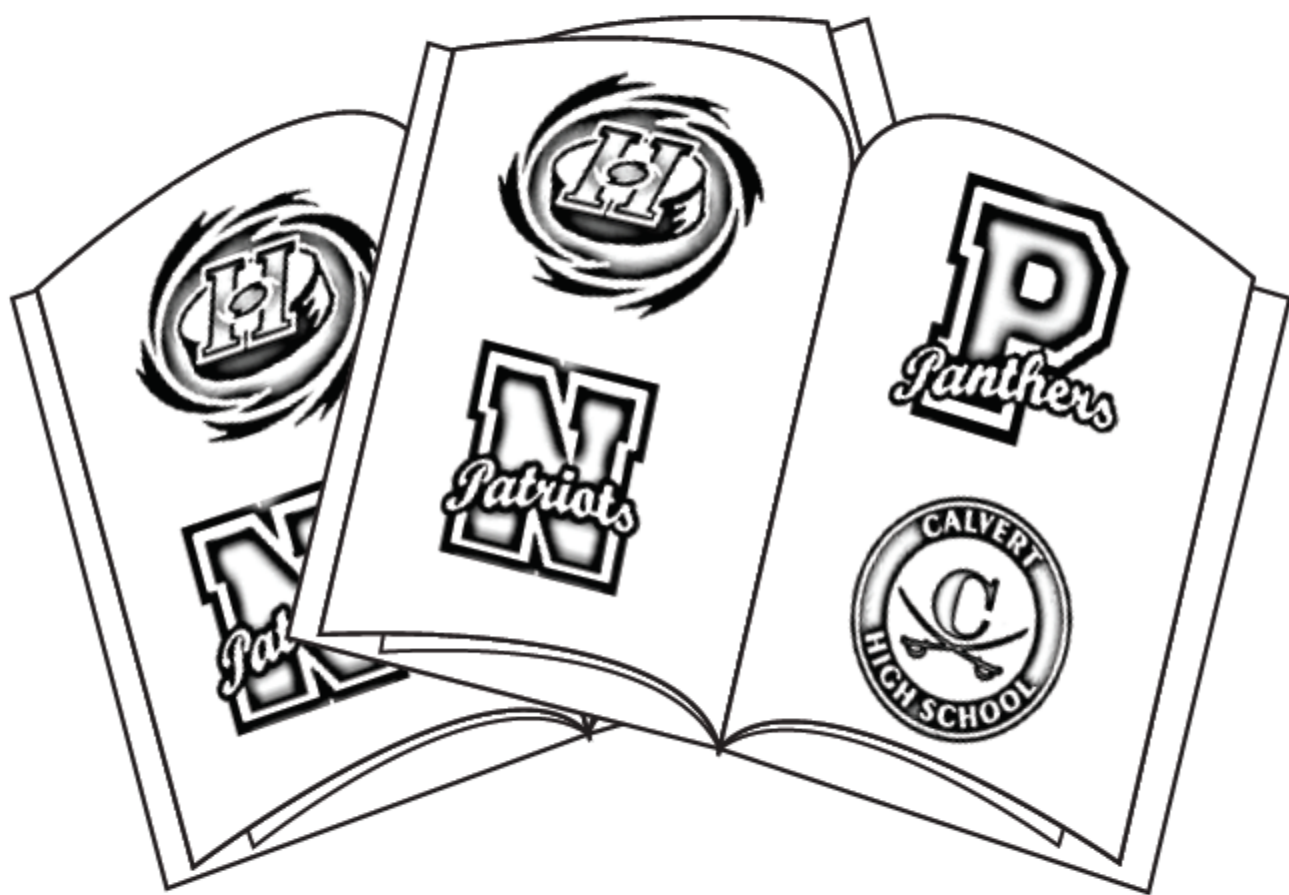


Career and Technology Education

Light the Path to your Future

CTA



Calvert County Public Schools

2019 - 2020

Calvert County High Schools

Calvert High School

520 Fox Run Blvd.
Prince Frederick, MD 20678
Dr. Steven Lucas, *Principal*
Main Office: 443-550-8880 Guidance Office: 443-550-8893

Huntingtown High School

4125 N. Solomons Island Road
Huntingtown, MD 20639
Mr. Rick Weber, *Principal*
Main Office: 443-550-8810 Guidance Office: 443-550-8816

Northern High School

2950 Chaneyville Road
Owings, MD 20736
Mr. Stephen Williams, *Principal*
Main Office: 443-550-8950 Guidance Office: 443-550-8941

Patuxent High School

12485 Southern Connector Blvd.
Lusby, MD 20657
Ms. Sabrina Bergen, *Principal*
Main Office: 443-550-8840 Guidance Office: 443-550-8855

Calvert County Middle Schools

Calvert Middle School

655 Chesapeake Blvd.
Prince Frederick, MD 20678
Mr. Zachary Seawell, *Principal*
Main Office: 443-550-8970 Guidance Office: 443-550-8972

Mill Creek Middle School

12200 Southern Connector Blvd.
Lusby, MD 20657
Ms. Rebecca Bowen, *Principal*
Main Office: 443-550-9190 Guidance Office: 443-550-9203

Northern Middle School

2954 Chaneyville Road
Owings, MD 20736
Mr. Jaime Webster, *Principal*
Main Office: 443-550-8230 Guidance Office: 443-550-9228

Plum Point Middle School

1475 Plum Point Road
Huntingtown, MD 20639
Ms. Kelley Adams, *Principal*
Main Office: 443-550-9170 Guidance Office: 443-550-9175

Southern Middle School

9615 H. G. Trueman Road
Lusby, MD 20657
Ms. Mandy Blackmon, *Principal*
Main Office: 443-550-9250 Guidance Office: 443-550-9259

Windy Hill Middle School

9560 Boyds Turn Road
Owings, MD 20736
Mr. James Kurtz, *Principal*
Main Office: 443-550-9310 Guidance Office: 443-550-9313

Calvert County Special Schools & Centers

Career and Technology Academy

330 Dorsey Road
Prince Frederick, MD 20678
Mr. Mark Wilding, *Principal*
Main Office: 443-550-9940 Guidance Office: 443-550-9972

Calvert Country School

1350 Dares Beach Road
Prince Frederick, MD 20678
Ms. Marcie Hough, *Principal*
Main Office: 443-550-9910

Board of Education of Calvert County

Dawn C. Balinski
President

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Dr. Daniel D. Curry, Ed.D.
Superintendent of Schools

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Calvert County Public Schools

Divisions of Instruction & Student Services • 443-550-8000

1305 Dares Beach Road, Prince Frederick, MD 20678

Raeqwon Harris, a 2018 graduate of Calvert High School, designed the cover. He was a student in the Graphics Arts Program at the Career and Technology Academy.

