emphasizing technological literacy, computational thinking, design, systems, engineering, or applied technology.

Suggested Disciplines: Computer Science, Programming, Web Development, Cybersecurity, Engineering Design, CAD, Robotics, Business Technology, or another appropriate technology-based course. A course may support the student's concentration but should remain distinct from the three-credit concentration sequence when possible.

FINANCIAL LITERACY									1 Credit
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Financial Literacy									

Requirement: One credit of personal financial literacy addressing budgeting, banking, credit and debt, taxes, insurance, consumer decision-making, investing, employment compensation, and long-term financial planning.

Suggested Courses: Career-focused applications such as estimating, pricing, self-employment, payroll, business expenses, and entrepreneurship may be incorporated.

FINE ARTS									1 Credit
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Fine Arts									
Fine Arts									

Requirement: One credit of study or performance in the visual, performing, or media arts. Can be split into two 0.5 credit courses

Discipline Options: Visual Art, Music, Theatre, Photography, Graphic Design, Film/Media Arts, Art History, or another appropriate fine-arts discipline.

HEALTH & PHYSICAL EDUCATION									1 Credit
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Health									
Physical Education									

Requirement: One combined credit consisting of 0.5 credit Health and 0.5 credit Physical Education.

CAREER & TECHNICAL CONCENTRATION									3 Credits
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Concentration I									
Concentration II									
Concentration III									

Requirement: Three credits in a planned, coherent sequence that develops progressively advanced knowledge and technical skills within a defined occupational or career field.

Recommended Structure: Foundations / CTE I → Intermediate / CTE II → Advanced / CTE III. Course titles may reflect the student's specific trade, profession, technical field, external training program, or dual-enrollment sequence. See *Concentration Guide*

CAREER PRACTICUM / WORK-BASED LEARNING									1 Credit
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Career Practicum/WBL									

Requirement: One credit of documented, supervised career-connected experience related to the student's concentration.

Experiences may include apprenticeship, internship, clinical experience, supervised employment, industry mentorship, school/home-based enterprise, substantial industry-mentored capstone, or another appropriate work-based experience. Families should maintain a work plan, hour log, supervisor/mentor information, competency or task record, and final evaluation or reflection.

CAREER-RELATED ELECTIVE									1 Credit
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Career-Related Elective									

Requirement: One additional credit that strengthens the student's career pathway through advanced technical study, supporting academics, business skills, credential preparation, or related postsecondary coursework.

Examples: CAD, Blueprint Reading, Technical Math, Medical Terminology, Entrepreneurship, Small Business Accounting, Nutrition, Programming, Advanced Welding, Small Engine Repair, or an aligned dual-enrollment course.

MINIMUM CREDITS REQUIRED									23 CREDITS
ADDITIONAL COURSEWORK — Courses beyond the 23-credit diploma requirements may be recorded below.									
Requirement	Course Taken	Credits	Level	8th	9th	10th	11th	12th	
Additional Course 1									
Additional Course 2									
Additional Course 3									

TOTAL CREDITS 0 0 0 0 0

CTE DIPLOMA NOTES

This 23-credit Career & Technical Education Diploma is designed as a rigorous career-focused pathway modeled on Maryland's emphasis on coherent CTE programs of study, progressively advanced technical coursework, work-based learning, and industry-recognized credentials where appropriate. It is an organizational diploma pathway and should not be represented as an MSDE-approved CTE program unless the student is actually enrolled in such a program. Students who may pursue a four-year college should review prospective admission requirements early; additional world language, mathematics, science, or other academic coursework may be advisable.

Recommended Career Documentation: concentration plan • course descriptions • training records • work-based learning plan and hour log • supervisor/mentor evaluation • portfolio or capstone • industry credential documentation, where applicable