South Carroll High School

High School Program of Studies

2022-2023

Career Pathways Planning Guide

Index of Career Completers and Career Majors

Graduation Requirements

Carroll County Public Schools
125 North Court Street
Westminster, Maryland 21157

HOW TO SEARCH THIS DOCUMENT:

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Information concerning the Americans with Disabilities Act is available from the Director of Facilities Management, (410) 751-3177, or the Communications Officer, (410) 751-3020, 125 North Court Street, Westminster, Maryland 21157.

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CORE STATEMENT

Carroll County Public Schools:
Building the Future

CORE VALUES

The Board of Education establishes the following core values:

- The pursuit of excellence
- Life-long learning and success
- A safe and orderly learning environment
- Community participation
- Fairness, honesty, and respect
- Continuous improvement
- Reflecting the priorities, beliefs, and mores of our local community

Message from the Superintendent . . . . .

Thank you for taking the time to review the High School Program of Studies. The purpose of this document is to help students, parents, and school counselors plan a four-year educational program for high school.

A well thought out high school program will prepare students for college and career readiness. By using the High School Program of Studies and the attached Pathways to Careers, students have the tools they need to map out both a short-range and long-range plan for high school study.

As courses are selected, please be sure to refer to the high school graduation requirements located in this document to ensure that you meet state and local graduation requirements. Also, please be aware that while approved course offerings available in Carroll County high schools are identified, each school develops its own program from these course offerings.

Our students today will have opportunities and challenges that will prepare them for tomorrow. Choosing a course of study for each student is an important step in preparing for that future. One way we can ensure that our students are successful is by working together to provide them with the very best educational experience.

Best wishes for a successful school year.

Steven A. Lockard, Ph.D.
Superintendent of Schools

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The High School Program of Studies
and
Career Pathways Planning Guide

Introduction

The Board of Education of Carroll County and professional staff recognize the need for students and parents to plan a high school program that enables each student to fulfill the Maryland State Graduation requirements in a manner that provides for individual interests, needs, and career goals.

It is also recognized that every student is on a pathway to a career - whether in the near or distant future. But how does a student get there, and will he or she be properly prepared? Has the student selected an education career plan suited to his or her interests and abilities? Will the student be able to enter a chosen career directly after high school, or will he or she need further training and/or higher education? These are all important questions for the student to consider before entering the highly competitive and technical workforce of the 21st century.

The **Pathways To Careers** program provides the direction needed to answer these questions. This innovative program is an integral part of the Carroll County School Improvement Plan and has been developed to accommodate all students in the school system. Consisting of six different career clusters (Arts, Business Contact, Business Operations, Science, Social Services, and Technical), the **Pathways To Careers** program

- helps students in making career decisions.
- identifies how specific courses correspond to specific careers.
- improves students' skills and increases their potential for employability and further training and education.

Pathways To Careers prepares students to create a career plan which . . .

- allows them to move between job and further education.
- helps them to understand and have knowledge of a variety of jobs within a career field.
- creates awareness of training and educational opportunities.
- provides opportunity for training, re-training and further education.
- includes on-the-job experience.

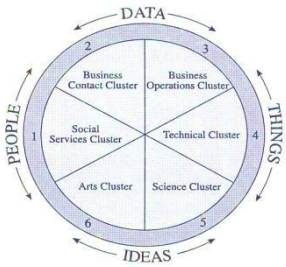
To aid in planning a four-year course of study, this publication also includes a comprehensive list of all course offerings available to students. It is strongly recommended that students, parents, teachers, counselors, and administrators communicate openly in the planning and course selection process.

It is important to note that "No person will be denied admission to any school or to any program or course of study in Carroll County Public Schools on the basis of race, color, national origin, sex, religion, or handicap." Any student or parent having inquiries regarding the application of these rights should contact the school principal or the Director of Student Services, 125 North Court Street, Westminster, Maryland 21157, telephone 410-751-3123. *

Not all programs and courses may be available at all schools.

**Board of Education Policy JFA – Approved November 14, 1979*

Getting Started



World of Work Map*

An illustration of the relationship between work tasks and the six career clusters (Arts, Business Contact, Business Operations, Science, Social Services, and Technical).

Career Clusters

Groups of occupational areas which are related to one or more of the four (4) work task areas.

Work Task Areas

Four identified areas: people, data, things, ideas. These are matched to a student's interest, abilities, and preferences.

Career Pathways

Include specific education, work and career choices.

Completer Program

A specified sequence of courses for a career pathway in a Career and Technical Education (CTE) completer program. All completer programs are approved by the Maryland State Department of Education (MSDE) and completion of the required CTE credits meets MSDE high school graduation requirements. All CTE programs offer a value-added component which may include college credits, industry certification or both.

Articulated Program

A specified sequence of courses (Completer Program) that can be applied toward credits or advanced standing at a particular college or technical school.

Apprenticeship Program

Combines supervised on-the-job training with related post-secondary instruction. It is sponsored by employers that are able to train at the workplace.

Career Majors

Course sequences within a specific career cluster and pathway which enable a student to work toward a career option not addressed by a CTE completer program. A minimum of four (4) credits of specified cross curricular course work constitutes a career major.

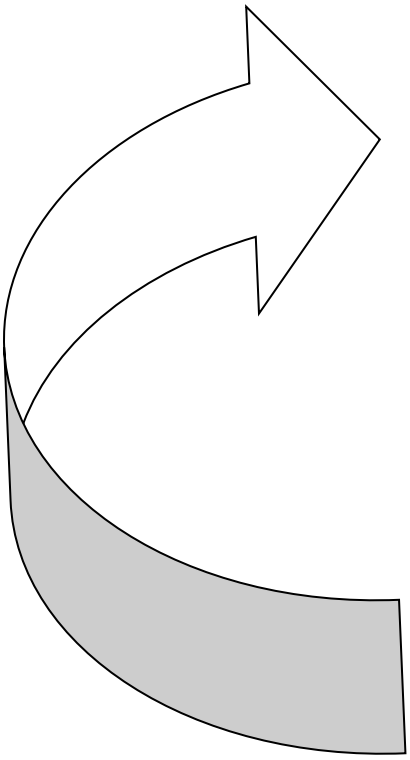
Naviance®

A comprehensive college and career readiness platform that helps students create connections between their goals, strengths, and interests, and success after high school. All high school students have a Naviance® account and full access to tools and information that will enhance their high school educational planning and support their preparation for college and career entry.

*Permission for use of the World of Work Map is granted by the American College Testing Program (ACT).

How To Use This Book

The High School Planning Guide can be used throughout a student's high school years. Students can make maximum use of the included information by following the steps below. These steps can be repeated and revisited as often as needed.



- Login to Naviance to access and complete the career surveys and tasks identified by your school counselor. Use a career interest survey to help identify your interests and skills and the career cluster area in which they are located (Arts, Business Contact, Business Operations, Science, Social Services, Technical).
- Find the completer program or career major in your preferred cluster that most closely matches your career interests and skills in the first half of this book, The Pathways To Careers.
- Look up course descriptions in the Program of Studies section in the second half of this book.
- Develop and follow your Education Career Plan **(sample on page 8)** to include the required courses for either a completer program or career major in addition to career specific electives that are of interest to you.
- Use the course selection guideline grid, which includes blank areas, as you plan when you would schedule specific courses.
- Consider transition activities, such as work-based learning or articulated and transcripted credits (college credit for high school work) that are related to specific completer programs.

Sample Educational Career Plan

Subject Area (credits required)	***Completed in 7th/8th Grade***	***CR***	***9th Grade***	***CR***	***10th Grade***	***CR***	***11th Grade***	***CR***	***12th Grade***	***CR***
English (4)										
Social Studies (3)										
Science (3)										
Mathematics (3)*										
Physical Education (1)										
Health (.5) **										
Tech Education (1)										
Financial Literacy (.5)										
Fine Arts (1)										
Alternatives for Meeting Graduation Requirements (page 15)										
World Language (2)										
or										
Completer Program										
Electives										
25 Total Credits Required	7th/8th Grade→		9th Grade→		10th Grade→		11th Grade→		12th Grade→	

Please refer to the following when planning: Graduation Requirements; Maryland State Colleges and Universities Admission Requirements; Rigorous High School Program; Dual Completer.

This sample plan is intended to be used by parents and students for pre-planning purposes. An official Educational Career Plan will be completed in collaboration with your high school counselor.

*4 Math credits are required for students entering grade 9 as of 2021-2022. **1 Health credit is required for students entering grade 9 as of 2021-2022.

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Need
To
Know
Information

Graduation Requirements for Students Entering Grade 9 Prior to 2021

Subject	Required Credits	Required Courses
English	4	-English 9 -English 10 -English 11 or AP Language and Composition -English 12 or AP Literature and Composition or AP Seminar or AP Research*
Social Studies	3	-Government or AP United States Government and Politics -United States History or AP United States History -World History or AP World History
Science	3	-Conceptual Physics -Chemistry I -Biology
Mathematics	3 All students shall enroll in a mathematics course each year of high school.	-Two credits of Algebra -One credit of Geometry The fourth course must be 1 credit in duration and may be selected from the Program of Studies Mathematics course offerings.
Physical Education	1	-Physical Education I (½ credit)
Health	½	-Health I
Fine Arts	1	-Completed credit in any Fine Arts course may be applied to the Fine Arts graduation requirements unless otherwise indicated.
Technology Education	1	-Foundations of Technology, Exploring Computer Science, Principles of Engineering (part of Project Lead the Way completer program), or AP Computer Science Principles
Graduation Pathway: • **World Language** • **<u>Or</u> American Sign Language** • **<u>Or</u> Advanced Technology** • **<u>Or</u> State Approved Career and Technical Education Completer Program**	 2 2 2 3-9	 -Two credits of the same World Language -Sign Language I, II, III -See Technology Courses -See Completer Programs
Financial Literacy	½	-Financial Literacy or -Managing Personal Finances Using Excel (1 credit)
Electives	6-12	
Total Credits Required	25	

NOTE: This chart will be subject to change pending any State action on graduation requirements.

*Students who earn scores of 3 or higher in AP Seminar *and* AP Research receive the AP Seminar and Research Certificate™. Students who *also* earn scores of 3 or higher on four additional AP exams at any time in high school receive the AP Capstone Diploma™.

Credit will be awarded for high school courses completed successfully in middle school.

<u>Additional Requirements</u>

- Four years of approved study beyond grade 8.
- Four credits must be earned after the completion of grade 11.
- State-mandated 75 hours of service-learning may be met by completing the course –related option and/or the exemplary service option. (see Service-Learning Program guidelines)
- Students must meet the High School Assessment requirements for Algebra I, English 10, Biology (Life Science MISA), and Government. Testing requirements and passing scores vary based on the year of course completion. Details related to each content area are provided below.
- All students shall be assessed no later than grade 11 to determine if the student meets the Maryland State Department of Education criteria for College and Career Readiness in English Language Arts and Mathematics.

- Transition courses or other instructional opportunities will be delivered in grade 12 to students who have not achieved College and Career Readiness by the end of grade 11.

High School Assessment Requirements

Algebra I

- Students taking Algebra I during the 2020-2021 and 2021-2022 school years will be required to participate in the Maryland [High School] Comprehensive Assessment for Algebra I (MCAP) to meet the graduation requirement. Beginning with the 2022—2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for Algebra I as an end-of-course assessment in Algebra I, accounting for twenty percent of the student's final grade.

English 10

- Students taking English 10 during the 2021-2022 school year will be required to participate in the Maryland [High School] Comprehensive Assessment for English (MCAP) to meet the graduation requirement. Beginning with the 2022—2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for English as an end-of-course assessment in English 10 accounting for twenty percent of the student's final grade.

Biology

- Students taking Biology during the 2020-2021 school year will be required to participate in the last administration of the High School Maryland Integrated Science Assessment (HS-MISA) to meet the graduation requirement. Students taking Biology during the 2021-2022 school year will be required to participate in the new Maryland [High School] Comprehensive Assessment for science (Life Science MISA) to meet the graduation requirement. Beginning with the 2022—2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for science as an end-of-course assessment in Biology accounting for twenty percent of the student's final grade.

Government

- Students taking Government during the 2021-2022 school year will be required to participate in the Maryland [High School] Comprehensive Assessment for government (Government MCAP) to meet the graduation requirement. Beginning with the 2022—2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for government as an end-of-course assessment in Government accounting for twenty percent of the student's final grade.

Combined Score Option

- Students can meet the MCAP/MISA requirements through a combined score passing option set by MSDE. The combined score total needed to pass varies based on the year in which the assessment is taken. See your school counselor for details.

Graduation Requirements for Students Entering Grade 9 in 2021 and Beyond

Subject	Required Credits	Required Courses
English	4	-English 9 -English 10 -English 11 or AP Language and Composition -English 12 or AP Literature and Composition or AP Seminar or AP Research*
Social Studies	3	-Government or AP United States Government and Politics -United States History or AP United States History -World History or AP World History
Science	3	-Conceptual Physics -Chemistry I -Biology
Mathematics	4 All students shall enroll in a mathematics course each year of high school.	-Algebra I -Geometry -One additional Algebra-based credit The fourth course must be 1 credit in duration and may be selected from the Program of Studies Mathematics course offerings.
Physical Education	1	-Physical Education I (½ credit)
Health	1	-Health Education Note: Students who took Health I (.5 credit) in SY 2021-2022 will need to take Health II (.5 credit) in SY 2022-2023 to fulfill the 1 credit graduation requirement.
Fine Arts	1	-Completed credit in any Fine Arts course may be applied to the Fine Arts graduation requirements unless otherwise indicated.
Technology Education	1	-Foundations of Technology, Exploring Computer Science, Principles of Engineering (part of Project Lead the Way completer program), or AP Computer Science Principles
Graduation Pathway: • **World Language** • **<u>Or</u> American Sign Language** • **<u>Or</u> State Approved Career and Technical Education Completer Program**	 2 2 3-9	 -Two credits of the same World Language -Sign Language I, II, III -See Completer Programs
Financial Literacy	½	-Financial Literacy or -Managing Personal Finances Using Excel (1 credit)
Electives	6-12	
Total Credits Required	25	

NOTE: This chart will be subject to change pending any State action on graduation requirements.

*Students who earn scores of 3 or higher in AP Seminar *and* AP Research receive the AP Seminar and Research Certificate™. Students who *also* earn scores of 3 or higher on four additional AP exams at any time in high school receive the AP Capstone Diploma™.

Credit will be awarded for high school courses completed successfully in middle school.

<u>Additional Requirements</u>

- Four years of approved study beyond grade 8.
- Four credits must be earned after the completion of grade 11.
- State-mandated 75 hours of service-learning may be met by completing the course –related option and/or the exemplary service option. (see Service-Learning Program guidelines)
- Students must meet the High School Assessment requirements for Algebra I, English 10, Biology (Life Science MISA), and Government. Testing requirements and passing scores vary based on the year of course completion. Details related to each content area are provided below.

- All students shall be assessed no later than grade 11 to determine if the student meets the Maryland State Department of Education criteria for College and Career Readiness in English Language Arts and Mathematics.
- Transition courses or other instructional opportunities will be delivered in grade 12 grade to students who have not achieved College and Career Readiness by the end of the grade 11.

High School Assessment Requirements

Algebra I

- Students taking Algebra I during the 2020-2021 and 2021-2022 school years will be required to participate in the Maryland [High School] Comprehensive Assessment for Algebra I (MCAP) to meet the graduation requirement. Beginning with the 2022-2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for Algebra I as an end-of-course assessment in Algebra I, accounting for twenty percent of the student's final grade.

English 10

- Students taking English 10 during the 2021-2022 school year will be required to participate in the Maryland [High School] Comprehensive Assessment for English (MCAP) to meet the graduation requirement. Beginning with the 2022-2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for English as an end-of-course assessment in English 10 accounting for twenty percent of the student's final grade.