Calvert County Public Schools does not discriminate on the basis of race, color, religion, sex, age, ancestry or national origin, familial status, marital status, physical or mental disability, sexual orientation, gender identity and expression, or genetic information or age in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following persons have been designated to handle inquiries regarding the non-discrimination policies:

- Director of Student Services
- Director of Human Resources
443-550-8000

For further information on notice of non-discrimination, visit the Office of Civil Rights Complaint Assessment System at: <http://ocrcas.ed.gov> or call 1-800-421-3481.

Anti-sexual, Anti-racial and Anti-disability Harassment Statement

Discrimination can manifest itself in behaviors such as bullying, harassment, or intimidation of individuals.

Calvert County Public Schools does not tolerate any form of harassment including, but not limited to, sexual, racial, or disability. Any individual (student, employee, or community member) who believes that he or she has been subjected to any form of harassment is encouraged to report the allegation of harassment. Students, parents and community members may report allegations of harassment to:

Ms. Kimberly Roof
Director of Student Services
Calvert County Public Schools
1305 Dares Beach Road
Prince Frederick, MD 20678

Employees may report allegations of harassment to:

Ms. Laveeta Hutchins
Director of Human Resources
Calvert County Public Schools
1305 Dares Beach Road
Prince Frederick, MD 20678

Calvert County Public Schools is committed to conducting a prompt investigation for any allegation of harassment. If harassment has occurred, the individual will be disciplined promptly. Disciplinary actions for students found to have engaged in any form of harassment may result in suspension or expulsion. Disciplinary actions for employees found to have engaged in any form of harassment may result in suspension or termination.

Calvert County Public Schools encourages all students, parents, employees, and community members to work together to prevent any form of harassment.

For further information on notice of non-discrimination, visit the Office of Civil Rights Complaint Assessment System at: <http://ocrcas.ed.gov> or call 1-800-421-3481.

Career & Technology Education

In order to receive a Maryland High School Diploma, students must complete a program of study, or pathway. There are two possible pathways. One is the College Preparatory Pathway. Another option for students is to complete a pathway in Career and Technology Education. Some students complete both and are considered dual completers.

Career and Technology Education (CTE) is relevant, authentic learning that gives students real job-related experiences and allows them to pursue areas of strength as well as areas of interest. It is this relevance and authenticity that provides students an educational program that truly prepares them for a career and/or college. In many CTE programs, students have an opportunity to earn college credits while still in high school.

Calvert County Public Schools offers a wide variety of CTE programs of study. Of these programs, fifteen are offered at the Career and Technology Academy (CTA), which is adjacent to Calvert High School's campus in Prince Frederick. All programs at the CTA are designed to prepare students for post-secondary education and/or employment. Programs at the CTA are two year programs. Students attend CTA in eleventh grade for level one and in twelfth grade for level two. Level one classes are generally two periods long and level two classes are three periods long. Students in level one classes also take their English course while at CTA (except students in Cosmetology or Firefighter/Emergency Medical Technician).

The comprehensive programs are open to all eleventh and twelfth-grade students. Students who are repeating tenth grade may enroll in Career and Technology Academy courses with their high school principal's permission. Priority for enrollment in level one courses is given to eleventh grade students. Twelfth graders are permitted to enroll in level one if space is available.

At CTA, Job Placement Services provide employment readiness training for career and technology education students in the fifteen program areas. Students learn to correctly complete a job application, resume, and cover letter, and will participate in individual job interviews. Seniors receive a portfolio which includes their transcript, resume, employability profile, and job application.

The CTE programs available at CTA are:

- Academy of Health Professions
- Auto Mechanics - Service Technician
- Carpentry
- CISCO Networking Academy
- Construction Design and Management (CDM)
- Cosmetology
- Culinary Arts
- Electricity
- Firefighter/Emergency Medical Technician
- Graphic Arts
- Heating, Ventilation, and Air Conditioning
- Home Improvement

- Masonry
- Plumbing
- Welding

In addition to the CTE programs available at CTA, many Career and Technology Education programs are offered at the four high schools. Most of these programs consist of four courses. Students may complete one of the following CTE programs without ever leaving their home school:

- Academy of Finance
- Accounting
- Business Administrative Services
- Business Management
- Career Research and Development
- Computer Science
- Criminal Justice/Law Enforcement
- Curriculum for Agricultural Science Education (CASE) – CHS only
- Project Lead the Way – Biomedical Sciences
- Project Lead the Way – Pathway to Engineering
- Teacher Academy of Maryland (TAM)

Students who complete both a college prep pathway as well as a CTE pathway are referred to as Dual Completers. Dual completion provides students with more options upon graduating from high school. Students who graduate as dual completers are prepared to continue their education in college as well as to enter the workforce.

Articulation Agreements for Career Technology Education Programs of Study

The majority of the pathways have articulation agreements in place with community colleges, technical colleges or universities which provide college credit for the completion of high school courses. Some of the programs have a “memorandum of understanding” in place with a local union giving CCPS graduates a head start when joining a union. For more information, please call the CTA.

Below is a list of articulation agreements by program:

Pathways	Location of Program	Articulation
Academy of Health Professions	CTA	CSM
Accounting	Home High School	CSM
Automotive Service Technician	CTA	Nashville Auto Diesel College Universal Technical Institute University of Northwestern Ohio Ohio Technical College Advanced Technical Institute Pennsylvania College of Technology Community College of Baltimore County
Carpentry	CTA	Mid-Atlantic Carpenters Training Center

Pathways	Location of Program	Articulation
CASE	CHS	University of Maryland
CISCO Networking Academy	CTA	CSM
Construction Design and Management (CDM)	CTA	Morgan State University
Criminal Justice/Law Enforcement	Home High School	CSM
Culinary Arts	CTA	Johnson & Wales University
Fire Fighter/EMT	CTA	University of Maryland
Graphic Arts	CTA	Boston University CSM
HVAC	CTA	Unions
Plumbing	CTA	Unions
Project Lead the Way- Pathway to Engineering	Home High School	UMBC CSM
Project Lead the Way- Biomedical Sciences	Home High School	Stevenson University CSM
Teacher Academy of Maryland	Home High School	Towson University Coppin State University Stevenson University Hood College Salisbury University CSM
Welding	CTA	Unions

New CTE Programs

Computer Science

This is a four course program of study. Upon completion of the program sequence, students may earn college credit for introductory-level Computer Science through Advanced Placement (AP) Computer Science exam(s).

The courses are described below:

- **Foundations of Computer Science** (based on CSTA: *Exploring Computer Science*) is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. This course satisfies the Tech Ed graduation requirement. Students may also have the option of taking the course online.
- **AP Computer Science Principles** (based on AP: *Computer Science Principles*) is an AP course. This course advances students' understanding of the technical aspects of computing including, programming and algorithm design, computer system organization and operation, and data representation and information organization.
- **App Development** is a course designed to further a student's understanding of computer programming by gaining a solid knowledge of the Java programming language and then applying those skills by developing apps and games using Android® Studio App Inventor.

Students will start by creating increasingly complex programs in an integrated development environment (IDE) such as Eclipse®. The purpose of the class is to not only teach students how to program, but also to prepare students for college or the workplace as they learn about how applications work and how to program them. The students will create actual apps that can be downloaded to their smartphones or tablets, and theoretically can be put out on the market.

- **AP Computer Science Coding** is a more in-depth study of computer science, specifically the technical aspects of computing including: programming and algorithm design, computer system organization and operation, and data representation and information organization.
- Students may choose from one of the following Dual Enrollment courses in lieu of AP Computer Science Coding:
 - **ITS 1020 Operating Systems Concepts:** Students are introduced to the principles of various types of microcomputer operating systems. Topics include system resources, memory management, processor management, user interface and operating system functions. Major emphasis is placed on how the user, hardware, and software interface with the operating system. Various current operating systems will be covered in this course.
 - **ITS 2940 Cyber Ethics:** Students consider the safe and ethical use of computer technology including the Internet. They study the role of technology in today's society, cyber protection issues and the moral challenges we face in using technology including cyber space. Topics to be included are privacy, intellectual property, cyber abuse/crime, codes of conduct, policy development as well as the digital divide. In addition, students consider how the global and anonymous nature of the Internet makes it difficult to transfer standard rules of conduct to this virtual environment.

Construction Design and Management (CDM)

Students will develop an understanding of the built world through the design and construction process. Each course uses a project-based learning approach to advance students' understanding of the design-build-maintain process. Advanced architectural drafting and design skills are developed through lab-based instruction using Autodesk software tools (AutoCAD and Revit Architecture). Throughout the program, students will develop a portfolio to demonstrate knowledge of each phase of the design and construction management process. Students will also have the opportunity to earn industry certification in AutoCAD and Revit. Students enrolled in this program are expected to:

- Understand the design-build-maintain process and the construction industry;
- Identify and use the materials and tools used in the design-build-maintain process;
- Understand the construction process and the interaction of skilled trades, designers and managers;
- Demonstrate the use of basic and advanced design principles;
- Create multiple design plans (architectural, civil and mechanical) for construction projects;
- Understand Building Information Modeling (BIM) technology to connect design and construction; and
- Demonstrate project management skills including designing, scheduling and completing an entire construction project.

Construction Design and Management I:

The first semester of this course provides an overview of the design and construction process as well as an introduction to the many career options within the field of construction. Students will be introduced to core concepts in design and construction including: construction methods and materials; fundamental elements of design; and innovative technologies including Green Construction and Design. Students will be introduced to design software as they complete basic design projects, such as a bridge design, floor plans and elevation plans. This course also includes career exploration activities and research regarding the construction industry.

The second semester of this course provides students with an in-depth understanding of the construction design process. Students will complete a series of increasingly complex construction design projects in which they incorporate all aspects of the construction process, including zoning and regulation requirements; construction methods and materials, energy conservation; surveying; and project planning. Students will use design software to generate site plans (topography) as well as detailed building plans. Portfolios are used to show the developmental stages of a design project. Students will work in teams to develop each aspect of a construction project including developing a proposal, site plans, and construction management documents

Construction Design and Management II:

Students will work in teams to fully develop designs and a construction management plan for a pre-determined site. In this semester-long project, students begin with the legal description and topography of the site and create a proposal for development. The construction design project must meet the client's needs, budget, and the site characteristics. Students will generate a series of plans to be included with the proposal for submission to an industry review panel for approval. Upon completion of the course, students will demonstrate advanced design/drafting skills and be prepared for the AutoCAD certification exam.

The second semester of this course builds on an understanding of the construction design process to advanced knowledge and skill in construction management. In this course, students will be required to work in teams to complete a project from existing plans. The semester-long project will focus on building codes and standards, coordination of the construction process, estimating, planning and scheduling; and site management. Students will complete a portfolio of their design and construction management projects for review by an industry panel.