Biology

- Students taking Biology during the 2021-2022 school year will be required to participate in the new Maryland [High School] Comprehensive Assessment for science (Life Science MISA) to meet the graduation requirement. Beginning with the 2022-2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for science as an end-of-course assessment in Biology accounting for twenty percent of the student's final grade.

Government

- Students taking Government during the 2021-2022 school year will be required to participate in the Maryland [High School] Comprehensive Assessment for government (Government MCAP) to meet the graduation requirement. Beginning with the 2022—2023 school year, a student will take the Maryland [High School] Comprehensive Assessment for government as an end-of-course assessment in Government accounting for twenty percent of the student's final grade.

College and Career Readiness Determination

The Maryland College and Career Readiness and College Completion Act of 2013 requires that all students in grade 11 complete an assessment to determine if they meet the criteria set forth by the Maryland State Department of Education for college and career readiness. College and career readiness is defined as the level of preparation a student needs to enroll and succeed, without remediation, in a credit-bearing course at a postsecondary institution that offers a degree or in a high quality certificate program that enables students to enter a career pathway with potential future advancement.

To be College and Career Ready (CCR), students in grade 11 (or near completion of English 11, Honors English 11, AP Language and Composition, Algebra II, or Integrated Algebra) will take MCAP English 11 and Accuplacer – College Level Math, unless the student has already earned CCR designation through an approved alternative assessment from the list below.

Students who do not achieve the CCR passing score on the initial assessment prior to grade 12 will be enrolled in a transition course or a course that includes additional learning experiences in grade 12. Near completion of the transition course, students will re-test for CCR by taking Accuplacer – Reading, Writing, and Sentence Skills, Accuplacer – College Level Math, or both. Students enrolled in a Career and Technical Education completer program, and not designated CCR by the end of their junior year, can meet CCR designation in their senior year by passing the related industry recognized certification exam for their career completer.

Additional CCR Determination Options:

- Dual Enrollment – Students who have been granted permission to take and are enrolled in a college-level credit-bearing mathematics/ELA course by the end of their junior year are considered CCR and do not have to take a CCR assessment.
- Local Agreements – Local School Systems (LSS) may use alternate means for determining CCR if an agreement exists between the LSS and a local community college that allows students to take college-level credit-bearing mathematics/ELA coursework using different metrics.
- GPA – The verified cumulative unweighted high school GPA of 3.0 or better may be used to signify the college-readiness of the applicant; the GPA will have an expiration date of no less than five years, regarding its utility as a metric for college-readiness. As such the applicant would not have to take the Accuplacer exam, or otherwise be restricted from registering for credit classes. This measure does not apply to grades earned in English as a Second Language (ESL) courses.

Content Area	Assessment	Passing Score
English Language Arts	MCAP English 11	4 or higher
	Accuplacer – Reading Writing Sentence Skills	 79 or higher 6 or higher 90 or higher
	SAT Reading	480 or higher
	ACT Reading	21 or higher
	AP Language and Composition	3 or higher
	AP Literature and Composition	3 or higher
Mathematics	Accuplacer – College Level Math	 45 or higher
	SAT Math	530 or higher
	ACT Math	21 or higher
	AP Calculus AB or BC	3 or higher
	AP Statistics	3 or higher

NOTE: This chart will be subject to change pending any State action on graduation requirements.

Carroll County Public Schools
Alternatives for Meeting Graduation Requirements

In order to receive a diploma from Carroll County Public Schools, students must complete one of the following alternatives as a graduation requirement. Every course may not be available at all schools.

Alternative 1
Two credits of a single world language. The following courses may be used to satisfy this requirement.

ESOL I, II, III, IV French I, II, III, IV, AP German I, II, III, IV, AP	Latin I, II, III, IV, AP Spanish I, II, III, IV, AP American Sign Language I, II, III, IV

Alternative 2
Complete a State-approved Career and Technical Education (CTE) completer program. The following programs, which consist of an approved, designated sequence of courses, may be used to satisfy this requirement.

Program	Location	Credits
Academy of Health Professions	Carroll County Career and Technology Center	4
Accounting	All High Schools	4
Administrative Services	All High Schools	4
Applied Mechanical Engineering	Carroll County Career and Technology Center	6
Apprenticeship Maryland	All High Schools	4
Army Junior Reserve Officer Training Corps (JROTC)	Combination – All High Schools	3
Auto Service Technology	Carroll County Career and Technology Center	6
Biomedical Sciences-Project Lead The Way	Carroll County Career and Technology Center	4
Building Maintenance	Carroll County Career and Technology Center	4
Business Administration and Management	All High Schools	4
Career Research and Development	Gateway School and Flexible Student Support	4
Carpentry	Carroll County Career and Technology Center	6
CASE Agricultural Science – Animal	All High Schools	4
CASE Agricultural Science – Plant	All High Schools	4
CASE Natural Resources	All High Schools	4
Cisco Networking Academy (Cyber Security and Cyber Operations)	Carroll County Career and Technology Center	6
Collision Repair Technology	Carroll County Career and Technology Center	6
Computer Science	All High Schools	4
Cosmetology	Carroll County Career and Technology Center	9
Culinary Arts	Carroll County Career and Technology Center	6
Digital Fabrication and Manufacturing	All High Schools	3
Drafting	Carroll County Career and Technology Center	6
Early Childhood Education	All High Schools	5
Education – Middle and High School (Teacher Academy of Maryland)	Combination - All High Schools	4
Electrical Construction	Carroll County Career and Technology Center	6
Engineering (Project Lead The Way)	Carroll County Career and Technology Center	5
Financial Services (Academy of Finance)	Combination – All High Schools	5
Food Service and Hospitality Management (ProStart)	Combination - All High Schools	4
Heating, Ventilation, Air Conditioning (HVAC)	Carroll County Career and Technology Center	6
Heavy Equipment and Truck Technology	Carroll County Career and Technology Center	6
Homeland Security and Emergency Preparedness-Criminal Justice/Law Enforcement	Carroll County Career and Technology Center	4
Homeland Security and Emergency Preparedness-Geographic Information Systems and Technology	Carroll County Career and Technology Center	4
Interactive Media Production	All High Schools	4
Marketing	All High Schools	4
Masonry	Carroll County Career and Technology Center	6
Print Production (Print Ed)	Combination: All High Schools and Carroll County Career and Technology Center	4
Textiles and Fashion Careers	Carroll County Career and Technology Center	6

Program	Location	Credits
Video Production	Combination: All High Schools and Carroll County Career and Technology Center	4
Welding Technology	Carroll County Career and Technology Center	6

CARROLL COUNTY PUBLIC SCHOOLS
SERVICE-LEARNING PROGRAM

MISSION STATEMENT

The Carroll County Service-Learning Program has been designed to benefit the student, school, and the community through developmentally appropriate service-learning opportunities.

DEFINITION OF SERVICE-LEARNING

Service-Learning is a teaching method that combines meaningful service to the community with curriculum-based learning. Students improve their academic skills by applying what they learn in school to the real world; they then reflect on their experience to reinforce the link between their service and their learning. Service-Learning includes: preparation, identifying projects and learning skills; and action. Students can meet the needs of the community three ways:

Direct Service: Students have face-to-face contact with the service recipients, such as serving meals at a homeless shelter or volunteering at a nursing home.

Indirect Service: Students perform a service without having face-to-face contact with the recipient, such as participating in food and clothing drives and fundraising.

Advocacy: Students educate others about a particular issue, such as writing letters to legislators or editors and displaying posters to targeted audiences.

Students will reflect and evaluate projects through discussion or completion of the writing prompt on the Service-Learning Reflection form.

CARROLL COUNTY GUIDELINES

1. Students, parents, and individuals/organizations who accept student volunteers are hereby advised that the fact that Service-Learning is mandated is not a sufficient basis for attaching liability to the Carroll County Public Schools. The Board of Education of Carroll County does not provide general liability insurance for individuals or organizations for whom students may perform student service. Parents or guardians of student and individuals or organizations that accept student volunteers should verify the adequacy of their own insurance coverage.
2. The Carroll County Program will meet or exceed the minimum number of hours (75) of Service-Learning as required by the State of Maryland. Students may count a maximum of 20% of total practice and preparation time for a service-learning activity, unless pre-approved by the school's Service-Learning Coordinator.
3. Students may meet the Service-Learning Graduation Requirement by completing the Course-Related Option or by completing the Exemplary Service Award Option.
4. Students may accumulate service hours beginning the summer after the completion of grade 5 through grade 12; and, may complete the requirement any time during that period. Students must complete a minimum of 55 Service-Learning hours by the end of the eleventh grade in order to be promoted to senior status.
5. Service-Learning hours will be pro-rated for students transferring into Carroll County Schools from private or out-of-state schools after the completion of their freshman year. For those students transferring into CCPS after the freshman year, the hours are pro-rated as follows: Sophomores are required to complete 40 hours; junior year 30 hours; first semester of the senior year 10 hours; second semester of senior year 5 hours.
6. Service-Learning activities will be approved by the school principal or student service coordinator. Students shall not be paid for their service and shall not earn hours for service to a for-profit agency or business. Students shall not earn hours for service in preparation for or during religious services; not earn hours for assisting family members with tasks such as cutting the lawn or babysitting; not be excused from school to earn service-learning hours. Check with the school coordinator for clarification.
7. Students choosing the Exemplary Service Option must document service-learning hours on the Service-Learning Reflection Form (form on front).

COURSE-RELATED SERVICE OPTION
Students may fulfill the Service-Learning Graduation Requirement by successfully completing courses that contain a service-learning component. Students must earn the minimum of 75 service-learning hours to satisfy the Service-Learning Requirement. The number of hours each course provides is listed below.

Middle School Courses Providing Hours:
6th grade Outdoor Education (10 hours)
8th grade Family and Consumer Sciences (15 hours)
Learning for Independence Job Readiness (15 hours)

High School Courses Providing 5-15-30 Hours:
Advanced Laboratory-Child Development (30 hours)
Aquatic Environmental Science (15 hours)
Child Development Laboratory (30 hours)
Government / Honors Government (5 hours)
Terrestrial Environmental Science (15 hours)

High School Courses Providing 10 Hours
Academic Department Assistant+
Advanced Cosmetology: Theory and Application
Applied Art
Auto Service Technology I, II
Building Maintenance
Culinary Arts I and II
Electrical Construction I, II
Honors International Studies
Independent Study – Student Service Learning+
Issues in American Society
Mastery of Cosmetology
Newspaper Production / Honors Newspaper Production+
Peer Facilitating+
Principles and Practices of Cosmetology
Science Research I, II, III / Honors Science Research I, II, III
Textiles and Fashion Careers I, II
US History / Honors US History
Video Production
Yearbook Production / Honors Yearbook Production+

*Students may earn Service-Learning hours in additional courses with the prior consent of the instructor.

+Students may earn 10 Service-Learning hours for the ½ credit course; 20 Service-Learning hours for the 1 credit course; 40 Service-Learning hours for 2 credit course.

EXEMPLARY SERVICE AWARD
Students who complete a minimum of 300 service-learning hours by May 1 of their senior year will earn the Exemplary Service Award and will be honored with a certificate upon graduation.

Service-Learning hours must be documented on a Service-Learning Reflection Form and approved by the Service-Learning Coordinator in the same year in which the service is performed.

COURSE SELECTION AND ENROLLMENT OPTIONS

FLEXIBLE STUDENT SUPPORT
This alternative program offers credit classes in English, social studies, science, health, math, fine arts, and occupational programs for students who have withdrawn from high school and need only a few credits to meet graduation requirements, or who are enrolled in daytime high school and need to take advantage of the course offerings available through Flexible Student Support programs.

- **Student Support Center** – traditional instruction in a school class setting.
- **Distance Learning** – a facilitator is on-site for on-line courses.
- **Career Research and Development** – classroom instruction combined with work experience leading to a completer program.

Students are required to follow all policies and procedures of Carroll County Public Schools while enrolled in these programs. Credits earned are transferred back to the student's home school to apply toward graduation requirements.

For further information, contact the Pupil Personnel Worker assigned to your school or call 410-751-3145.

DUAL ENROLLMENT

Dual enrollment provides high school juniors and seniors the opportunity to enroll in college level courses through local public colleges while enrolled in a Carroll County public high school. Dually enrolled students may take college courses for which they have met the prerequisite requirements and for which they have received authorization by both a parent/guardian and a designated school official. Billing will be handled by the college with appropriate discounts applied. Students eligible for free and reduced meals will have the tuition waived. Students/parents will be responsible for all other expenses and fees. Eligibility for dual enrollment is as follows:

1. Must have an overall, non-weighted GPA of at least 3.0*;
2. Must be of at least "junior" status on the start date of the semester of dual enrollment**;**
3. Must enroll in at least one qualifying (non-remedial) college course;
4. Must be enrolled in a total of four credits for the semester (college and minimum of 1 CCPS credit combined);
5. Must have met minimum Service-learning hours requirement (75 hours);
6. Must have a 94% attendance rate during the nine weeks (marking period) preceding the application for the dual enrollment program.

   *Select dual enrollment courses are also offered at the high school location. Procedures and the application process still apply. Students who take courses offered at their high school location must have a minimum GPA of 2.5, and a minimum of a grade of "C" in Algebra II if enrolling in a dual enrollment math course.

Prior to the student enrolling in the dual enrollment program, a parent conference will be held with the school counselor for post-secondary planning. The student/parent must complete the **Dual Enrollment Application.** Dual enrollment courses will be reflected on the student's high school transcript and the final grade will be calculated into the high school GPA. College courses at the 100 level or above will receive .5 high school credit for 1-2 college course credits and 1.0 high school credit for 3-5 college course credits. Dual enrollment courses will be weighted as a transcripted/AP course and may count toward graduation requirements. Students may take summer college courses to be added to the high school transcript, with prior approval from the principal. There is no financial discount for courses taken in the summer.

ALTERNATIVES TO FOUR-YEAR ENROLLMENT

In recognition of the fact that four-year enrollment in a public high school may not serve the best interests of some students, the following alternatives shall be made available:

EARLY COLLEGE ADMISSION PROGRAM

A student may receive a Maryland High School Diploma after completion of grade 11 through acceptance in the early college admission program, provided that:

- The student is accepted for early admission to an accredited college before high school graduation;
- All State assessment prerequisites, the 25 credits, specified credits, and service-learning requirements have been met;
- A written request by the student and parent or guardian is made to and approved by the local superintendent of schools, asking the waiver of the fourth year attendance requirement and certifying the early admission acceptance.
- The student's program for the first year of college is approved by the local superintendent of schools if this program is included toward the issuance of a diploma; and at the conclusion of a full year of study, a written request for a Maryland High School Diploma is submitted to the superintendent together with a transcript or letter from the college to the high school principal indicating that the student has successfully completed a year of college work.

EARLY ADMISSION TO APPROVED VOCATIONAL, TECHNICAL, OR OTHER POST-SECONDARY SCHOOL

A student may receive a Maryland High School Diploma after completion of grade 11 through acceptance in an early admission program of an approved vocational, technical, or post-high school if:

- The student is accepted for early admission by an approved vocational, technical, or post-secondary school before high school graduation.
- All State assessment prerequisites, the 25 credit, specified credit, and student service requirements have been met.
- A written request by the student and parent or guardian is made to and approved by the local superintendent of schools, asking the waiver of the fourth year requirement and certifying the early admission acceptance.

GENERAL EDUCATIONAL DEVELOPMENT TESTING PROGRAM

A Maryland High School Diploma may be awarded for satisfactory performance on approved general educational development tests provided that the student meets those requirements as defined in Education Article, 7-205, Annotated Code of Maryland.