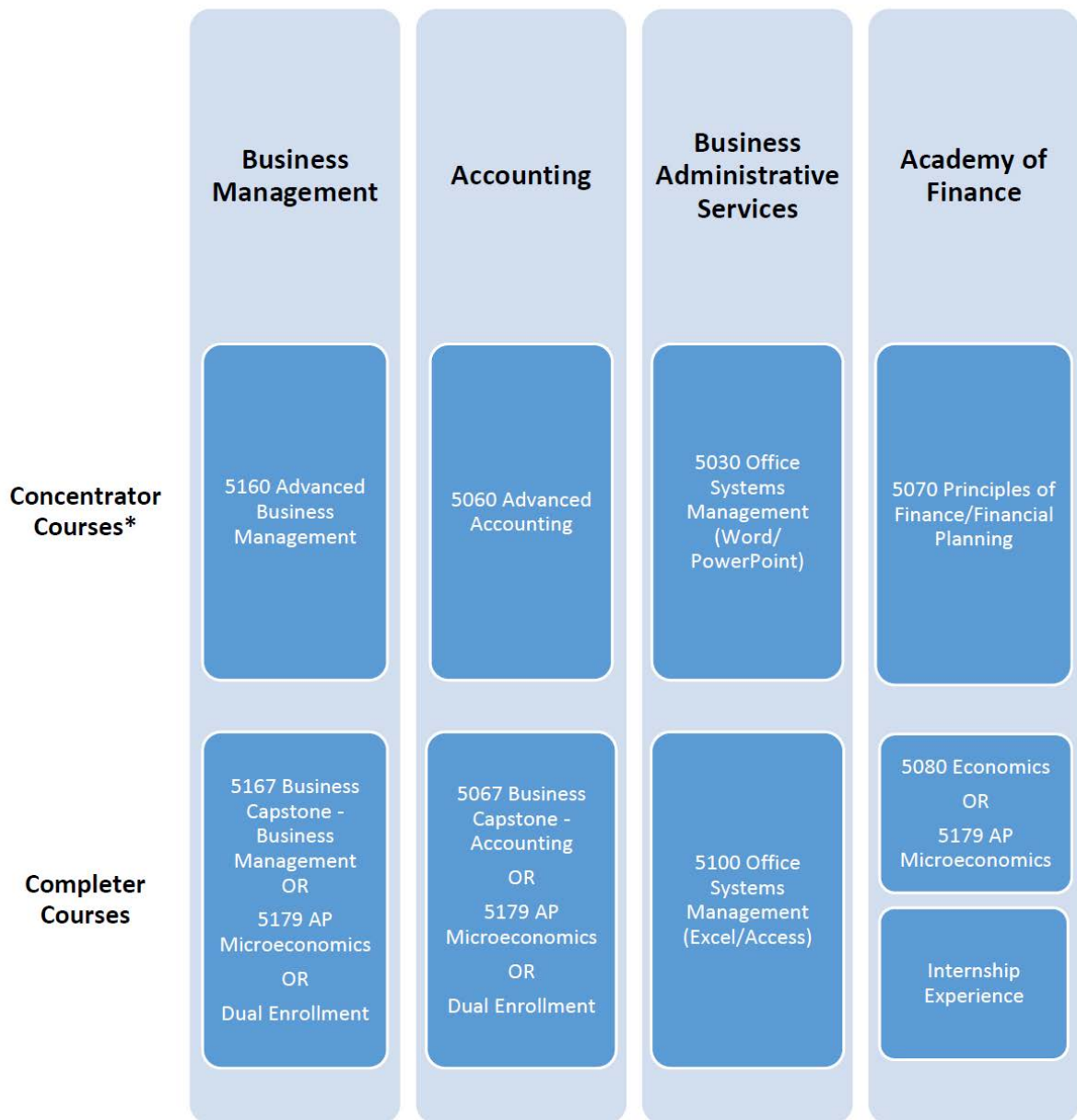
Business Pathways

Introductory/Prerequisite Courses

All Business Completers take these two courses:

- 5000 Principles of Business Administration and Management
- 5050 Principles of Accounting

Student chooses a Business Pathway:



*Students not attempting to complete a particular pathway who wish to take one of the Concentrator courses should use the alternate course number.

The following programs are offered at each of the four home high schools:

Program	Course Number	Course Name	Credits
Academy of Finance	5000	Principles of Business Administration and Management	1
	5050	Principles of Accounting	1
	5070	Principles of Finance / Financial Planning	1
	5080	Economics	1
	5179	OR AP Microeconomics	
	5081	Internship Required	0
Accounting	5000	Principles of Business Administration and Management	1
	5050	Principles of Accounting	1
	5060	Advanced Accounting	1
	5067	Business Capstone – Accounting	1
	5179	OR AP Microeconomics OR Dual Enrollment	
Business Administrative Services	5000	Principles of Business Administration and Management	1
	5050	Principles of Accounting	1
	5030	Office Systems Management (Word/PowerPoint)	1
	5100	Office Systems Management (Excel/Access)	1
Business Management	5000	Principles of Business Administration and Management	1
	5050	Principles of Accounting	1
	5160	Advanced Business Management	1
	5167	Business Capstone – Business Management	1
	5179	OR AP Microeconomics OR Dual Enrollment	
Career Research and Development	8650	Career Research Development	1
	8660	Career Research Development Seminar	1
	8670	Work-Based Learning Experience	2
Computer Science	3505	Foundations of Computer Science	1
	3506	AP Computer Science Principles	1
	3511	App Development	1
	3519	AP Computer Science Coding OR Dual Enrollment (see 3519 for info)	1
Criminal Justice / Law Enforcement	2600	American Criminal Justice System	1
	2610	Juvenile Justice	1
	2620	Criminal Law	1
	2630	Criminal Investigation	2
Curriculum for Agricultural Science Education (CASE) (CHS only)	8035	Intro. to Agriculture, Food, and Natural Resources (AFNR)	1
	8036	Principles of Agricultural Science – Animal (ASA)	1
	8037	Animal and Plant Biotechnology	1
	8038	Agricultural Business, Research, and Development	1
Project Lead the Way – Biomedical Sciences	8025	Principles of Biomedical Sciences	1
	8026	Human Body Systems	1
	8027	Medical Interventions	1
	8028	Biomedical Innovation	1
Project Lead the Way – Pathway to Engineering	8005	Introduction to Engineering Design (Prerequisite course)	1
	8006	Principles of Engineering	1
	8007	Digital Electronics	1
	8008	Aerospace Engineering	1
	8011	OR Civil Engineering and Architecture	
	8009	Engineering Design and Development	1
Teacher Academy of Maryland (TAM)	5500	Human Growth and Development through Adolescence	1
	5510	Teaching as a Profession	1
	5520	Foundations of Curriculum and Instruction	1
	5530	Education Academy Internship	1

The following programs are offered at the Career and Technology Academy (CTA):

Program	Course Number	Course Name	Credits
Academy of Health Professions	8060	Academy of Health Professions I	2
	8070	Academy of Health Professions II Track A	3
	8075	OR Academy of Health Professions II Track B	
Auto Mechanics – Service Tech.	8940	Service Technician I	2
	8950	Service Technician II	3
Carpentry	8270	Carpentry I	2
	8280	Carpentry II	3
CISCO Networking Academy	8440	PC Troubleshooting and Introduction to Network Engineering	2
	Choose one of the following courses:		
	8450	Advanced Network Engineering	3
	8455	Cyber Security and Network Engineering	3
Construction Design and Management (CDM)	8330	Construction Design and Management I	2
	8340	Construction Design and Management II	3
Cosmetology	8360	Cosmetology I	3
	8370	Cosmetology II	3
Culinary Arts	8510	Food Production and Management I	2
	8520	Food Production and Management II	3
Electricity	8410	Electricity I	2
	8420	Electricity II	3
Firefighter/Emergency Medical Tech	8996	Fire and Rescue I	3
	8997	Fire and Rescue II	3
Graphic Arts	8610	Graphic Arts I	2
	8620	Graphic Arts II	3
Heating, Ventilation, and Air Conditioning	8121	Heating, Ventilation, and Air Conditioning I	2
	8122	Heating, Ventilation, and Air Conditioning II	3
Home Improvement	8870	Home Improvement I	2
	8880	Home Improvement II	3
Masonry	8710	Masonry I	2
	8720	Masonry II	3
Plumbing	8111	Plumbing I	2
	8112	Plumbing II	3
Welding	8910	Welding I	2
	8920	Welding II	3

Four Year Plans

As students prepare to enter high school, it is important that they make informed decisions about their proposed programs of study. To help students make sure that they are able to meet all graduation requirements, including completing a pathway, it is recommended that students, parents, and counselors work together to complete a **Four Year Plan**. This may seem overwhelming to an 8th grade student.

In order to make the process a little less difficult, the following pages provide examples of possible four year plans. There are two sample plans for each of the CTE programs. These samples include four year plans for students who wish to become dual completers (i.e., students who wish to complete a CTE pathway as well as the College Prep pathway). For three CTE programs (PLTW Engineering, PLTW Biomedical Sciences, and Teacher Academy of Maryland), only the dual completer four year plan is shown.

The plans shown are only samples. Within each program, there is room for variation. Also, students' four year plans are allowed to change as they progress through high school. However, by taking the time to carefully plan out each year's schedule ahead of time, students, parents, and counselors can ensure that all requirements are met.

Academy of Finance Recommended Course Sequence				
Maryland Career Cluster 2: Business Management and Finance				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy			(Met)	
CTE		Principles of Accounting	Principles of Finance /Financial Planning	Economics or AP Microeconomics
		Principles of Business Management and Administration		Six week internship*
Electives	Elective (1/2 credit) Computer Keyboarding for College and Career (1/2 credit)		2 Electives	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options. *To be completed during the summer prior to 12 th grade.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Securities/Commodities Sales Agent, Brokerage Clerk, Insurance Agent, Bank Teller, Loan Processor, Insurance Policy Processor/Claims Agent, Claims Adjuster, Claims Examiner		Personal Financial Advisor, Investment Advisor, Financial Analyst, Loan Officer, Bank Operations Manager, Underwriter, Accounting Clerk, Bookkeeper, Payroll Clerk, Accounts Payable/Receivable Clerk		

Academy of Finance –Dual Completer Recommended Course Sequence				
Maryland Career Cluster 2: Business Management and Finance				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts			Art or Music	
Financial Literacy			(Met)	
CTE		Principles of Accounting	Principles of Finance /Financial Planning	Economics or AP Microeconomics
		Principles of Business Management and Administration		Six week internship*
Electives	World Language	World Language	Elective	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options. *To be completed during the summer prior to 12 th grade.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Securities/Commodities Sales Agent, Brokerage Clerk, Insurance Agent, Bank Teller, Loan Processor, Insurance Policy Processor/Claims Agent, Claims Adjuster, Claims Examiner		Personal Financial Advisor, Investment Advisor, Financial Analyst, Loan Officer, Bank Operations Manager, Underwriter, Accounting Clerk, Bookkeeper, Payroll Clerk, Accounts Payable/Receivable Clerk		

Academy of Health Professions Recommended Course Sequence				
Maryland Career Cluster 6: Health and Biosciences				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Academy of Health Professions I (2 credits)	Academy of Health Professions II Track A or B (3 credits)
Electives	Elective	Elective Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Licensed Practical Nurse, Nurse Assistant, Massage Therapist, Physical Therapy Assistant, Occupational Therapy Assistant, Pharmacy Technician, Medical Lab Technician		Physician Assistant, Dietician/Nutritionist, Occupational Therapist, Medical Technician, Surgical Technician, Registered Nurse, Chiropractor, Pharmacist, Audiologist, Speech and Language Pathologist		

Academy of Health Professions Dual Completer Recommended Course Sequence				
Maryland Career Cluster 6: Health and Biosciences				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Academy of Health Professions I (2 credits)	Academy of Health Professions II Track A or B (3 credits)
Electives	World Language	World Language Computer Keyboarding for College and Careers (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Licensed Practical Nurse, Nurse Assistant, Massage Therapist, Physical Therapy Assistant, Occupational Therapy Assistant, Pharmacy Technician, Medical Lab Technician		Physician Assistant, Dietician/Nutritionist, Occupational Therapist, Medical Technician, Surgical Technician, Registered Nurse, Chiropractor, Pharmacist, Audiologist, Speech and Language Pathologist		

Accounting Recommended Course Sequence				
Maryland Career Cluster 2: Business Management and Finance				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts	Art or Music			
Financial Literacy		Financial Literacy (1/2 credit)		
CTE		Principles of Business Admin and Management Principles of Accounting	Advanced Accounting	Business Capstone – Accounting, AP Econ, or Dual Enrollment Course
Electives		Computer Keyboarding for College and Career (1/2 credit)	2 Electives	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Accounting Clerk, Bookkeeper, Payroll Clerk, Accounts Payable/Receivable Clerk, Bank Teller, Loan Processor, Claims Adjustor		Accountant, Credit Analyst, Investment Banker, Financial Analyst, Budget Analyst, Auditor, Tax Analyst, Investment Advisor		

Accounting - Dual Completer Recommended Course Sequence				
Maryland Career Cluster 2: Business Management and Finance				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts			Art or Music	
Financial Literacy			Financial Literacy (1/2 credit)	
CTE		Principles of Business Admin and Management	Advanced Accounting	Business Capstone – Accounting, AP Econ, or Dual Enrollment Course
		Principles of Accounting		
Electives	World Language	World Language	Computer Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Accounting Clerk, Bookkeeper, Payroll Clerk, Accounts Payable/Receivable Clerk, Bank Teller, Loan Processor, Claims Adjustor		Accountant, Credit Analyst, Investment Banker, Financial Analyst, Budget Analyst, Auditor, Tax Analyst, Investment Advisor		

Auto Mechanics - Service Technician Recommended Course Sequence				
Maryland Career Cluster 10: Transportation Technologies				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Service Technician I (2 Credits)	Service Technician II (3 Credits)
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
		Elective		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Parts Manager, Automotive Technician, Collision Repair Technician, Fleet Maintenance Manager			Mechanical Engineer, Design Engineer, Structural Engineer, Manufacturing Engineer, Civil Engineer	

Auto Mechanics - Service Technician Dual Completer Recommended Course Sequence				
Maryland Career Cluster 10: Transportation Technologies				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Service Technician I (2 Credits)	Service Technician II (3 Credits)
Electives	World Language	World Language Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Parts Manager, Automotive Technician, Collision Repair Technician, Fleet Maintenance Manager			Mechanical Engineer, Design Engineer, Structural Engineer, Manufacturing Engineer, Civil Engineer	

Business Administrative Services Recommended Course Sequence				
Maryland Career Cluster 2: Business Management and Finance				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts			Art or Music	
Financial Literacy		Financial Literacy (1/2 credit)		
CTE		Principles of Business Administration	Office Systems Management (Word / PowerPoint)	Office Systems Management (Excel/Access)
		Principles of Accounting		
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Elective	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Management Trainee, Executive Assistant, Supervisor, Small Business Manager, Payroll Clerk, Accounting Clerk, Bookkeeper, Office Manager, Secretary, Data Entry Specialist, Insurance Industry		Branch Manager, Project Manager, Operations Manager, Training, Accountant, Credit Analyst, Budget Analyst, Financial Analyst, Loan Officer, Banking Industry		

**Business Administrative Services – Dual Completer
Recommended Course Sequence**

Maryland Career Cluster 2: Business Management and Finance

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts			Art or Music	
Financial Literacy			Financial Literacy (1/2 credit)	
CTE		Principles of Business Administration	Office Systems Management (Word / PowerPoint)	Office Systems Management (Excel/Access)
		Principles of Accounting		
Electives	World Language	World Language	Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Sample Career Options