CREDIT BY EXAM

In Carroll County, credit toward high school graduation may not be earned by passing an examination, except in the case of seniors who have already completed all requirements for the Maryland High School Diploma except for a credit in either English 12 or Algebra II. According to COMAR 13A.03.02.05, rising seniors may earn credit by using specific tests.

English 12: Students who desire to obtain Maryland High School Graduation credit for English 12 must take two tests; SAT and SAT Subject Test in Literature. To obtain the credit, the students must achieve a minimum combined score of 1080 on the SAT Subject Test in Literature and the writing portion of the SAT with a minimum of 520 on the writing portion of the SAT.

Algebra II: Students who wish to receive Maryland high school Graduation credit for Algebra II must achieve a minimum of 1150 on the American Diploma Project Algebra II exam.

A student choosing this option must put their request in writing to the principal prior to the start of the senior year.

COLLEGE ATHLETIC ELIGIBILITY

The National Collegiate Athletic Association (NCAA) has specific guidelines for high school student athletes who wish to be eligible to compete in college athletics. There are five basic criteria which include:

1. graduation from high school with 2 world language credits earned during grades 9 through 12;
2. graduation from high school with mathematics credits through Algebra II;
3. minimum core grade point average;
4. minimum ACT or SAT test score; and
5. completion of 16 core courses.

Planning for college and college athletics should begin in grade nine in order to complete the core courses. Students should register with the NCAA clearinghouse by the end of their junior year. Check with your school counselor for information concerning the specifics of the above criteria. CCPS Courses that meet NCAA eligibility criteria are marked with a 'Y' in the course descriptions.

ENROLLMENT CRITERIA FOR COURSES AT THE CAREER AND TECHNOLOGY CENTER AND REGIONALIZED PROGRAMS

The Carroll County Career and Technology Center is a career specialization school. Students enrolled in a program at the center are also enrolled in their home schools where supporting course work and extracurricular activities are provided.

Except where noted, transportation to the Career and Technology Center is provided on a round-trip basis from the home school. Many of the Career and Technical Education (CTE) courses include internships. These experiences are often off school property. Transportation to these experiences shall be the responsibility of the parent/guardian. Students are required to purchase uniforms in many of the CTE programs and to wear appropriate safety apparel.

Any student may apply to any CTE program. Students should meet prerequisites for specific courses and complete the Career and Technology Center and Regional Program application. Students are selected on the probability of success in Career and Technology Center and Regional Programs. The minimum requirements to be enrolled into a Career and Technology Center or Regional Program are:

- 94% attendance;
- 2.0 Weighted Grade Point Average;
- successful completion of the required prerequisites;
- promotion to grade 11; and
- completion of course work as indicated in the Pathways To Careers;

Students not meeting these requirements may STILL be considered for enrollment. It is recommended that these students improve their grades and/or attendance and increase the rigor of their course work.

Programs vary in number of credits and prerequisites. Pathways To Careers and the course descriptions in the Program of Studies should be used in preparing a comprehensive high school plan.

Note for all Career and Technical Education Programs:
End of program assessments may be required for all completer programs at both the Career and Technology Center and the comprehensive high schools.

CAREER RELATED INTERNSHIPS

Career Related internships are the culminating (capstone) experience for students who have explored a career area by following a career major or completer sequence as outlined in *Pathways To Careers*. This program is operated by Carroll County Public Schools in partnership with participating employers. Internship placement and supervision are facilitated by the career coordinator at each comprehensive high school and the Carroll County Career and Technology Center. Students are placed at a work site according to aptitude, ability, preparation, interest, and career plan.

Students seeking an internship in a career area related to a Career and Technical Education completer program must complete the program prior to or concurrent with the internship. The internship experience is guided by an individualized training plan that has been established through the cooperative effort of the student, school, and employer.

Eligibility for an internship includes but is not limited to:

a. Senior status during scheduled internship;
b. 2.5 grade point average;
c. 94% attendance during the previous quarter;
d. HSA requirements met;
e. 75 service-learning hours completed;
f. completed at least 3 credits of a completer or career major; and
g. acceptable behavior/disciplinary record.

MARYLAND STATE COLLEGES AND UNIVERSITIES ADMISSION REQUIREMENTS

The University System of Maryland (USM) policy encourages students to take challenging high school courses that will prepare them for success upon entering the University. The courses listed below, along with an acceptable standardized test score and a grade point average equivalent to a C or better, represent the minimum high school requirements for entry in the USM institutions. Individual campuses and programs may have additional admission requirements. Students should seek out these specific requirements by writing the admissions office at their campus of choice.

Minimum Course Requirements for Admission

Subject		Credits
English		4
World Language or Advanced Technology		2*
Social Science/History • Government • United States History • World History		3
Mathematics • Algebra I • Geometry • Algebra II	Students who complete Algebra II prior to their final year must complete the four-year Mathematics requirement by taking a course or courses that utilize non-trivial Algebra.	4**
Science In at least two different areas, with at least two lab experiences.		3***

*Each institution will determine whether Advanced Technology credits will be accepted in lieu of World Language. Please contact the institution(s) of your choice for information.

**Students who have completed all available mathematics courses prior to their senior year should speak with a counselor regarding fourth year math options.

***For students interested in science-oriented careers (such as medicine, engineering, veterinary medicine, physical therapy, etc.), four years of science are recommended in three different science areas, with at least three lab experiences.

Consideration for admission is also based on the rigor of coursework, performance on high school assessments, trends in performance, citizenship and leadership, special talents, and personal circumstances.

MARYLAND STATE SEAL OF BILITERACY

The Maryland State Seal of Biliteracy (MSSB) is an award from the Maryland State Board of Education that recognizes a student's high level of proficiency in listening, speaking, reading, and writing in English and one or more additional languages. The MSSB is based on the premise that high school graduates who can function in two or more languages are well equipped with the knowledge and skills needed to participate successfully in college, career, and a diverse 21st century society. Eligible students must pass the required MCAP English and an MSDE approved world language assessment. For information regarding guidelines, requirements, and assessments, contact the Assistant Supervisor of World Languages.

VIRTUAL LEARNING PROGRAM
Carroll County Public Schools (CCPS) believes that web-delivered, virtual courses provide alternative opportunities in the delivery of instruction for our students. The Carroll County Virtual Program offers high school courses that are designed to expand student access to challenging curricula aligned to the Maryland College and Career Standards through the delivery of high-quality online courses.

The goals of the Carroll County Virtual Learning Program are to provide equity across programs and schools by ensuring that all students have access to the same pathway and course options and to provide opportunities for students to accelerate learning.

These courses are consistent with the regular school program; however, teaching is conducted virtually with the teacher physically separated from the students. In most cases, the teacher is not a CCPS employee. Students work independently and at various times of the day or week. Teachers communicate with students online and via telephone.

Each school has a support system for students taking virtual courses and management of virtual courses resides at the local school. Courses offered through a virtual option have been reviewed and accepted by MSDE and CCPS for approved credit and are taught by highly qualified teachers.

Schools placing students in a virtual course are responsible for providing a mentor teacher and providing computer access. Courses are scheduled during the regular school day.

To be successful in a virtual course, learners must demonstrate a variety of attributes. These include:

- Self-motivation to direct their own learning
- Self-discipline to maintain course engagement
- Confidence to ask for help or clarification when needed
- Ability to work independently
- Strong time management skills.

Generally, students are able to register for virtual courses only under exceptional circumstances that prevent enrollment in a traditional face-to-face classroom setting. CCPS will use the following criteria to guide decision-making in determining whether a student is eligible to enroll in a virtual course:

- the school or program does not offer the course;
- the student has a schedule conflict that prevents taking a course when it is offered at the school or program;
- teacher recommendations.

Only the principal has the authority to approve student placement in a virtual course. Please contact your school counselor for more information.

HONORS AND ADVANCED PLACEMENT

HONORS AND ADVANCED PLACEMENT COURSES
Honors courses differ from academic courses in that they require students to be more independent, creative, and extensive in the pursuit of topics and concepts. They are more rigorous, not because of a greater quantity of work, but because students will explore topics to a greater depth, using inquiry and problem-solving approaches.

Typically, students who are successful taking honors courses are highly motivated and are high achievers. They learn rapidly, can make generalizations and understand complex concepts, and produce original and creative products. They accept responsibility for their own learning and strive to maintain good work habits, interest, attitude, and a commitment necessary for high achievement.

Open Enrollment Policy – All students who meet the prerequisites shall be given the opportunity to enroll in honors or Advanced Placement (AP) courses.

ADVANCED PLACEMENT TESTING
Opportunities are available for highly motivated students to participate in the Advanced Placement Program administered by the College Board. Advanced Placement examinations are offered annually to give high-school students opportunities to demonstrate college-level achievements. As with other College Board examinations, students pay a fee for each Advanced Placement examination they take. Advanced Placement examinations are administered annually in May. Individual students should see school counselors for specific information relative to the Advanced Placement Program.

In order to provide instructional assistance to highly motivated students interested in the Advanced Placement Testing, specific course opportunities have been developed in Carroll County high schools. Courses specifically identified as such include:

Career and Technical Education
- AP Computer Science A
- AP Computer Science Principles

English
- AP Language and Composition
- AP Literature and Composition

Fine Arts
- AP Studio Art: Drawing
- AP Studio Art: 3D Design
- AP Studio Art: 2D Design
- AP Music Theory

Science
- AP Physics I
- AP Chemistry
- AP Biology
- AP Environmental Science
- AP Physics C

Mathematics
- AP Calculus AB
- AP Calculus BC
- AP Statistics

World Languages
- AP French Language and Culture
- AP Spanish Language and Culture
- AP Spanish Literature and Culture
- AP German Language and Culture
- AP Latin

Social Studies
- AP United States History
- AP World History: Modern
- AP European History
- AP Human Geography
- AP Macroeconomics
- AP Psychology
- AP United States Government and Politics

Students and parents should understand that extra demands are essential for success on the Advanced Placement examinations and that the individual student must pursue studies on a personal basis. In each of the courses designated above, teachers will assist the student in identifying the content covered by a particular Advanced Placement test and offer individualized instructional assistance within the structure of the course.

GRADE POINT AVERAGES AND RANKINGS

DUAL SYSTEM FOR REPORTING GRADE POINT AVERAGES/CLASS RANK

Students in Carroll County Public Schools receive a weighted and non-weighted Grade Point Average (GPA)/class rank determined by the final grade of each course. The dual GPA/class rank system is based on the assignment of quality points. The charts below identify the quality points assigned in both the weighted and non-weighted systems.

Students in Carroll County Public Schools receive a weighted and non-weighted Grade Point Average (GPA)/class rank determined by the final grade of each course. The dual GPA/class rank system is based on the assignment of quality points. The charts below identify the quality points assigned in both the weighted and non-weighted systems.

	WEIGHTED GPA			NON-WEIGHTED GPA
	AP/Transcripted	**Honors**	**Academic/Articulated**	**For All Students, In All Courses, At All Levels**
A	5.0	4.5	4.0	A = 4.0
B	4.0	3.5	3.0	B = 3.0
C	3.0	2.5	2.0	C = 2.0
D	1.0	1.0	1.0	D = 1.0
F	0	0	0	F = 0

All scholarships from the Maryland State Scholarship Program are granted based on criteria using a non-weighted GPA. Recipients of the Governor's Award shall be selected based on the weighted GPA rankings. Recipients of the Presidential Academic Excellence Award will be based on unweighted GPA. Each school's honor roll shall be determined using the weighted GPA. Students are selected at each high school for the National Honor Society based on established county criteria. Current cumulative weighted and non-weighted grade point average, as well as honor roll status, shall be listed on each report. The weighted and non-weighted GPA will be included on a student transcript.

Please consult your school counseling office for additional information and procedures.

MARYLAND SCHOLARS PROGRAM

The Maryland Scholars Program is designed to increase the percentage of students who complete rigorous coursework and are well prepared to succeed in college and the workplace. A major component of the Maryland Scholars Program is focusing eighth and ninth grade students on the importance of their course selections for high school and the pivotal role higher-level math and science courses play in future career opportunities. The program relies on business volunteers to deliver the message to students in their classrooms about the connection between achievement in school and success in life.

Students must successfully complete the following course of study:

4 credits of English
4 credits of Math
3 credits of Lab Science (Biology, Chemistry, Conceptual Physics/Physics)
3 credits of Social Studies (Government, U.S. History, World History)
2 credits of the same World Language

Students must attain a minimum GPA non-weighted of 3.0 to qualify.

RIGOROUS HIGH SCHOOL PROGRAM
The Maryland State Department of Education defines a rigorous high school program as one where graduates master four of the six performance indicators:

- Two or more credits in the same World Language with a grade of B or better;
- One or more credits in mathematics courses at a level higher than Algebra II and Geometry with a grade of B or better;
- Four credits of science with a grade of B or better;
- Two or more credits of approved advanced technology education with a grade of B or better;
- A score of 1000 or higher on SAT-1 or a score of 20 or higher on ACT, or both; and
- A cumulative grade point average of 3.0 or higher on a 4.0 scale.

When making course selections students and parents should strive to meet or exceed the minimum standards for a rigorous high school program.

DUAL COMPLETER
A secondary student who completes the course entry requirements for the University System of Maryland with a C or better in all courses and has completed a Career and Technology completer program is designated as a dual completer.

CAREER AND TECHNICAL EDUCATION (CTE)

PREPARES STUDENTS TO BE CAREER AND COLLEGE READY

Students who graduate from CTE programs are successfully prepared to participate in the work force and post-secondary education.

CAREER READY students have the knowledge, skills and career experience to be successful in the modern day, competitive, workforce. CTE students have opportunities to earn industry certifications through technical skill testing and/or valuable program affiliations with professional organizations. CTE programs require industry-based curriculum, industrial grade equipment, specific teacher credentials and regular program monitoring by industry experts. In addition, program staff regularly meet with local businesses and colleges/post-secondary education institutions to make sure CTE programs provide students with the knowledge, skills and experiences necessary to be successful in their chosen field. As a culminating experience, students who complete a CTE pathway may be eligible to enroll in a career related internship. These internships blend academic and technical knowledge and skills with the real work experiences and career ready practices necessary for students to thrive in today's workplace.

COLLEGE READY students are prepared for the rigors of post-secondary education. Through extensive partnerships CTE students can earn college credits while still in high school (see table below). CCPS works with colleges to annually review CTE curricula and competencies to ensure alignment with college standards and expectations. Students can earn articulated credits for which they must meet certain criteria and enroll in the specific college/university. In some cases, students earn transcripted credit (noted below with an*); credits awarded that transfer to other colleges/universities.