With an Associate’s Degree	With a Bachelor’s Degree
Management Trainee, Executive Assistant, Supervisor, Small Business Manager, Payroll Clerk, Accounting Clerk, Bookkeeper, Office Manager, Secretary, Data Entry Specialist, Insurance Industry	Branch Manager, Project Manager, Operations Manager, Training, Accountant, Credit Analyst, Budget Analyst, Financial Analyst, Loan Officer, Banking Industry

Business Management Recommended Course Sequence				
Maryland Career Cluster 2: Business Management and Finance				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts			Art or Music	
Financial Literacy		Financial Literacy (1/2 credit)		
CTE		Principles of Business Admin and Management	Advanced Business Management	Business Capstone – Business Management, AP Econ, or Dual Enrollment Course
		Principles of Accounting		
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Elective	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Management Trainee, Executive Assistant, Supervisor, Small Business Manager, Human Resource Clerk, Sales Representative, Office Manager		Accountant, Credit Analyst, Investment Banker, Financial Analyst, Budget Analyst, Auditor, Tax Analyst, Investment Advisor		

**Business Management – Dual Completer
Recommended Course Sequence**

Maryland Career Cluster 2: Business Management and Finance

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts			Art or Music	
Financial Literacy			Financial Literacy (1/2 credit)	
CTE		Principles of Business Admin and Management Principles of Accounting	Advanced Business Management	Business Capstone – Business Management, AP Econ, or Dual Enrollment Course
Electives	World Language	World Language	Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Sample Career Options

With an Associate’s Degree	With a Bachelor’s Degree
Management Trainee, Executive Assistant, Supervisor, Small Business Manager, Human Resource Clerk, Sales Representative, Office Manager	Accountant, Credit Analyst, Investment Banker, Financial Analyst, Budget Analyst, Auditor, Tax Analyst, Investment Advisor

**Career Research and Development
Recommended Course Sequence**

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Career Research and Development	Career Research and Development Seminar
				Work-Based Learning Experience (2 credits)
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	2 Electives	Work-Based Learning
		Elective		

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Carpentry Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Carpentry I (2 credits)	Carpentry II (3 credits)
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
		Elective		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Carpenter, Construction Manager, Civil Engineering Technician, Building Code Inspector, Real Estate Manager, Facilities Manager		Land Surveyor, Civil Engineer, Environmental Engineer, Engineer (all types), Project Manager, Cost Estimator, Specifications Writer		

Carpentry Dual Completer Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Carpentry I (2 credits)	Carpentry II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Carpenter, Construction Manager, Civil Engineering Technician, Building Code Inspector, Real Estate Manager, Facilities Manager		Land Surveyor, Civil Engineer, Environmental Engineer, Engineer (all types), Project Manager, Cost Estimator, Specifications Writer		

**CISCO Networking Academy
Recommended Course Sequence**

Maryland Career Cluster 8: Information Technology

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			PC Troubleshooting and Introduction to Network Engineering (2 Credits)	Advanced Network Engineering OR Cyber Security and Network Engineering (3 Credits)
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
		Elective		

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Sample Career Options

With an Associate’s Degree	With a Bachelor’s Degree
Computer Technician, Network Technician, Cabling Technician, PC Support Technician, Network Analyst, Applications Support Specialist, Applications Support Analyst	Network administrator, Project Manager, Technical Writer/Editor, Product Support Engineer, Operations System Analyst, Systems Technical Support Specialist, Quality Assurance Manager

CISCO Networking Academy – Dual Completer Recommended Course Sequence				
Maryland Career Cluster 8: Information Technology				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			PC Troubleshooting and Introduction to Network Engineering (2 Credits)	Advanced Network Engineering OR Cyber Security and Network Engineering (3 Credits)
Electives	World Language	World Language Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Computer Technician, Network Technician, Cabling Technician, PC Support Technician, Network Analyst, Applications Support Specialist, Applications Support Analyst		Network administrator, Project Manager, Technical Writer/Editor, Product Support Engineer, Operations System Analyst, Systems Technical Support Specialist, Quality Assurance Manager		

Computer Science Recommended Course Sequence				
Maryland Career Cluster 8: Information Technology				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE	Foundations of Computer Science	AP Computer Science Principles	App Development	AP Computer Science Coding or Dual Enrollment Options at CSM: ITS 1020 Operating Systems Concepts or ITS 2940 Cyber Ethics
Electives		Computer Keyboarding for College and Career (1/2 credit)	2 Electives	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Software Developer, Systems Engineer, Systems Analyst, Systems Administrator			Software Applications Developer, Network Systems Administrator, Database Administrator, Web Developer, Computer Programmer	

Computer Science – Dual Completer Recommended Course Sequence				
Maryland Career Cluster 8: Information Technology				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	<i>Fulfilled by pathway</i>			
Fine Arts		Art or Music		
Financial Literacy			Financial Literacy (1/2 credit)	
CTE	Foundations of Computer Science	AP Computer Science Principles	App Development	AP Computer Science Coding or Dual Enrollment Options at CSM: ITS 1020 Operating Systems Concepts or ITS 2940 Cyber Ethics
Electives	World Language	World Language	Computer Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
			Elective	
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Software Developer, Systems Engineer, Systems Analyst, Systems Administrator		Software Applications Developer, Network Systems Administrator, Database Administrator, Web Developer, Computer Programmer		

Construction Design and Management (CDM) Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Construction Design and Management I (2 Credits)	Construction Design and Management II (3 Credits)
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
		Elective		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
CAD/CAM Technician, Draftsperson, Engineering Technician, Documentation Specialist, Equipment Operator			Engineer, Architect, Mechanical Engineer, Surveyor, Project Manager, Safety Officer Scheduler	

Construction Design and Management (CDM) Dual Completer				
Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Construction Design and Management I (2 Credits)	Construction Design and Management II (3 Credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
CAD/CAM Technician, Draftsperson, Engineering Technician, Documentation Specialist, Equipment Operator			Engineer, Architect, Mechanical Engineer, Surveyor, Project Manager, Safety Officer Scheduler	

Cosmetology Recommended Course Sequence				
Maryland Career Cluster 4: Consumer Services, Hospitality, and Tourism				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry		An appropriate NGSS science course
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Cosmetology I (3 credits)	Cosmetology II (3 credits)
Electives	Elective	Elective Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Department Manager, Branch Manager, Sales Associate, Cosmetologist, Salon Manager			General/Regional Manager, Branch Manager, Territory Manager	