CAREER PATHWAY	PROGRAM	AREAS OF CERTIFICATION/PROFESSIONAL AFFILIATION	COLLEGE/UNIVERSITY	COLLEGE CREDITS
ARTS, MEDIA AND COMMUNICATION	Interactive Media Production	College credit earned on a transcript through Carroll Community College*	Carroll Community College	pending
	Print Production	PrintED - Graphic Arts Education and Research Foundation (GAERF) • Graphic Communications • Digital File Preparation /Digital File Output	Bridgemont Community Technical College Carroll Community College Montgomery Community College	16 3 4
	Video Production	Partners with the Community Media Center (with state of the art HD cameras and Final Cut Pro professional editing software)	Art Institute Stevenson University	4 3

Business Management and Finance	Accounting	College credit earned on a transcript for ACCT 101 through Carroll Community College*	Carroll Community College Frederick Community College Pennsylvania College of Technology	3* 3 TBD
	Administrative Services	Microsoft Office Specialist (MOS) Certification • Specialist Word/Specialist Excel	Carroll Community College Pennsylvania College of Technology	Up to 19 TBD
	Business Administration and Management	College Board: • CLEP Exam-College Level Exam Program	Community College of Baltimore Co. Fredrick Community College Pennsylvania College of Technology	9 6 TBD
	Financial Service Academy of Finance	National Academy Foundation (Model Academy) • NAF Certification Dual Completion with Financial Management Course • FN215 at Carroll Community College	Frederick Community College Pennsylvania College of Technology Carroll Community College (ACCT 101; FN 215)	12 TBD 6*
	Marketing	CLEP Exam-College Level Exam Program Credit	Community College of Baltimore County	6
Construction and Development	Building Maintenance	NCCT© Academic Core v2 OSHA-10 Certified		
	Carpentry	OSHA-10 Certified NCCT© Academic Core v2, plus • NCCT Academic Carpentry • NCCT Academic Electrical Construction • NCCT Academic HVAC • NCCT Academic Masonry National Registry (NCCER) Associated Builders and Contractors Apprenticeship	Community College of Baltimore Co. Pennsylvania College of Technology	6 Up to 9
	Electrical Construction		Community College of Baltimore County Frederick Community College Pennsylvania College of Technology	6 7 TBD
	HVAC		Community College of Baltimore Co. Frederick Community College Pennsylvania College of Technology University of Northwestern Ohio	22 10 Up to 12 6
	Masonry		Community College of Baltimore County Pennsylvania College of Technology	6 Up to 9
Consumer Services and Hospitality	Culinary Arts/Professional Cook	American Culinary Federation© (ACF)- • Culinary Arts • Retail Commercial Baking Restaurant Association of Maryland • ServSafe©- Food manager	Anne Arundel CC Culinary Institute of America Fredrick Community College Pennsylvania College of Technology Stratford University	3 3 6 TBD 18
	Culinary Arts/Baking and Pastry			
	Food Service and Hospitality Management	Restaurant Association of Maryland • ServSafe©- Food manager	Paul Smith's College	6
	Cosmetology	Maryland Board of Cosmetology Exam/Certification: • Cosmetologist License • 1500 clinical hours		
	Textiles and Fashion Careers	Garment Studio Construction©-college level fashion curriculum	Stevenson University	3
Environmental, Agriculture and Natural Resources	Agricultural Sciences (CASE)- Option 1: Animal Option 2: Plant	Curriculum for Agricultural Sciences Education (CASE) UMD-Institute of Applied Agriculture (Portfolio Review)	Community College of Baltimore Co. Rutgers University of Maryland	2-3 4.5 3
	Option 3÷ Natural Resources	Curriculum for Agricultural Sciences Education (CASE)	Allegany College Rutgers	2+ 3
Health and Biosciences	Academy of Health Professions: Nursing	Maryland State Board of Nursing Certifications: • Certified Nursing Assistant (CNA), • Geriatric Nursing Assistant (GNA), • Medical Assistant Certification (CCMA), • Certified Pharmacy Tech (CPhT) CPR Certification	Carroll Community College Community College of Baltimore Co. Frederick Community College Pennsylvania College of Technology Stevenson University	TBD 3 10 TBD 4
	Academy of Health Professions: Physical Rehabilitation	Partners with local sports medicine and physical rehabilitation organizations	Carroll Community College	3

	Biomedical Sciences-Project Lead the Way©	Certified by Project Lead the Way© Credit earned on a transcript*	Frederick Community College Indiana University of PA Missouri University of Science and Tech Stevenson University	14 12 12* 8
HUMAN RESOURCES SERVICES	Early Childhood Education	Praxis: Core or Praxis: ParaPro 99 hour child care certificate Partner with local childcare centers and elementary schools to provide qualified students with internships in their senior year	Carroll Community College Frederick Community College Pennsylvania College of Technology Stevenson University	6 6 TBD 6
	Homeland Security and Emergency Preparedness: Criminal Justice	College credit earned on a transcript for CRIM 101 through Carroll Community College*	Carroll Community College Frederick Community College University of Maryland, University College	3* 3 3
	Homeland Security and Emergency Preparedness: Geographical Information Systems Technology	Geographic Information Systems Spatial Technology and Remote Sensing (S.T.A.R.S.) Certification College credit earned on a transcript from Harrisburg U.*	Community College of Baltimore Co. Frederick Community College Harrisburg University	3 3 3* pending
	Teacher Academy of MD	Praxis: Core or Praxis: ParaPro Qualifying students participate in CCPS middle school based internships	Bowie State, Carroll Community College, Community College of Baltimore County, Coppin State, Frederick Community College, Frostburg, Hood College, Morgan State, Salisbury, St. Mary's, Stevenson, Towson	3 (for each)

INFORMATION TECHNOLOGY	Cisco Networking Academy©: Cybersecurity
	
	Cyber Operations
		Cisco© Systems:
		• Cisco Certified Network Associate (CCNA)
		  ○ Routing and Switching
		  ○ Network Security
		• Cisco Certified Network Associate (CCNA)
		  ○ Cyber Operations
		• LPI Linux Essentials
		• Certified Associate in Python Programming (PCAP)
			Carroll Community College
			Community College of Baltimore Co.
			Frederick Community College
			Pennsylvania College of Technology
				TBD
				16
				18
				TBD

	Computer Science	College Board: AP Computer Science A; AP Computer Science Principles	Carroll Community College	pending
MANUFACTURING, ENGINEERING AND TECHNOLOGY	Digital Fabrication and Manufacturing	College credit earned on a transcript for DFAB 101*	Carroll Community College	pending*
	Drafting	AutoCAD© Certification Test	Community College of Baltimore Co. Frederick Community College Pennsylvania College of Technology	6 6 TBD
	Engineering - Project Lead the Way©	Certified by Project Lead the Way© Credit earned on a transcript*	Community College of Baltimore Co. Frederick Community College Pennsylvania College of Technology Rochester Institute of Technology* University of MD, Baltimore Co. University of MD, Eastern Shore	6 3 TBD 12 3 6
	Applied Mechanical Engineering	National Institute of Metal Working Skills (NIMS©): • Measurement, Materials, and Safety, Job Planning, • Benchwork and Layout; other certifications, optional for qualified students	Community College of Baltimore County Pennsylvania College of Technology	17 TBD
	Welding Technologies	American Welding Society (AWS) certification National Registry (National Center for Construction Education and Research (NCCER)) • NCCT© Academic Core v2 • OSHA-10 Certified	Fredrick Community College Pennsylvania College of Technology	13 TBD

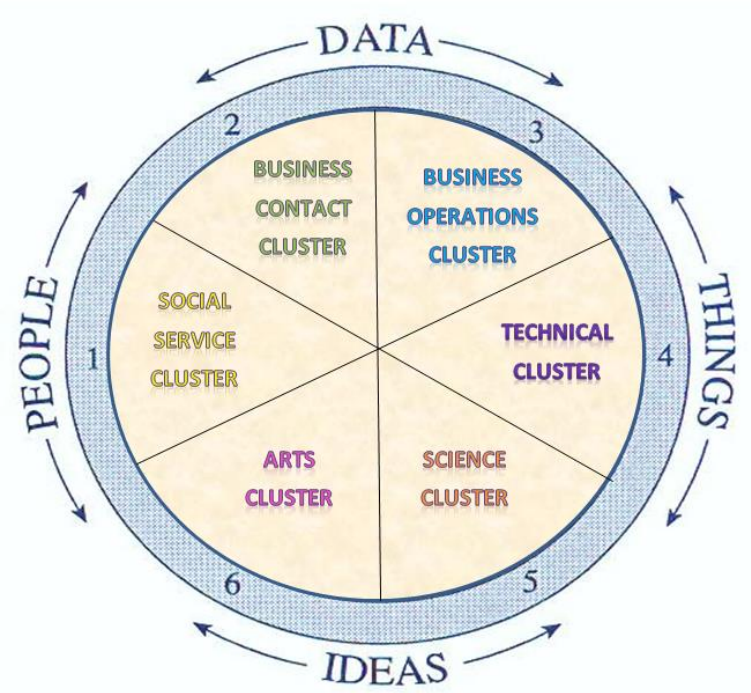
TRANSPORTATION TECHNOLOGIES	Automobile Service Technology	The National Institute for Automobile Service Excellence (ASE©) • Brakes • Maintenance and Light Repair • Electrical/ Elec. Systems • Engine Performance • Suspension/Steering	Community College of Baltimore Co. Montgomery Community College Pennsylvania College of Technology Universal Technical Institute University of Northwestern Ohio	5 7 Up to 15 Up to 4 Up to 12
	Collision Repair Technology	The National Institute for Automobile Service Excellence (ASE©) • Non-Structural Analysis and Damage Repair • Painting and Refinishing • Structural Analysis and Damage Repair	Pennsylvania College of Technology	Up to 18
	Heavy Equipment and Truck Technology	The National Institute for Automobile Service Excellence (ASE©) • Brakes • Diesel Engines and Light Repair • Electrical/ Electronic. Systems	Pennsylvania College of Technology Universal Technical Institute University of Northwestern Ohio	Up to 6 Up to 4 Up to 12

Mission of Career and Technical Education in Carroll County Public Schools

The mission for the system of Career and Technical Education for Carroll County is to prepare learners to begin careers and pursue lifelong learning through a process of career development, academic instruction, specific technical skills development, and work experience in order to meet the workforce preparation and economic development needs of Carroll County the region, and the global economy.

Carroll County Public Schools

Career Pathways



2022-2023

Links below

- ARTS CLUSTER
- BUSINESS CONTACT CLUSTER
- BUSINESS OPERATIONS CLUSTER
- SCIENCE CLUSTER
- SOCIAL SERVICES CLUSTER
- TECHNICAL CLUSTER

Arts Cluster

What type of work is involved in the *Arts* cluster?

- Individualized expression of creative or musical talent.
- Design, performing arts and fine arts.
- The application of artistic skills in the fields of photography, graphic arts, and design

What are the *Arts* Pathways?

- Applied Arts – Visual
- Creative and Performing Arts
- Applied Arts – Written and Spoken

What should you think about when considering a career in the *Arts* cluster?

Do You . . . .

- like art, music, drama, and other creative interests?
- like to display your imagination through artistic, literary, musical or dramatic abilities?
- have a need for individualistic expression?
- value esthetics and artistic qualities?
- prefer free, unstructured situations or unconventional ideas?
- enjoy being creative, flexible, innovative or imaginative?
- prefer creative and expressive interaction with people?
- enjoy being an original thinker?
- value creative communication and expression of ideas, emotions or sentiments?

If you answered YES to most of these questions, a career in the *Arts* cluster may be for you!

For more details, read on…

Back to Career Clusters

COMPLETERS

COMPLETER: Interactive Media Production — CREDITS: 4

Careers: Multimedia Artists and Animator, Video Game Designer, Audio –Visual Equipment Technician, Information, Technology Project Managers, Film and Video Editors, Advertising and Promotions Manager, Search Marketing Strategist, Producer, Art Director

Grade →	9	10	11	12
Completer Program Requirements (4 minimum credits)		Honors Principles of Art, Media and Communication (1)	Honors Interactive Multimedia Production (1)	Advance Interactive Multimedia Production (2) or Advanced Simulation and Gaming (2)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Studio 2D Design Art (1), AP Computer Science Principles (1)** Honors Digital Design in Photography, Honors Digital Media and Design (.5-1), Honors Art II (.5-1), Journalistic Writing (.5), Psychology I or Honors Psychology I (1), Principles of Business Administration and Management (1), Drama I, II, II (.5-1.5), Honors Marketing (1), Public Speaking (.5), Honors Career Related Internship (.5-1)			
8 credits possible per year				
Value Added: From: Program:	Pending			

COMPLETER: Print Production — CREDITS: 4

Careers: Print Production Specialist, Print Production Manager, Graphic Designer, Photojournalist, Print Binding and Finishing Worker, Art Director, Desktop Publisher, Advertising and Promotions Manager

Grade →	**9**	**10**	**11**	**12**	
Completer Program Requirements (4 minimum credits) (#choose 1 credit from these)			Honors Principles of Art, Media and Communication (1) or Honors Digital Media and Design (1)	Print Production (3)	
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Studio Art (1), AP Studio Art: 2 D Art (1)** Honors Art II (.5-1), Journalistic Writing (.5), Psychology I or Honors Psychology I (1), Principles of Business Administration and Management (1), Drama I, II, III (.5-1.5), Honors Marketing (1), Newspaper Production (.5-1), Public Speaking (.5), Yearbook Production (.5-1), Honors Career Related Internship (.5-1), Business Communications and Keyboarding (1)				
8 credits possible per year					
Value Added:	3 Articulated Credits	4 Articulated Credits	4 Articulated Credits	4 Articulated Credits	4 Articulated Credits
From:	Carroll Community College	Art Institute of Washington	Montgomery College	Bridgemont Community and Technical College	Frederick Community College
Program:	Computer Graphics	Advertising or Graphic Design	Desktop Publishing	Digital Design and Print Communications	Computer Graphics
End of Program Test:	Graphic Communications and Digital File Preparation/Digital File Output (Print Ed Certification)				
Industry:	Graphic Arts Education and Research Foundation (GAREF) - PrintED				
Taken:	During Print Production				

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COMPLETER: Textiles and Fashion Careers CREDITS: 6

Careers: Fashion Designer, Costume Designer, Interior and Spatial Designer, Wholesale and Retail Buyer, Fashion Merchandiser, Fabric and Apparel Patternmaker, Merchandise Displayer and Window Trimmer, Tailor, Dressmaker, and Custom Sewer, Upholsterer

Grade →	9	10	11	12
Completer Program Requirements			Textiles and Fashion Careers I (3)	Textiles and Fashion Careers II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Studio Art (1), AP World Language and Culture (1)** Principles of Fashion and Interior Design (.5-1), Principles of Business Administration and Management (1), Honors Economics (.5), Honors Digital Media and Design (.5), Issues in American Society (.5), Honors Marketing (1), Honors Art II (.5-1), Psychology I or Honors Psychology I (1), Public Speaking (.5), Honors Career Related Internship (.5-1), Honors Principals of Art, Media and Communication (1)			
Value Added: **From:** **Program:**	3 credits Stevenson University Fashion Design			

COMPLETER: Video Production CREDITS: 4

Careers: Film and Video Editor, Audio and Video Equipment Technician, Camera Operator for Television, Video and Motion Picture, Broadcast and Sound Engineer, Producer, Director, Art Director

Grade →	9	10	11	12
Completer Program Requirements (4 minimum credits) (# choose 1 credit from these)			Honors Principles of Art, Media and Communication (1) Honors Digital Media and Design (1)	Video Production (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Studio Art (1)** Honors Art II (.5-1), Journalistic Writing (.5), Psychology I or Honors Psychology I (1), Principles of Business Administration and Management (1), Drama I, II, III (.5-1.5),, Honors Marketing (1), Public Speaking (.5), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	3 Articulated Credits Stevenson University Film and Moving Image			

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MAJORS

CAREER MAJOR: Dance

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits with 2 credits in Dance)		Dance I (.5) Dance II (.5/1) Personal Fitness (.5) Music History and Literature (.5) Honors Child and Adolescent Development (1)	Dance III (.5/1) Barbell and Cross training (.5) Psych. I or Honors Psychology 1 (1) Principles of Business Administration and Management (1)	Applied Dance (.5/1) Honors Humanities (.5) Issues in American Society (.5) Public Speaking (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Drama I (.5), AP Psychology (1), Exploring Music (.5), Music Elective (.5-1), American Sign Language (.5), Honors Marketing (1), Movement for Athletes (.5), Technical Theater I (.5), Honors Career Related Internship (.5-1), Weight Training (.5). French I (1)			