**Cosmetology Dual Completer
Recommended Course Sequence**

Maryland Career Cluster 4: Consumer Services, Hospitality, and Tourism

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry		An appropriate NGSS science course
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Cosmetology I (3 credits) This includes one credit in science	Cosmetology II (3 credits)
Electives	World Language	World Language Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Sample Career Options

With an Associate's Degree	With a Bachelor's Degree
Department Manager, Branch Manager, Sales Associate, Cosmetologist, Salon Manager	General/Regional Manager, Branch Manager, Territory Manager

Criminal Justice Recommended Course Sequence				
Maryland Career Cluster 7: Human Resource Services				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	Social Studies Elective
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE		American Criminal Justice Systems	Juvenile Justice	Criminal Investigation (2 credits)
			Criminal Law	
Electives	Elective	Computer Keyboarding for College and Career (1/2 credit)	Elective	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Police Officer, Court Clerk, Crime Technician, Dispatch/Communications Officer, Security Officer (Public or Private), Corrections Officer		Parole Officer, Case Manager, Counselor, Forensic Scientist, Police Agent, Air Marshall, Customs Officer, Homeland Security Agent		

Criminal Justice Dual Completer Recommended Course Sequence				
Maryland Career Cluster 7: Human Resource Services				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	Social Studies Elective
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy			Financial Literacy (1/2 credit)	
CTE		American Criminal Justice Systems	Juvenile Justice	Criminal Investigation (2 credits)
			Criminal Law	
Electives	World Language	World Language	Computer Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Police Officer, Court Clerk, Crime Technician, Dispatch/Communications Officer, Security Officer (Public or Private), Corrections Officer		Parole Officer, Case Manager, Counselor, Forensic Scientist, Police Agent, Air Marshall, Customs Officer, Homeland Security Agent		

Culinary Arts Recommended Course Sequence				
Maryland Career Cluster 4: Consumer Services, Hospitality, and Tourism				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Food Production and Management I (2 credits)	Food Production and Management II (3 credits)
Electives	Elective	Elective Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Restaurant Owner, Sales Manager, Host/Hostess, Chief, Kitchen Manager, Maitre d`		General Manager, Food Services Manager, Executive Chef, Menu Planner, Nutritionist, Registered Dietitian		

Culinary Arts Dual Completer Recommended Course Sequence				
Maryland Career Cluster 4: Consumer Services, Hospitality, and Tourism				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Food Production and Management I (2 credits)	Food Production and Management II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Restaurant Owner, Sales Manager, Host/Hostess, Chief, Kitchen Manager, Maitre d'			General Manager, Food Services Manager, Executive Chief, Menu Planner, Nutritionist, Registered Dietitian	

Curriculum for Agricultural Science Education (CASE) – CHS Only				
Recommended Course Sequence				
Maryland Career Cluster 5: Environmental, Agriculture, and Natural Resources				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE	Intro to Agriculture, Food, and Natural Resources	Principles of Agricultural Sciences - Animal	Animal and Plant Biotechnology	Agricultural Business, Research and Development
Electives		Computer Keyboarding for College and Career (1/2 credit)	2 Electives	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Food Safety Inspector, Agricultural Inspector, Animal Shelter Manager, Animal Breeder, Agricultural Marketing Representative		Forest Conservationist, Food Scientist, Soil Scientist, Veterinarian, Plant Scientist, Sustainable Biomaterials Specialist, Water Resources Scientist		

Curriculum for Agricultural Science Education (CASE) – Dual Completer – CHS Only				
Recommended Course Sequence				
Maryland Career Cluster 5: Environmental, Agriculture, and Natural Resources				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed		FoCS, IED or FOT		
Fine Arts			Art or Music	
Financial Literacy			Financial Literacy (1/2 credit)	
CTE	Intro to Agriculture, Food, and Natural Resources	Principles of Agricultural Sciences - Animal	Animal and Plant Biotechnology	Agricultural Business, Research and Development
Electives	World Language	World Language	Computer Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Food Safety Inspector, Agricultural Inspector, Animal Shelter Manager, Animal Breeder, Agricultural Marketing Representative		Forest Conservationist, Food Scientist, Soil Scientist, Veterinarian, Plant Scientist, Sustainable Biomaterials Specialist, Water Resources Scientist		

Electricity Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Electricity I (2 credits)	Electricity II (3 credits)
Electives	Elective	Elective	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Construction Manager, Civil Engineering Technician, Building Code Inspector, Electrician, Facility Manager		Engineer (all types), Architect, Specifications Writer, Project Manager		

Electricity Dual Completer Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Electricity I (2 credits)	Electricity II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Electrician, Facility Manager			Engineer (all types), Architect, Specifications Writer, Project Manager	

**Fire Fighter / Emergency Medical Technician
Recommended Course Sequence**

Maryland Career Cluster 7: Human Resource Services

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry		An appropriate NGSS science course
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED, or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Fire and Rescue I (3 credits)	Fire and Rescue II (3 credits)
Electives	Elective	Elective of choice recommended: Principles of Biomedical Sciences Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel or Elective

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Sample Career Options

With an Associate’s Degree	With a Bachelor’s Degree
Firefighter, EMT, Paramedic	Fire Marshall, Fire Investigator, Smoke Jumper, Captain, Fire Chief, Assistant Chief, Lieutenant

Fire Fighter / Emergency Medical Technician Dual Completer Recommended Course Sequence				
Maryland Career Cluster 7: Human Resource Services				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry		An appropriate NGSS science course
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED, or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Fire and Rescue I (3 credits)	Fire and Rescue II (3 credits)
Electives	World Language	World Language Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel or Elective
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Firefighter, EMT, Paramedic		Fire Marshall, Fire Investigator, Smoke Jumper, Captain, Fire Chief, Assistant Chief, Lieutenant		

Graphic Arts				
Recommended Course Sequence				
Maryland Career Cluster 1: Arts, Media, and Communication				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Graphic Arts I (2 credits)	Graphic Arts II (3 credits)
Electives	Elective	Elective	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Cartoonist, Fashion Artist, Photographer, Sketch Artist, Craftsperson, Illustrator, Exhibition Installer, Interior Design, Graphic Design, Desktop Publishing, Digital Image Specialist, Advertising Layout Designer			Textile Designer, Conservator, Animator Museum Director, Gallery Manager, Fine Artist (i.e., painting, sculpture, ceramics), Advertising Manager, Publicist, Communications Manager	

Graphic Arts Dual Completer Recommended Course Sequence				
Maryland Career Cluster 1: Arts, Media, and Communication				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Graphic Arts I (2 credits)	Graphic Arts II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Cartoonist, Fashion Artist, Photographer, Sketch Artist, Craftsperson, Illustrator, Exhibition Installer, Interior Design, Graphic Design, Desktop Publishing, Digital Image Specialist, Advertising Layout Designer		Textile Designer, Conservator, Animator Museum Director, Gallery Manager, Fine Artist (i.e., painting, sculpture, ceramics), Advertising Manager, Publicist, Communications Manager		

Heating, Ventilation, and Air Conditioning Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			HVAC I (2 credits)	HVAC II (3 credits)
Electives	Elective	Elective	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager			Engineer (all types), Architect, Specifications Writer, Project Manager	

**Heating, Ventilation, and Air Conditioning Dual Completer
Recommended Course Sequence**

Maryland Career Cluster 3: Construction and Development

Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED, or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			HVAC I (2 credits)	HVAC II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		

Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.