CAREER MAJOR: Drama

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *required		Technical Theatre I (.5) Drama II (.5) * Creative Writing (.5) Public Speaking (.5) Principles of Fashion and Interior Design (.5) Honors Film and Literature (.5)	Speech and Debate (5) Drama III (.5) * Psych. I or Honors Psychology I (1) Honors Marketing (1) Honors Theater Production and Analysis (1)	Ancient and Medieval History (.5) Honors Humanities (.5) Shakespeare (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Honors Principles of Art, Media and communication (1), Drama I (.5), AP Psychology (1), Applied Dance (.5-1), Dance I (.5-1), Music Elective (.5-1), Honors Career Related Internship (.5-1), Principles of Business Administration and Management (1)			

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CAREER MAJOR: Graphic Communications CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *required		Honors Principles of Art, Media and Communication (1)* Principles of Business Administration and Management (1)	Honors Art II (.5-1) Journalistic Writing (.5) Honors Marketing (1),	Honors Digital Design in Photography (1) Honors Digital Media and Design (1) Yearbook Production (1) Psychology I or Honors Psychology (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	AP Psychology (1), Business Communications and Keyboarding (1), Honors Studio Art (.5-1), Newspaper Production (.5-1), Sociology (.5), Honors Career Related Internship (.5-1) Applied Art (.5-1)			
8 credits possible per year				
Related Completers:	Print Production, Video Production, Drafting, Interactive Media Production			

CAREER MAJOR: Humanities and Classical Studies CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Mystery and Detective (.5) Mythology (.5) Honors Twentieth Century Novel (.5)	AP Language and Composition (1) Pop Culture and Composition (.5) Honors Latin III (1) Music History and Literature (.5-1)	Ancient and Medieval History (.5) AP Literature and Composition (1) Honors Humanities (.5) AP Latin (1) Shakespeare (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Latin I (1), Business Communications and Keyboarding (1), Art I (.5-1), Drama I, II, III (.5-1.5), Honors Career Related Internship (.5-1)			
8 credits possible per year				

CAREER MAJOR: Industrial and Product Design CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) Required *		Honors Principles of Art. Media and Communication (1) Principles of Fashion and Interior Design (.5-1)	Advanced Design Applications (1)* Technological Design (1) Technological Issues and Impacts (1) Honors Marketing (1)	Honors Art II (.5-1) Honors Digital Design in Photography (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Business Communications and Keyboarding (1), AP Physics I (1), Science Research I or Honors Science Research I (1), Honors Career Related Internship (.5-1)			
8 credits possible per year				
Related Completers:	Drafting, Engineering, Applied Mechanical Engineering, Interactive Medial Production			

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CAREER MAJOR: Music

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Instrumental OR Choral Elective (1-4) Music History and Literature (.5-1)	Honors Marketing (1) or Graphics Communications (1) Chorus, Honors Chorus (.5-1) Band (1) Ensemble (.5-1) Stage Band, Honors Jazz Ensemble (1)	Honors Music History and Literature (1) Honors Music Theory, AP Music Theory (.5-1) Vocal Ensemble, Hon. Vocal Ensemble (.5-1) Orchestra, Honors Orchestra (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Band Front (.5), Dance I (.5-1), Drama I, II, III (.5 ea.), Exploring Music (1), Shakespeare (.5), Electronic Music (.5-1), Dance I (.5-1), Dance II (.5-1), Applied Dance (.5-1), Honors Career Related Internship (.5-1), Public Speaking (.5), Principles of Fashion and Interior Design (.5-1), Honors Principles of Art, Media and Communication (1)			
8 credits possible per year				

CAREER MAJOR: Visual Fine Arts

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Honors Art II (.5-1) Honors Principles of Art, Media and Communication (1) Principles of Fashion and Interior Design (.5-1)	Principles of Business Administration and Management (1) Honors Digital Media and Design (1) Psychology I or Honors Psychology I (1) Honors Digital Design in Photography (1)	Applied Art (.5-1) Honors Studio Art, AP Studio Art (.5-1) Honors Humanities (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	AP Psychology (1), Flower Design (.5-1), Honors Ceramics (.5-1), Honors Drawing I (.5), Honors Mixed Media (.5-1), Honors Painting (.5), Advanced Design Applications (1), Honors Career Related Internship (.5-1)			
8 credits possible per year				
Related Completers:	Print Production, Textiles and Fashions, Video Production, Interactive Media Production			

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Business Contact Cluster

What type of work is involved in the *Business Contact* cluster?

- Initiating and carrying out sales campaigns.
- Using mathematical concepts to design financial and economic systems.
- Dealing with all kinds of people from civic leaders to the general public.

What are *Business Contact* Pathways?

- Honors Marketing and Sales
- Management and Planning

What should you think about when considering a career in the *Business Contact* cluster?

Do You . . . .

- like working with facts, numbers, and data?
- like contact with all kinds of people?
- speak and write clearly and accurately?
- work independently?
- like making decisions?
- like initiating and carrying out projects?
- care about people, their needs and welfare?

If you answered YES to most of these questions, a career in the *Business Contact* cluster may be for you!

For more details, read on…

Back to Career Clusters

COMPLETERS

COMPLETER: Marketing

CREDITS: 4

Careers: Wholesale and Retail Buyer, Marketing Manager, Energy Broker, Public Relations Specialist, Business Intelligence Analyst, Advertising and Promotions Manager, Commercial and Industrial Designer, Insurance Sales Agent, Sales Representative, Purchasing Agent

Grade →	9	10	11	12
Completer Program Requirements		Principles of Business Administration and Management (1)	Honors Accounting I (1) Honors Marketing (1)	Advanced Marketing (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Statistics (1)** Honors Principles of Art, Media and Communication (1), Business Communications and Keyboarding (1), Accounting II (1), Business Law (1), AP Human Geography (1), Issues in American Society (.5), Political Science (.5), Public Speaking (.5), Sociology (.5), World Geography (.5), Technological Issues and Impacts (1), Honors Career Related Internship (.5-1), Speech and Debate (.5)			
Value Added: **From:** **Program:**	9 credits Community College of Baltimore County, Catonsville Business Management – Honors Marketing			
End of Program Test: **Industry:** **Taken:**	Principles of Honors Marketing College Board – CLEP End of Advanced Marketing			

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MAJORS

CAREER MAJOR: Advertising

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) Required *, plus at least 1 listed business course		Honors Principles of Art, Media and Communication (1)* Principles of Business Administration and Management (1)	Honors Marketing (1) Honors Digital Media and Design (1) Public Speaking (.5) Creative Writing (.5)	Psychology I or Honors Psychology I (1) Sociology (.5) Honors Economics (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Honors Art II (.5), AP Language and Composition (1), Business Law (1), Journalistic Writing (.5), Newspaper Production (.5-1), Managing Personal Finances Using Excel (1), Honors Career Related Internship (.5-1)			
Related Completers:	Marketing, Print Production, Video Production, Interactive Media Production			

CAREER MAJOR: Hospitality and Tourism

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Principles of Business Administration and Management (1) Honors Humanities (.5)	Honors World Language III (1) Advanced Foods (.5) Honors Marketing (1) Honors Economics (.5) AP Human Geography (1)	World Geography (.5) Sociology (.5) Psychology I or Honors Psychology I (1) Public Speaking (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Honors Accounting I (1), Honors Marketing (1), AP Psychology (1), Creative Writing (.5), Honors IV or AP World Language (1), Managing Personal Finances Using Excel (1), Honors Career Related Internship (.5-1), AP Macroeconomics (1), AP Human Geography (1), Pop Culture and Composition (.5), AP Environmental Science (1), Honors Principles of Art, Media and Communication (1), Drama (.5)			
Related Completers:	Culinary Arts, Business Administration and Management. Food Service and Hospitality Management (ProStart)			

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CAREER MAJOR: International Business **CREDITS: 4**

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *required		Public Speaking (.5) Principles of Business Administration and Management (1)* Managing Personal Finance Using Excel (1)	Honors World Language III (1) Honors Accounting I (1) Business Law (1) Sociology (.5) Psychology I or Honors Psychology I (1) Honors Economics (.5)* Honors Law Citizenship, and Society (.5)	Honors IV or AP World Language (1) World Geography (.5) Honors Marketing (1) AP Macroeconomics (1) AP Language and Composition (1) AP Literature and Composition (1) Honors International Studies (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Business Communications and Keyboarding (1), Accounting II (1), AP Psychology (1), AP Statistics (1), Issues in American Society (.5), AP Human Geography (1), Honors Career Related Internship (.5-1)			

CAREER MAJOR: Mass Communications **CREDITS: 4**

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Drama I (.5) Honors Film and Literature (.5) Honors Principles of Art, Media and Communication (1)	Journalistic Writing (.5) Drama II (.5) Public Speaking (.5) Creative Writing (.5) Honors World Language III (1) Newspaper Production (.5) Honors Marketing (1)	Psychology I or Honors Psychology I (1) Business Law (1) Honors IV or AP World Language (1) AP Language and Composition (1) AP Literature and Composition (1) Political Science (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Popular Culture and Composition (.5), Honors Film and Literature (.5), Business Communications and Keyboarding (1), AP Psychology (1), Principles of Business Administration and Management (1), Economics (.5), AP Human Geography (1), Music Elective (.5-1), Sociology (.5), Speech and Debate (.5), Honors Career Related Internship (.5-1), Honors Digital Design in Photography (.5-1)			
Related Completers:	Print Production, Video Production			

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CAREER MAJOR: Public Relations

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) Required *		Honors Principles of Art, Media and Communication (1) Business Communications and Keyboarding (1) Principles of Business Administration and Management (1)	Public Speaking (.5)* Honors Marketing (1) Business Law (1) Honors World Language III (1) Psychology I (1) or Honors Psychology (1)* Journalistic Writing (.5)	Honors Economics (.5) Sociology (.5) Creative Writing (.5) Honors IV or AP World Language (1) AP Language and Composition (1) AP Literature and Composition (1) Popular Culture Language and Composition (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Honors Digital Media and Design (1), AP Statistics (1), AP Psychology (1), AP Human Geography (1), Managing Personal Finances Using Excel (1), Honors Career Related Internship (.5-1), Honors Art II (.5-1). AP Macroeconomics (1)			
8 credits possible per year				
Related Completers:	Marketing, Print Production			

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What type of work is involved in the *Business Operations* cluster?

- Recording, posting, and filing of business records.
- Organization, accuracy, neatness, and attention to detail.
- Office work and contact with customers.
- Application of math and business concepts.

What are *Business Operations* Pathways?

- Records and Communication
- Financial Transactions
- Storage and Dispatching
- Business Machine and Computer Operation

What should you think about when considering a career in the *Business Operations* cluster?

Do You . . .

- prefer well-ordered environments?
- like systematic verbal and numerical activities?
- enjoy working with tools, machines, and equipment?
- like a predictable work setting?
- prefer to work along?
- perform work tasks to meet standards of accuracy?
- enjoy using math skills?
- like well-defined tasks?

If you answered YES to most of these questions, a career in *Business Operations* cluster may be for you!

For more details, read on…

Back to Career Clusters

COMPLETERS

COMPLETER: Accounting CREDITS: 4

Careers: Accountants and Auditors, Financial Analyst, Credit Counselor, Tax Preparer, Bill and Account Collector, Bookkeeper, Budget Analyst, Loan Officer, Fraud Examiner and Analyst

Grade →	9	10	11	12
Completer Program Requirements		Principles of Business Administration and Management (1)	Honors Accounting I (1) Accounting II (1)	Honors Business Education Capstone (1) or Honors Career Related Internship or Dual Enrollment – (see your counselor) or AP Macroeconomics
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Business Communications and Keyboarding (1), AP Macroeconomics (1), Business Law (1), Honors Economics (.5), Honors Calculus (1), AP Calculus AB (1), AP Calculus BC (1)			
Value Added: From" Program:	3 Transcripted Credits Carroll Community College Accounting		3 Articulated Credits Frederick Community College Accounting	
End of Program Test: Industry: Taken:	Accounting 101 Final Exam Carroll Community College At the end of Accounting II			

COMPLETER: Business Administration and Management CREDITS: 4

Careers: General Operations Manager, Database Administrator, Administrative Services Manager, Business Operations Specialist, Business Teacher, Business Continuity Planner, Human Resources Specialist, Credit Counselor, Bill and Account Collector

Grade →	9	10	11	12
Completer Program Requirements		Principles of Business Administration and Management (1)	Honors Accounting I (1) Advanced Business Management (1)	Honors Business Education Capstone (1) Honors Career Related Internship or Dual Enrollment (see your counselor) or AP Macroeconomics
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Business Communications and Keyboarding (1), AP Statistics (1), Accounting II (1), AP Psychology (1), Business Law (1), Honors Calculus, AP Calculus AB, AP Calculus BC (1), Issues in American Society (.5), Psychology I or Honors Psychology I (1), Sociology (.5)			
Value Added: From: Program:	3 Articulated Credits Community College of Baltimore County Business Management		3 Articulated Credits Frederick Community College Business	
End of Program Test: Industry: Taken:	CLEP Principles of Management Exam College Board - CLEP At the end of Advanced Business Management			

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COMPLETER: Computer Science

CREDITS: 3

Careers: Computer and Information Research Scientist, Computer Programmer, Computer Systems Analysts, Software Developer, Computer Systems Engineers/Architects, Computer Science Teachers, Database Administrators, Bioinformatics Scientists

Grade →	9	10	11	12
Completer Program Requirements		AP Computer Science Principles (1)	AP Computer Science A (1) Advanced Topics in Computer Science (1)	Computer Science Capstone (1) or Honors Career Related Internship (1) or Dual Enrollment (See your counselor) (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Statistics (1)** Business Communications and Keyboarding (1), Managing Personal Finances Using Excel (1), Math Elective Beyond Algebra II (.5-1), Honors Accounting I (1), Accounting II (1), Business Law (1), Principles of Business Administration and Management (1)			
Value Added: From: Program:	Up to 9 credits through elective Advanced Placement Exams and/or dual enrollment credit			

COMPLETER: Financial Services - National Academy Foundation Endorsement

CREDITS: 5-7

Careers: Financial Advisor, Financial Manager, Treasurer and Controller, Budget Analyst, Real Estate Broker or Agent, Brokerage Clerks, Teller, Insurance Agent, General and Operations Manager

Grade →	9	10	11	12
Completer Program Requirements			Managing Personal Finances Using Excel (1) (meets Fin Lit requirement- recommended) Honors Accounting I (1) Honors Finance Academy I (1) Accounting II (1) (with AOF cohort)	Honors Finance Academy II (1) Honors Academy of Finance Internship/ Honors Career Related Internship (1-2)
Additional Requirements for NAF Endorsement (7 credits)	Freshman Seminar (.5) (Strongly encouraged by NAF)			Dual Enrollment in finance course (.5) Additional Honors Career Related Internship- paid (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections:** AP Macroeconomics (1) Business Communications and Keyboarding (1), Principles of Business Administration and Management (1), Business Law (1), Honors Economics (.5), Office Systems Management (1)			
Value Added: From: Program:	3 Transcripted Credits via Financial Services completer; 6 total Transcripted Credits via Academy of Finance Carroll Community College Accounting			

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MAJORS

CAREER MAJOR: Actuarial Science

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *requires at least 1 credit of a statistics course		Managing Personal Finances Using Excel (1)	Probability and Statistics (.5/1)* or Honors Marketing (1) Honors Accounting I (1) Honors Economics (.5)	Business Law (1) AP Statistics (1)* Math Elective beyond Algebra II (.5-1) AP Macroeconomics (1) AP Human Geography (1) Integrated Algebra and Statistics (1)*
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Principles of Business Administration and Management (1), Accounting II (1), Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (1), Psychology I or Honors Psychology I (1), Sociology (.5), Honors Career Related Internship (.5-1)			
Related Completers:	Accounting			

CAREER MAJOR: Human Resources Management

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *required		Public Speaking (.5) Principles of Business Administration and Management (1)*	Honors Marketing (1) Honors Accounting I (1) Psychology I or Honors Psychology I (1)* Business Law (1)	Issues in American Society (.5) AP Statistics (1) Sociology (.5) AP Psychology (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Business Communications and Keyboarding (1), Honors Economics (.5), Managing Personal Finances Using Excel (1), Honors Career Related Internship (.5-1), AP Human Geography (1), Honors Law, Citizenship, and Society (.5)			

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What type of work is involved in the *Science* cluster?