Sample Career Options

With an Associate's Degree	With a Bachelor's Degree
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager	Engineer (all types), Architect, Specifications Writer, Project Manager

Home Improvement Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Home Improvement I (2 credits)	Home Improvement II (3 credits)
Electives	Elective	Elective Computer Keyboarding for College and Career (1/2 credit)	Travel or Elective	Travel, Elective, or Work-Based Learning
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager			Engineer (all types), Architect, Specifications Writer, Project Manager	

Home Improvement Dual Completer Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Home Improvement I (2 credits)	Home Improvement II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager			Engineer (all types), Architect, Specifications Writer, Project Manager	

Masonry				
Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Masonry I (2 credits)	Masonry II (3 credits)
Electives	Elective	Elective	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Mason, Construction Manager, Civil Engineering Technician, Building Code Inspector, Real Estate Manager, Facilities Manager			Land Surveyor, Civil Engineer, Environmental Engineer, Engineer (all types), Project Manager, Cost Estimator, Specifications Writer	

Masonry Dual Completer Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Masonry I (2 credits)	Masonry II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Mason, Construction Manager, Civil Engineering Technician, Building Code Inspector, Real Estate Manager, Facilities Manager		Land Surveyor, Civil Engineer, Environmental Engineer, Engineer (all types), Project Manager, Cost Estimator, Specifications Writer		

Plumbing				
Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Plumbing I (2 credits)	Plumbing II (3 credits)
Electives	Elective	Elective	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager, Plumber			Engineer (all types), Architect, Specifications Writer, Project Manager	

Plumbing Dual Completer Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Plumbing I (2 credits)	Plumbing II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager, Plumber			Engineer (all types), Architect, Specifications Writer, Project Manager	

Project Lead the Way Biomedical Sciences – Dual Completer				
Recommended Course Sequence				
Maryland Career Cluster 6: Health and Biosciences				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Geometry	Algebra II	PreCalculus	AP Calculus I
Science	Biology	Chemistry	Physics	AP Science with lab recommended (2 credits)
Social Studies	US History	American Government	World History	Social Studies Elective
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed			FoCS, IED or FOT	
Fine Arts		Art or Music		
Financial Literacy			Financial Literacy (1/2 credit)	
CTE	Principles of Biomedical Science	Human Body Systems	Medical Interventions	Biomedical Innovations
Electives	World Language	World Language	Computer Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Psychiatric Assistant, Medical Assistant, Pharmacy Technician, Phlebotomist, EMT, Veterinary Technician, Dental Assistant		Biomedical Engineer, Biologist, General Practitioner, Forensic Scientist, Geneticist, Surgeon		

Project Lead the Way Pathway to Engineering – Dual Completer				
Recommended Course Sequence				
Maryland Career Cluster 9: Manufacturing, Engineering, and Technology				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Geometry	Algebra II	PreCalculus	AP Calculus I
Science	Biology	Chemistry	Physics	AP Science with lab recommended (2 credits)
Social Studies	US History	American Government	World History	Social Studies Elective
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	IED			
Fine Arts		Art or Music		
Financial Literacy			Financial Literacy (1/2 credit)	
CTE		Principles of Engineering	Digital Electronics Engineering Elective*	Engineering Design and Development
Electives	World Language	World Language	Computer Keyboarding for College and Career (1/2 credit)	Elective, Work-Based Learning, and/or Dual Enrollment at CSM
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
*Students are required to take either one (or both) of the engineering electives which are Aerospace Engineering and Civil Engineering and Architecture .				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Mechanical Engineering Technician, Civil Engineering Technician, Industrial Engineering Technician, Electrical Engineering Technician		Mechanical Engineer, Aerospace Engineer, Electrical Engineer, Chemical Engineer, Nuclear Engineer, Civil Engineer, Industrial Engineer		

Teacher Academy of Maryland – Dual Completer Recommended Course Sequence				
Maryland Career Cluster 7: Human Resource Services				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Geometry	Algebra II	PreCalculus	AP Calculus I or AP Statistics
Science	Biology	Chemistry	Physics	AP Science recommended
Social Studies	US History	American Government	World History	Social Studies Elective
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy			Financial Literacy (1/2 credit)	
CTE		Human Growth and Development through Adolescence	Teaching as a Profession	Foundations of Curriculum Instruction
				Education Academy Internship
Electives	World Language	World Language	Elective	Elective, Work- Based Learning, and/or Dual Enrollment at CSM
			Computer Keyboarding for College and Career (1/2 credit)	
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate’s Degree		With a Bachelor’s Degree		
Instructional Assistant, Day Care Instructor, Substitute Teacher		Teacher, Professional School Counselor		

Welding Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Welding I (2 credits)	Welding II (3 credits)
Electives	Elective	Elective	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree			With a Bachelor's Degree	
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager			Engineer (all types), Architect, Specifications Writer, Project Manager	

Welding Dual Completer Recommended Course Sequence				
Maryland Career Cluster 3: Construction and Development				
Content Area	9th Grade	10th Grade	11th Grade	12th Grade
English	English	English	English	English
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II or PreCalculus	Next appropriately rigorous math course
Science	Biology	Matter and Energy or Chemistry	Earth Science or Physics	Science or Social Studies Elective
Social Studies	US History	American Government	World History	
PE / Health	PE (that meets graduation requirement) and Health			
Tech Ed	FoCS, IED or FOT			
Fine Arts		Art or Music		
Financial Literacy		Financial Literacy (1/2 credit)		
CTE			Welding I (2 credits)	Welding II (3 credits)
Electives	World Language	World Language	Travel or Elective	Travel, Elective, or Work-Based Learning
		Computer Keyboarding for College and Career (1/2 credit)		
Presented is one of the recommended course sequences. Please see your school counselor to discuss all options.				
Sample Career Options				
With an Associate's Degree		With a Bachelor's Degree		
Construction Manager, Civil Engineering Technician, Building Code Inspector, Facility Manager		Engineer (all types), Architect, Specifications Writer, Project Manager		