- Planning and conducting research.
- Collecting and applying systematic accumulation of knowledge in related branches of mathematics, life, physical and social science.
- Observing and classifying facts in laboratory research.
- Applying information in the fields of mathematics, medicine, life, physical and social sciences.
- Studying the environment, world cultures, and people.

What are *Science* Pathways?

- Engineering and Other Applied Technologies
- Medical Specialties and Technologies
- Natural Sciences and Mathematics
- Social Sciences

What should you think about when considering a career in the *Science* cluster?

Do You . . .

- have an aptitude in science, math, or social studies?
- have a curiosity about how things work?
- have the ability to gather and analyze data to solve problems?
- have an aptitude in working with computers?
- have a desire to help people resolve medical and health related concerns?
- have a concern for physical and mental fitness?
- have an interest in politics, history, economics, or geography?

If you answered YES to most of these questions, a career in the *Science* cluster may before you!

For more details, read on…

Back to Career Clusters

COMPLETERS

COMPLETER: Academy of Health Professions

CREDITS: 4 to 5

Careers: Nursing Assistant, Registered Nurse, Clinical Nurse Specialist, Physical Therapist, Physical Therapist Assistant, Pharmacy Technician, Pharmacist, Medical Assistant, Nurse Practitioner, Physicians' Assistant

Grade →	9	10	11	12
Option 1 **Certified Nursing Assistant (C.N.A.)** **Completer Program Requirements** **4 credits**				Foundations of Medicine and Health Science (1) Structure and Functions of the Human Body (1) Honors CNA: Theory and Clinical Experience (1) Honors Academy of Health Professions Seminar and Internship (1-3) or Dual Enrollment (1)
Option 2 **Physical Rehabilitation** • **Physical Therapy** • **Occupational Therapy** • **Speech Pathology** • **Athletic Training Sports Medicine** **Completer Program Requirements** **5 credits**				Foundations of Medicine and Health Science (1) Structure and Functions of the Human Body (1) Honors Physical Rehabilitation: Theory and Clinical Experience (1) Honors Academy of Health Professions Seminar and Internship (1-3) or Dual Enrollment (1)
Option 3 **Medical Specialty (at Carroll County Career and Tech Center)** • **Certified Clinical Medical Assistant** **Completer Program Requirements** **5 credits**				Foundations of Medicine and Health Science (1) Structure and Functions of the Human Body (1) Honors CNA: Theory and Clinical Experience (1) Specialized Medical Option* (1) Honors Academy of Health Professions Seminar and Internship (1-3)
Option 4 **Medical Specialty (at Carroll Community College – fees apply)** • **Pharmacy Technician** • **Dental Assistant and Oral Radiography** **Completer Program Requirements** **4 credits**				Foundations of Medicine and Health Science (1) Structure and Functions of the Human Body (1) Specialized Medical Option* (1) Honors Academy of Health Professions Seminar and Internship (1-3) or Dual Enrollment-Allied Health prerequisite (Pharmacy Tech. only) (1)

Options 5-6 continued on next page

Grade →	9	10	11	12
Option 5 **Allied Health Internship** **Completer Program Requirements** **4 credits**				Foundations of Medicine and Health Science (1) Structure and Functions of the Human Body (1) Honors Academy of Health Professions Seminar and Internship (2)
Option 6 **Allied Health Dual Enrollment** **Completer Program Requirements** **4 credits**				Foundations of Medicine and Health Science (1) Structure and Functions of the Human Body (1) Honors Academy of Health Professions Seminar and Internship (1) Approved Allied Health Prerequisite college course* (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Biology (1), AP Chemistry (1)** Technological Issues and Impacts (1), Business Communications and Keyboarding (1), Health II (.5), Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1), Math Elective beyond Alg. II (.5-1), (1), AP Psychology (1), Psychology I or Honors Psychology I (1), Public Speaking (.5), Sociology (.5), Honors Health III (.5)			
Value Added:	Nursing Assistant students have the opportunity to earn the Certified Nursing Assistant endorsement. Physical Rehabilitation students have the opportunity to earn the Certified Personal Trainer endorsement.			
End of Program Test: **Industry:** **Taken:**	Certified Nursing Assistant Exam / Geriatric Nursing Assistant Exam -or- Determined by coursework Maryland Board of Nursing -or- Carroll Community College During Honors CNA: Theory and Clinical Experience -or- During Specialized Medical Option			
*Offered at Carroll Community College				

COMPLETER: Biomedical Sciences – Project Lead the Way Endorsement CREDITS: 4

Careers: Biomedical Engineer, Nanosystems Engineer, Biologist, Family and General Practitioner, Biochemist, Biophysicist, Forensic Science Technician, Geneticist, Bioinformatics Scientist

Grade →	9	10	11	12
Completer Program Requirements			Principles of Biomedical Sciences (1) Human Body Systems (1)	Medical Interventions (1) Biomedical Innovation (1)
Program Specific Requirements	A college preparatory math and science course is required each year of high school.			
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Biology (1), AP Chemistry (1), AP Human Geography (1), AP Statistics (1)** Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1), Science Research I or Honors Science Research I (1), Technological Issues and Impacts (1), Health II (.5), Issues in American Society (.5), Probability and Statistics (1)			
Value Added: **From:**	4 Transcripted Credits Stevenson University			
End of Program Test: **Industry:** **Taken:**	To Be Determined Project Lead the Way / Stevenson University To Be Determined			

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COMPLETER: CASE Agricultural Science – Animal CREDITS: 4

Careers: Agricultural Engineer, Agricultural Inspector, Natural Science Managers, Farm/Ranch Manager, Agricultural and Food Science Technician, Precision Agriculture Technician

Grade →	9	10	11	12
Completer Program Requirements	Honors CASE Introduction to Agriculture, Food, and Natural Resources (1)	CASE Agricultural Science - Animal (1)	CASE Animal and Plant Biotechnology (1)	CASE Agriculture Business Research, and Development (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Environmental Science (1), AP Biology (1), AP Chemistry (1), AP Statistics (1), AP Environmental Science (1), AP Language and Composition (1), AP United States Government and Politics (1)** Honors World Language III (1), Science Research I or Honors Science Research I (1), Chemistry II (1) or Honors Chemistry II (1), World Geography (.5), Aquatic Environmental Science (.5), Terrestrial Environmental Science (.5), Technological Issues and Impacts (1), Issues in American Society (.5), Honors Career Related Internship (.5-1)			
8 credits possible per year				
Value Added:	3 Transcripted Credits	3 Articulated Credits		3 Articulated Credits
From:	University of Maryland	Rutgers		CCBC
Program:	Institute of Applied Agriculture (IAA)	Environmental and Biological Sciences		Veterinary Technology

COMPLETER: CASE Agricultural Science - Plant CREDITS: 4

Careers: Soil and Plant Scientist, Nursery Greenhouse Manager, Curator, Landscaper, Groundskeeper, Soil and Water Conservationist, Forrester

Grade →	9	10	11	12
Completer Program Requirements	Honors CASE Introduction to Agriculture, Food, and Natural Resources (1)	CASE Agricultural Science - Plant (1)	CASE Animal and Plant Biotechnology (1)	CASE Agriculture Business Research, and Development (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Environmental Science (1), AP Language and Composition (1), AP United States Government and Politics (1), AP Statistics (1), AP Environmental Science (1), AP Chemistry (1)** Honors World Language III (1), Science Research I or Honors Science Research I (1), Chemistry II (1) or Honors Chemistry II (1), World Geography (.5), Aquatic Environmental Science (.5), Terrestrial Environmental Science (.5), Technological Issues and Impacts (1), Issues in American Society (.5), Honors Career Related Internship (.5)			
8 credits possible per year				
Value Added:	3 Transcripted Credits	3 Articulated Credits		3 Articulated Credits
From:	University of Maryland	Rutgers		CCBC
Program:	Institute of Applied Agriculture (IAA)	Environmental and Biological Sciences		Horticulture

COMPLETER: CASE Natural Resources CREDITS: 4

Careers: Naturalist, Environmental Scientist, Land Manager, Environment Engineer, Forester, Conservationist, Park Ranger, National Park Service Worker, U.S. Forest Service worker, U.S. Fish and Wildlife Service Worker, Natural Resources Manager

Grade →	9	10	11	12
Completer Program Requirements	Honors CASE Introduction to Agriculture, Food, and Natural Resources (1)	Honors CASE Natural Resources and Ecology (1)	Honors CASE Environmental Science Issues (1)	CASE Agriculture Business Research, and Development (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Environmental Science (1), AP Biology (1), AP Biology (1), AP Statistics. (1)** Managing Personal Finances Using Excel (1), Math Elective Beyond Algebra II (.5-1), Chemistry II (1) or Honors Chemistry II (1), Technological Issues and Impacts (1), Principles of Business Administration and Management (1), Aquatic Environmental Science and Terrestrial Environmental Science (.5), Issues in American Society (.5), Science Research I or Honors Science Research I (1)			
8 credits possible per year				
Value Added:	2 Articulated Credits		3 Articulated Credits	
From:	Allegany College of Maryland		Rutgers	
Program:	Forest Technology		Environmental and Biological Sciences	

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MAJORS

CAREER MAJOR: Economics

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *required		Principles of Business Administration and Management (1) Managing Personal Finances Using Excel (1)	Honors Marketing (1) Honors Accounting I (1) Issues in American Society (.5) Sociology (.5) Honors Economics (.5)*	Business Law (1) AP Statistics (1) AP Macroeconomics (1)* AP Calculus AB AP Calculus BC
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Accounting II (1), Honors International Studies (.5), AP Human Geography (1), Honors Career Related Internship (.5-1)			
Related Completers:	Accounting, Academy of Finance			

CAREER MAJOR: Environmental Health

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Health II (.5) Issues in American Society (.5) Honors Introduction to Agriculture, Food, and Natural Resources (1)	Aquatic Environmental Science (.5) and Terrestrial Environmental Science (.5) Public Speaking (.5) Sociology (.5)	Chemistry II or Honors Chemistry II (1) Business Law (1) AP Environmental Science (1) Science Research I or Honors Science Research I (1) Honors Science Research II (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	AP Biology (1), AP Chemistry (1), AP Psychology (1), Environmental Conservation (1), Psychology I or Honors Psychology I (1), Science Research II, Technological Issues and Impacts (1), World Geography (.5), Honors Career Related Internship (.5-1), Human Anatomy and Physiology (1)			
Related Completers:	Academy of Health Professions, CASE Agriculture Science - Plant, CASE Natural Resources			

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CAREER MAJOR: Food and Nutrition Science — CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) *required		Issues in American Society (.5) Honors CASE Introduction to Agriculture, Food, and Natural Resources (1)	Advanced Foods (.5/1) * Chemistry II or Honors Chemistry II (1) Food and Nutrition Science (.5) Health II (.5)	AP Biology (1) Science Research I or Honors Science Research I (1) Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1) Honors Health III (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Introduction to Foods (.5-1), AP Chemistry (1), AP Statistics (1), Psychology I or Honors Psychology I (1), Sociology (.5), Honors Career Related Internship (.5-1), Conceptual Physics (1)			
8 credits possible per year				
Related Completers:	Culinary Arts, Food Service and Hospitality Management (ProStart)			

CAREER MAJOR: History — CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Ancient and Medieval History (.5) World Geography (.5) Honors Twentieth Century Novel (.5)	AP Language and Composition (1) American Revolution and the Civil War (.5) Issues in American Society (.5) Mythology (.5)	AP European History (1) Shakespeare (.5) Honors International Studies (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Honors Humanities (.5), Music History and Literature (.5-1), Sociology (.5), Honors Law, Citizenship, and Society (.5), AP Human Geography (1), Honors Career Related Internship (.5-1), Speech and Debate (.5)			
8 credits possible per year				

CAREER MAJOR: International Studies — CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Public Speaking (.5)	Honors World Language III (1) Sociology (.5) World Geography (.5) Honors International Studies (.5) Honors Economics (.5) Speech and Debate (.5)	Honors IV or AP World Language (1) AP Macroeconomics (1) Psychology I or Honors Psychology I (1) Political Science (.5) AP Human Geography (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Business Communications and Keyboarding (1), AP Statistics (1), AP European History (1), AP Language and Composition (1), AP Literature and Composition (1), AP Psychology (1), Issues in American Society (.5), Honors Marketing (1), Honors Career Related Internship (.5-1)			
8 credits possible per year				

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CAREER MAJOR: Life Sciences

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Honors CASE Introduction to Agriculture, Food, and Natural Resources (1) Chemistry II (1) or Honors Chemistry II (1)	Aquatic Environmental Science (.5) Terrestrial Environmental Science (.5) Chemistry II or Honors Chemistry II (1) Health II (.5) Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1) Environmental Conservation (1) AP Environmental Science (1)	AP Chemistry (1) Science Research I or Honors Science Research I (1) AP Biology (1) Math elective beyond Algebra II
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	AP Statistics (1), Honors Calculus (1), AP Calculus AB (1), Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (1), AP Physics I (1), Honors Career Related Internship (.5-1), Honors International Studies (.5)			
Related Completers:	Academy of Health Professions, CASE Natural Resources, Biomedical Sciences, Case Agriculture Science - Animal, Case Agriculture Science - Plant			

CAREER MAJOR: Mathematics

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)			AP Statistics (1) Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (1)	Honors Calculus (1) AP Calculus AB (1) AP Calculus BC (1) Science Research I or Honors Science Research I (1) AP Physics I (1) AP Physics C (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Honors Accounting 1 (1), Honors Principles of Art, Media and Communication (1), Chemistry II or Honors Chemistry II (1), Advanced Design Applications (1), Managing Personal Finance Using Excel (1), Honors Career Related Internship (.5)			
Related Completers:	Computer Science, PLTW Engineering, Accounting			

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CAREER MAJOR: Physical Science **CREDITS: 4**

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)			Chemistry II or Honors Chemistry II (1) AP Chemistry (1) AP Physics I (1)	Science Research I or Honors Science Research I (1) Math elective beyond Algebra II (.5-1) AP Physics C (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	AP Statistics (1), Honors Calculus (1), AP Calculus AB (1), AP Calculus BC (1), Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (1), World Geography (.5), Honors Career Related Internship (.5-1)			
8 credits possible per year				
Related Completers:	PLTW Engineering			

CAREER MAJOR: Social Science **CREDITS: 4**

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		World Geography (.5) Issues in American Society (.5) Honors International Studies (.5)	Psychology I or Honors Psychology I (1) Political Science (.5) Sociology (.5) Public Speaking (.5) Honors Economics (.5) Honors World Language III (1)	AP Human Geography (1) AP Psychology (1) AP Macroeconomics (1) Speech and Debate (.5) Honors Humanities (.5) Honors Law, Citizenship, and Society (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Business Communications and Keyboarding (1), History Elective (.5-1), Honors Child and Adolescent Development (1), Technological Issues and Impacts (1), Music History and Literature (.5-1) Peer Facilitating (.5), Popular Culture and Composition (.5), AP Human Geography (1), Honors Career Related Internship (.5-1)			
8 credits possible per year				
Related Completers	Homeland Security and Emergency Preparedness-Criminal Justice/Law Enforcement			

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What type of work is involved in the *Social Services* cluster?

- Includes positions of high responsibility in caring for the personal needs and welfare of others in fields of social service, health, and education.
- Involves providing services to persons and catering to the tastes, desires, and welfare of others in fields of personal service.

What are *Social Services* Pathways?

- General Health Care
- Education and Related Services
- Social and Government Services
- Personal/Customer Service

What should you think about when considering a career in the *Social Services* Cluster?

Do You . . . . .

- get along with a wide variety of people?
- enjoy sharing ideas with others?
- enjoy helping others learn new things or acquire information?
- enjoy reading about or studying how society works and the interactions of individuals or groups of people?
- enjoy providing service to other people?
- seeing to their comfort, or enhancing their appearance?

If you answered YES to most of these questions, a career in the *Social Services* cluster may be for you!

For more details, read on…

Back to Career Clusters

COMPLETERS

COMPLETER: Army Junior Reserve Officer Training Corps (JROTC) CREDITS: 3

Careers: While the JROTC program does not prepare students for a specific career field, the program provides a platform for students to explore a variety of career interests and prepares students for the educational and experiential requirements required for a broad spectrum of career fields.

Grade →	9	10	11	12
Completer Program Requirements (3 minimum credits)	Leadership Education and Training I (1)	Leadership Education and Training II (1)	Leadership Education and Training III (1)	Leadership Education and Training IV (1) (Optional)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖ **Recommended AP Connections: AP Human Geography (1), AP Psychology (1), AP Government (1)** Leadership Education and Training V (1), Leadership Education and Training VI (1), Leadership Education and Training VII (1), Leadership Education and Training VIII (1), Business Communications and Keyboarding (1), Honors World Language III (1), Peer Facilitating (.5), World Geography (.5), Internship (.5-1) Issues in American Society (.5), Public Speaking (.5), Sociology (.5), World Geography (.5), Political Science (.5), Psychology I or Honors Psychology I (1), Honors Economics (.5), Speech and Debate (.5),AP Macroeconomics (1), AP Statistics (1), Business Law (1), Honors Law, Citizenship, and Society (.5), Honors International Studies (.5)			
Value Added: From: Program:	Advanced standing		Advanced standing	
	Department of Defense		Department of Defense	
	Enlistment: Rank Advancement to E-3		1 year of credit in the Senior ROTC program	

COMPLETER: Cosmetology CREDITS: 9

Careers: Hairstylist, Salon Manager, Film and Theater Hair Specialist, Skincare Specialist, Hair Color Specialist, Fashion Show Stylist, Salon Sales Consultant, Makeup Artist

Grade →	9	10	11	12
Completer Program Requirements			Principles and Practices of Cosmetology (3)	Advanced Cosmetology Theory and Application (3) Mastery of Cosmetology (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Biology (1), AP Chemistry (1)** Principles of Business Administration and Management (1), Public Speaking (.5), Honors Human Anatomy and Physiology (1), Human Anatomy and Physiology (1)			
8 credits possible per year				
Value Added:	1,000-hour letter/eligibility to participate in supervised work-based experience in a salon setting			
End of Program Test: Industry: Taken:	State Board Cosmetology Exam Maryland State Board of Cosmetology At the end of Mastery of Cosmetology			

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COMPLETER: Culinary Arts CREDITS: 6

Careers: Restaurant Chef, Baking and Pastry Chef, Cook, Caterer, Restaurant Manager, Food Production Manager, Cake Decorator, Dietician

Grade →	9	10	11	12
Completer Program Requirements			Culinary Arts I - Culinary Basics (3)	Culinary Arts II - Professional Baking and Pastry (3) or Culinary Arts II - Professional Cooking (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Chemistry (1), AP World Language and Culture (1)** Advanced Foods (1), Science Elective (.5-1), Honors Accounting I (1), Accounting II (1), Business Law (1), Principles of Business Administration and Management (1), Business Communications and Keyboarding (1), Honors Economics (.5), Food and Nutrition Science (1), Health II (.5), Honors Health III (.5), Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1), Psychology I or Honors Psychology I (1), Sociology (.5), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	American Culinary Federation (ACF) Certification	Up to 18 Articulated Credits Stratford University Culinary Arts	3 Articulated Credits Anne Arundel CC Hotel, Culinary Arts and Tourism	6 Articulated Credits Frederick CC Culinary Arts and Hospitality
End of Program Test: **Industry:** **Taken:**	ACF – Culinary Arts, Cook Level 2 American Culinary Federation At the end of Culinary Arts II - Professional Cooking		ACF – Retail Commercial Baking American Culinary Federation At the end of Culinary Arts II - Baking and Pastry	

COMPLETER: Early Childhood Education CREDITS: 5

Careers: Preschool, Kindergarten or Elementary Teacher, Childcare Worker, Preschool and Childcare Center Education Administrator, Family and Child Social Worker, Camp Director, Speech Therapist, Behavioral Specialist

Grade →	9	10	11	12
Completer Program Requirements		Honors Child and Adolescent Development (1) Child Development Laboratory (1)	Advanced Laboratory - Child Development (1)	Honors Early Childhood Education Seminar and Internship (2)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Psychology (1), AP Statistics (1)** Business Communications and Keyboarding (1), Psychology I or Honors Psychology I (1), Sociology (.5), Art Elective (1), Principles of Business Administration and Management (1), Drama I, II, III (.5-1.5), Health II (.5), Music Elective (.5), Peer Facilitating (.5), Public Speaking (.5), American Sign Language (.5)			
Value Added: **From:** **Program:**	Receives required State certification hours	6 Articulated Credits Carroll Community College Early Childhood Education	3-6 Articulated Credits Stevenson University Elementary Education or Early Childhood	
End of Program Test: **Industry:** **Taken:**	Praxis Core or ParaPro Exam Educational Testing Service At the end of Honors Early Childhood Education Seminar and Internship			

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COMPLETER: Education – Teacher Academy of MD CREDITS: 4

Careers: Middle or High School Teacher, Special Education Teacher, Media Specialist, School Counselor, Instructional Assistant, Child Psychologist, Speech Therapist, School Administrator, Coach

Grade →	9	10	11	12
Completer Program Requirements		Honors Child and Adolescent Development (1)	Honors Teaching as a Profession (1) Foundations of Curriculum and Instruction (1)	Honors Education Academy Internship (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖ **Recommended AP Connections: AP Psychology (1), AP Literature and Language (1)** Students should focus elective choices in the content area they aspire to teach. Business Communications and Keyboarding (1), Psychology I or Honors Psychology I (1), Peer Facilitating (.5), Public Speaking (.5), World Language (.5), American Sign Language I (1) Content Specific Coursework (1)			
Value Added: **From:** **Other:**	Articulated Credits Bowie State, Carroll Community, Community College of Baltimore County, Coppin State, Frederick Community, Frostburg, Hood, Morgan State, Notre Dame, Salisbury, St, Mary's, Stevenson, Towson Scholarships and guaranteed contract with CCPS upon successful completion of education degree			
End of Program Test: **Industry:** **Taken:**	Praxis Core Exam or ParaPro Educational Testing Service Foundations of Curriculum and Instruction			

COMPLETER: Food Service and Hospitality Management (ProStart) CREDITS: 4

Careers: Server, Host/Hostess, Catering Coordinator, Line Cook, Station Chef, Prep Cook, Food and Beverage Manager, Restaurant Manager, Quality Assurance Specialist

Grade →	9	10	11	12
Completer Program Requirements		*Prerequisite: Introduction to Foods (1)*	Food Service Professional I (1)	Food Service Professional II (1) Honors ProStart Internship (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖ **Recommended AP Connections: AP Chemistry (1)** French I (1), French II (1), Science Elective (.5-1), Honors Accounting I (1), Accounting II (1), Business Law (1), Principles of Business Administration and Management (1), Business Communications and Keyboarding (1), Honors Economics (.5), Health II (.5), Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1), Psychology I or Honors Psychology I (1), Sociology (.5)			
Value Added: **From:** **Program:**	ProStart Affiliated Colleges	6-7 Articulated Credits Paul Smith's College Culinary Arts and Service Management		
End of Program Test: **Industry:** **Taken:**	ProStart and ServSafe Exams ProStart and ServSafe At the end of Food Service Professional I and II			

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COMPLETER: Homeland Security and Emergency Preparedness- Criminal Justice/Law Enforcement CREDITS: 4

Careers: Police Officer, Criminal Investigator, Lawyer, Forensic Science Technician, Probation Officer, Corrections Officer, Customs Agent, Court Reporter, TSA Screener, Juvenile Probation Counselor, Private Security

Grade →	9	10	11	12
Completer Program Requirements			Honors Foundations of Homeland Security and Emergency Preparedness (1) Honors Administration of Justice I (1)	Administration of Justice II (1) Homeland Security and Emergency Preparedness (1) Honors Career Related Internship/Capstone (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Biology (1), AP Psychology (1), AP United States Government and Politics (1)** Business Communications and Keyboarding (1), AP Language and Composition (1), Honors World Language III (1), Peer Facilitating (.5), Science Research I or Honors Science Research I (1), World Geography (.5), Honors Career Related Internship (.5-1) Issues in American Society (.5), Public Speaking (.5), Sociology (.5), World Geography (.5), Political Science (.5), Psychology I or Honors Psychology I (1), Honors Economics (.5), Speech and Debate (.5),AP Macroeconomics (1), AP Statistics (1), Business Law (1), AP Human Geography (1), Honors Law, Citizenship, and Society (.5), Honors International Studies (.5)			
Value Added:	3 Transcripted Credits	3 Articulated Credits	3 Articulated Credit	3 Articulated Credits
From:	Carroll Community College	Frederick Community College	University of Baltimore	University of Maryland University College
Program:	Criminal Justice	Homeland Security or Emergency Management		

COMPLETER: Homeland Security and Emergency Preparedness- Geographic Information Systems and Technology CREDITS: 4

Careers: GIS Technician, Cartographer, Geographer, CAD Designer, GIS Analyst, Remote Sensing Analyst, Conservationist, Health Geographer, Urban/Regional Planner, Surveyor

Grade →	9	10	11	12
Completer Program Requirements			Foundations of Homeland Security and Emergency Preparedness (1) S.T.A.R.S. Course 1 and 2 (1)	S.T.A.R.S. Course 3 and 4 (1) Homeland Security and Emergency Preparedness Capstone (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	❖**Recommended AP Connections: AP Psychology (1), AP Human Geography (1)** Business Communications and Keyboarding (1), World Language III (1), Peer Facilitating (.5), Science Research I or Honors Science Research I (1), World Geography (.5), Honors Career Related Internship (.5-1) Issues in American Society (.5), Public Speaking (.5), Sociology (.5), World Geography (.5), Political Science (.5), Psychology I or Honors Psychology I (1), Honors Economics (.5), AP United States Government Politics (1), Speech and Debate (.5), AP Macroeconomics (1), AP Statistics (1), Business Law (1), AP Human Geography (1), Honors Law, Citizenship, and Society(.5)			
8 credits possible per year				
End of Program Test:	S.T.A.R.S. Entry-Level Technician Exam			
Industry:	GIS (Geographic Information Systems)			
Taken:	At the end of Homeland Security and Emergency Preparedness Capstone			
Value Added:	Certification(s) Geospatial Center of Excellence		3 Transcripted credits	
From:	NASA Stennis Space Center		Harrisburg University	
Program:	GIS/RS Certification		In progress	

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MAJORS

CAREER MAJOR: Family and Consumer Studies

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) with 2 credits required in Family and Consumer Sciences		Honors Child and Adolescent Development (1) Child Development Laboratory (1) Principles of Fashion and Interior Designs (.5-1)	Advanced Foods (.5-1) Food and Nutrition Science (1) Honors Economics (.5)	Sociology (.5) Psychology I or Honors Psychology I (1) AP Macroeconomics (1) Issues in American Society (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Chemistry II or Honors Chemistry II (1), Advanced Laboratory - Child Development (1), Art Elective (1), Flower Design (.5-1), Health II (.5), Advanced Design Applications (1), Issues in American Society (.5), Journalistic Writing (.5), AP Human Geography (1), Honors Marketing (1), Music Elective (.5-1), Public Speaking (.5), Honors Career Related Internship (.5-2), AP Psychology (1)			
Related Completers:	Early Childhood Education, Culinary Arts, Textiles and Fashion Careers, Food Service and Hospitality Management (ProStart)			

CAREER MAJOR: Law and Legal Services

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Issues in American Society (.5) Advanced Software Applications (1)	Public Speaking (.5) Sociology (.5) Honors Law, Citizenship, and Society (.5) Political Science (.5) Psychology I or Honors Psychology I (1) Honors Economics (.5)	Speech and Debate (.5) AP Macroeconomics (1) AP Psychology (1) AP Statistics (1) Business Law (1) AP Language and Composition (1) AP United States Government and Politics (1) Leadership Education and Training VIII (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Business Communications and Keyboarding (1), Honors World Language III (1), Peer Facilitating (.5), Science Research I or Honors Science Research I (1), World Geography (.5), AP Human Geography (1), Honors Career Related Internship (.5-1), AP Literature and Composition (1)			
Related Completers	Homeland Security and Emergency Preparedness- Criminal Justice/Law Enforcement			

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CAREER MAJOR: Library and Information Sciences **CREDITS: 4**

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Honors Child and Adolescent Development (1) Business Communications and Keyboarding (1) Managing Personal Finances Using Excel (1) Music History and Literature (.5)	Issues in American Society (.5) Honors Principles of Art, Media and Communication (1) Public Speaking (.5) Honors Film and Literature (.5)	AP Literature and Composition (1) Newspaper Production (.5-1) Honors Humanities (.5) Honors Twentieth Century Novel (.5) Pop Culture and Composition (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	Drama I, II, III (.5 ea.), Psychology I or Honors Psychology I (1), Honors Career Related Internship (.5-1), Journalistic Writing (.5), Mythology (.5), Shakespeare (.5)			
8 credits possible per year				

CAREER MAJOR: Social Work **CREDITS: 4**

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Honors Child and Adolescent Development (1)	Psychology I or Honors Psychology I (1) Political Science (.5) Sociology (.5) Public Speaking (.5) Honors World Language III (1) Honors Law, Citizenship, and Society (.5)	AP Psychology (1) Peer Facilitating (.5) Issues in American Society (.5) Honors IV or AP World Language IV (1) Health III (.5) Leadership Education and Training VI (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	AP Statistics (1), Child Development Laboratory (1), Advanced Laboratory - Child Development (1), AP Language and Composition (1), Honors Economics (.5), Health II (.5), American Sign Language (.5), World Geography (.5), AP Human Geography (1), Honors Career Related Internship (.5-1)			
8 credits possible per year				

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CAREER MAJOR: Sports and Recreation CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits) Required *		Honors Child and Adolescent Development (1)	Health II (.5) Human Anatomy and Physiology or Honors Human Anatomy and Physiology (1)* Personal Fitness (.5) Psychology I or Honors Psychology I (1) Weight Training (.5)	Honors Health III (.5) AP Biology (1) Sociology (.5) Individual/Dual Sports (.5) Team Sports (.5)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	AP Statistics (1), Applied Dance (.5-1), Principles of Business Administration and Management (1), Dance I (.5-1), Gymnastics and Tumbling (.5), Honors Marketing (1), Public Speaking (.5), World Geography (.5), AP Human Geography (1), Honors Career Related Internship (.5-1)			
Related Completers	Academy of Health Professions			

CAREER MAJOR: Urban and Regional Planning CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Career Major (4 minimum credits)		Issues in American Society (.5)	Advanced Design Applications (1) Aquatic Environmental Science and Terrestrial Environmental Science (1) Public Speaking (.5) Sociology (.5) World Geography (.5) Honors Economics (.5)	Environmental Conservation (1) AP Statistics (1) AP Human Geography (1) AP Environmental Science (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Business Communications and Keyboarding (1), AP Macroeconomics (1), Political Science (.5), Psychology I or Honors Psychology I (1), Business Law (1), Managing Personal Finances Using Excel (1), Speech and Debate (.5), Technological Issues and Impacts (1), Honors Art II (.5-1), Honors Career Related Internship (.5-1)			
Related Completers	Homeland Security and Emergency Preparedness- Geographic Information Systems Technology			

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What type of work is involved in the *Technical* cluster?

- Responsibility for engineering and structural design in the manufacture, construction, and transportation of products or utilities.
- Working with one's hands in a skilled trade concerned with construction, manufacture, installation or repair of products.
- Applying problem solving abilities to design and execute solutions for today's technical challenges.
- The creation of systems that perform a useful task.

What are *Technical* Pathways?

- Vehicle Operation and Repair
- Construction/Maintenance
- Agriculture and Natural Resources
- Crafts and Related Services
- Home/Business Equipment Repair
- Industrial Equipment Operation and Repair

What should you think about when considering career in the *Technical* cluster?

Do You . . . .

- have an understanding of cause and effect?
- have problem solving and math skills?
- enjoy working with tools and equipment?
- perform work tasks to meet standards of accuracy?
- have mechanical ability?
- have manual dexterity and hand-eye coordination?
- have the ability to form mental images of objects or structures from drawings?

If you answered YES to more of these questions, a career in the *Technical* cluster may be for you!

For more details, read on…

Technical Cluster

Back to Career Clusters

COMPLETERS

COMPLETER: Applied Mechanical Engineering — CREDITS: 6

Careers: Machinist, Tool and Die Maker, Mechanical Engineer, Industrial Machine Mechanic, Millwright

Grade →	9	10	11	12
Completer Program Requirements			Applied Mechanical Engineering I (3)	Applied Mechanical Engineering II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Physics I (1)** Advanced Design Applications (1), Math Elective beyond Algebra II (.5-1), Business Communications and Keyboarding (1), Honors Calculus, AP Calculus BC (1), Chemistry II (1), Issues in American Society (.5), Public Speaking (.5), Technological Issues andand Impacts (1), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	17 Articulated Credits Community College of Baltimore County, Catonsville Computer Automated Manufacturing and Industrial Technology			
End of Program Test: **Industry:** **Taken:**	Measurement, Materials, and Safety and Job Planning Bench Work and Layout NIMS (National Institute for Metalworking Skills) During Applied Mechanical Engineering I			

COMPLETER: Apprenticeship Maryland* — CREDITS: 4

(*See School Counselor for Availability)

Careers: Designed to prepare students for careers/employment and/or further education and training specifically in career pathways in Manufacturing and Science, Technology, Engineering and Mathematics (STEM) occupations

Grade →	9	10	11	12
Completer Program Requirements			Honors Apprenticeship Related Instruction (1)	Honors Apprenticeship Work-Based Learning (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	Principles of Business Management (1) and coursework related to specific Apprenticeship content/pathway.			
Value Added: **From:** **Program:**	Pending			

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COMPLETER: Auto Service Technology CREDITS: 6

Careers: Automotive Master Mechanic, Automotive Technician, Automotive Service Advisor, Automotive Parts Specialist, Front End Specialist, Lube Technician, Automotive Engineering Technician, Automotive Service Manager

Grade →	9	10	11	12
Completer Program Requirements			Auto Service Technology I (3)	Auto Service Technology II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Environment Studies (1), AP Physics I (1)** Advanced Design Applications (1), Technological Design (1), Math Elective beyond Algebra II (.5-1), Science Elective (.5-1), Agricultural Mechanical Technology (1), Chemistry I or Honors Chemistry I (1), Business Communication and Keyboarding (1), Public Speaking (.5), Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (1), Technological Issues and Impacts (1), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	Up to 15 Articulated Credits Community College of Baltimore County, Catonsville Automotive Technology	Up to 15 Articulated Credits Penn College of Technology Automotive Technology	Up to 12 Articulated Credits University of Northwestern Ohio Automotive Technology	Up to 4 Articulated Credits Universal Technical Institute Automotive Technology
End of Program Test: **Industry:** **Taken:**	Auto Service Excellence (ASE)Exams in Brakes, Electrical/Electronic Systems, Engine Performance, and Suspension/Steering Auto Service Excellence (ASE) Certification At the completion of each section during Auto Service Technology I and Auto Service Technology II			

COMPLETER: Building Maintenance CREDITS: 4

Careers: General Maintenance and Repair Worker, Grounds Maintenance Worker, Building Supervisor, Custodian, Property Manager, Facilities Manager

Grade →	9	10	11	12
Completer Program Requirements				Building Maintenance I (3) Manufacturing and Construction Technologies (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Environmental Science (1), AP Statistics (1)** Agricultural Mechanical Technology (1), Math elective beyond Algebra II (1), Technological Design (1), Honors Career Related Internship (.5-1), Advanced Design Applications (1), Public Speaking (.5)			
End of Program Test: **Industry:** **Taken:**	NCCT Core Exam v2 National Center for Construction Education and Research (NCCER) At the end of Building Maintenance I			

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COMPLETER: Carpentry CREDITS: 6

Careers: Carpenter, including Finish Carpenters, Civil Carpenters, Master Carpenter, Construction Project Manager, Cabinet Maker, Furniture Maker, Home Improvement Contractor

Grade →	9	10	11	12
Completer Program Requirements			Carpentry I (3)	Carpentry II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Physics I (1), AP Calculus AB (1)** Advanced Design Applications (1), Agricultural Mechanical Technology (1), Math elective beyond Algebra II (1), Honors Career Related Internship (.5-1), Technological Design (1)			
Value Added: **From:** **Program:**	Up to 1 year toward Apprenticeship Associated Builders and Contractors	6 Articulated Credits Community College of Baltimore County, Catonsville Construction Technology		
End of Program Test: **Industry:** **Taken:**	NCCT Academic Carpentry Level I v2 National Center for Construction Education and Research (NCCER) At the end of Carpentry I	NCCT Academic Core v2 National Center for Construction Education and Research (NCCER) At the end of Carpentry II		

COMPLETER: Cisco Networking Academy CREDITS: 6

Careers: Help Desk Operator, Support Technician, Network Support Technician, Network Support Engineer, Network Administrator, Network Designer, Network Engineer, Security Operations Analyst, Network Security Architect, Network Security Engineer, Network Security Specialist

Grade →	9	10	11	12
Option 1: Cybersecurity **Completer Program Requirements**			Cisco Cybersecurity I (3)	Cisco Cybersecurity II (3)
Option 2: Cyber Operations **Completer Program Requirements**			Cisco Cyber Operations I (3)	Cisco Cyber Operations II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Statistics (1), AP Physics I (1)** Technological Design (1), Managing Personal Finances Using Excel (1), Honors Accounting I (1), Business Law (1), Honor IT internship (.5-1)			
Value Added: **From:** **Program:**	Up to 16 Articulated Credits CC of Baltimore County, Catonsville, Essex, or Dundalk Information Technology	Credits determined by Certifications earned Carroll Community College Computer Science	Credits determined on an individual basis Frederick Community College Computer Science	
End of Program Test: **Industry:** **Taken:**	Cybersecurity: Cisco CCNA Routing and Switching; Cyber Operations: LPI Linux Essentials Cisco / Linux / Python Cyber Security: at the end of Level II; Cyber Operations: at the end of Level I			

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COMPLETER: Collision Repair Technology CREDITS: 6

Careers: Auto Body Technician, Collision Repair Supervisor, Collision Repair Shop Owner, Master Automotive Painter, Collision Insurance Adjuster

Grade →	9	10	11	12
Completer Program Requirements			Collision Repair Technology I (3)	Collision Repair Technology II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Environmental Science (1), AP Physics I (1)** Advanced Design Applications (1), Math Elective beyond Algebra II (.5-1),Honors Accounting I (1), Principles of Business Administration and Management (1), Business Communications and Keyboarding (1), Public Speaking (.5), Honors Career Related Internship (.5-1), Honors Digital Media and Design (.5-1), Honors Art II (.5)			
Value Added: **From:** **Program:**	15 Articulated Credits Community College of Baltimore County, Catonsville Automotive Collision Repair and Refinishing		Up to 16 Articulated Credits Penn College of Technology Auto Body/Collision Repair	
End of Program Test: **Industry:** **Taken:**	Auto Service Excellence (ASE) in Non-Structural Analysis and Damage Repair, Painting and Refinishing, and Structural Auto Service Excellence (ASE) Certification At the end of Collision Repair Technology II			

COMPLETER: Digital Fabrication and Manufacturing CREDITS: 3

Careers: Industrial Designer, Mechanical Engineer Technician, Drafter, Product Developer/Prototyper, Assembler and Fabricator, 3D Print Technician

Grade →	9	10	11	12
Completer Program Requirements		Honors Advanced Design Applications (1)	Honors Technological Design (1) Introduction to 3D Printing (1)	Optional: Honors Digital Fabrication Capstone, Dual Enrollment (see your counselor), or Honors Career Related Internship (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Studio Art: 3D Design (1)** Technological Issues and Impacts (1),Honors Digital Media and Design (1),Math Elective (.5-1), Honors Digital Media and Design (.5), Honors Calculus (1), AP Calculus AB (1), AP Calculus BC (1), (.5-1), Honors Digital Design in Photography (.5)			
Value Added: **From:** **Program:**	3 Transcripted Credits Carroll Community College Pending			

COMPLETER: Drafting CREDITS: 6

Careers: Civil, Mechanical, Electrical and Electronic, Architectural, Aeronautical, Marine Drafters, Architect, Civil Engineering Technician, Surveying and Map Technician

Grade →	9	10	11	12
Completer Program Requirements			Drafting I (3)	Drafting II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Studio Art: 3D Design (1)** Advanced Design Applications (1), Math Elective (.5-1), Honors Principles of Art, Media and Communication (1), Honors Digital Media and Design (.5), Honors Calculus (1), AP Calculus AB (1), AP Calculus BC (1), Honors Art II (.5-1), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	3 Articulated Credits Carroll Community College Computer Aided Design	9 Articulated Credits CC of Baltimore County, Catonsville Computer Aided Drafting and Design	Up to 7 Articulated Credits Frederick CC Computer Aided Drafting	

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COMPLETER: Electrical Construction CREDITS: 6

Careers: Electrician, Lighting Design Engineer, Stage Lighting Engineer, Project Manager, Business Owner, Alternative Energy Designer/Engineer

Grade →	9	10	11	12
Completer Program Requirements			Electrical Construction I (3)	Electrical Construction II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Physics I (1), AP Statistics (1)** Advanced Design Applications (1), Math Elective beyond Algebra I (.5-1), Agricultural Mechanical Technology (1), Business Communications and Keyboarding (1), Public Speaking (.5), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	Up to 1 year toward Apprenticeship Associated Builders and Contractors	6 Articulated Credits Community College of Baltimore County, Catonsville Construction Technology		
End of Program Test: **Industry:** **Taken:**	NCCT Academic Core v2 National Center for Construction Education and Research (NCCER) At the end of Electrical Construction I		NCCT Academic Electrical Level I v2 National Center for Construction Education and Research (NCCER) At the end of Electrical Construction II	

COMPLETER: Engineering Technology - Project Lead the Way Endorsement

CREDITS: 5

Careers: Biochemical Engineer, Petroleum Engineer, Nanotechnology Engineer, Mechanical Engineer, Environmental Engineer, Agricultural Engineer, Product Safety Engineer, Aerospace Engineer, Industrial Engineer, Logistics Engineer

Grade →	9	10	11	12
Completer Program Requirements			Honors Principles of Engineering (1) Intro to Engineering Design (1)	Computer Integrated Manufacturing (1) Digital Electronics (1) Honors Engineering Design and Development (1)
Program Specific Requirements	A college preparatory math and science course is required each year of high school.			
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Physics I (1)** AP Statistics (1), AP Calculus BC (1), Trigonometry/Pre-Calculus or Honors Trigonometry/Pre-Calculus (1), Science Research I (1), Science Research II (1), AP Chemistry (1), Advanced Design Applications (1), Technological Design (1), Technological Issues and Impacts (1), Principles of Fashion and Interior Design (.5-1)			
Value Added: **From:** **Program:**	16 Transcripted Credits Rochester Institute of Technology Engineering	3 Articulated Credits University of Maryland Baltimore County Engineering	3 Articulated Credits The Community Colleges of Baltimore County Engineering Technology and Engineering Transfer	3 credits Frederick CC CAD
End of Program Test: **Industry:** **Taken:**	Rochester Institute of Technology Exams in Principles of Engineering, Introduction to Engineering Design, Digital Electronics, and Computer Integrated Manufacturing Project Lead the Way (PLTW) At the end of the designated course			

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COMPLETER: Heating, Ventilation, Air Conditioning CREDITS: 6

Careers: HVAC Technician, HVAC Engineer, Ductwork Fabricator, Electronic Engineer, Sheet Metal Worker, Project Engineer, HVAC Consultant

Grade →	9	10	11	12
Completer Program Requirements			HVAC I (3)	HVAC II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Physics I (1)** Advanced Design Applications (1), Technological Design (1), Math Elective beyond Algebra II (.5-1), Business Communications and Keyboarding (1), Public Speaking (.5), Technological Issues and Impacts (1), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	6 Articulated Credits Community College of Baltimore County, Catonsville Construction Technology	6 Articulated Credits University of Northwestern Ohio Commercial HVAC and Refrigeration		Up to 1 year toward Apprenticeship Associate Builders and Contractors
End of Program Test: **Industry:** **Taken:**	NCCT Academic Core v2 National Center for Construction Education and Research (NCCER) At the end of HVAC I		NCCT Academic HVAC National Center for Construction Education and Research (NCCER) At the end of HVAC II	

COMPLETER: Heavy Equipment and Truck Technology CREDITS: 6

Careers: Heavy Equipment Mechanic, Diesel Engine Mechanic, Farm Equipment Mechanic, Heavy Equipment Maintenance Specialist, Diesel Locomotive Mechanic, Fleet Maintenance Mechanic

Grade →	9	10	11	12
Completer Program Requirements			Heavy Equipment and Truck Technology I (3)	Heavy Equipment and Truck Technology II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Environmental Science (1), AP Physics I (1)** Advanced Design Applications (1), Technological Design (1), Math Elective beyond Algebra II (.5-1), Agricultural Mechanical Technology (1), Principles of Business Administration and Management (1), Business Communications and Keyboarding (1), AP Physics I (1), Public Speaking (.5), Technological Impacts and Issues (1), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	Up to 8 Articulated Credits Pennsylvania College of Technology Diesel Technology: Heavy Construction Equipment: Technician, Operator or CAT Emphasis; or Electric Power Generation Technology	Up to 12 Articulated Credits University of Northwestern Ohio Diesel Technology		Up to 4 Articulated Credits Universal Technical Institute Automotive Technology
End of Program Test: **Industry:** **Taken:**	Auto Service Excellence (ASE) Diesel Engines and Electrical/Electronic Systems Auto Service Excellence (ASE)certification At the end of Heavy Equipment and Truck Technology II			

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COMPLETER: Masonry CREDITS: 6

Careers: Mason, Home Builder/Designer, Landscape/Hardscape Designer, Patio/Driveway Designer and Builder, Construction Project Manager, Business Owner, Home Improvement Contractor

Grade →	9	10	11	12
Completer Program Requirements			Masonry I (3)	Masonry II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Physics I (1), AP Statistics (1)** Advanced Design Applications (1), Technological Design (1), Honors Accounting I (1), Agricultural Mechanical Technology (1), Public Speaking (.5), Principles of Business Administration and Management (1), Honors Career Related Internship (.5-1)			
Value Added: **From:** **Program:**	Up to 1 year toward Apprenticeship Associated Builders and Contractors	6 Articulated Credits Community College of Baltimore County, Catonsville Construction Technology		
End of Program Test: **Industry:** **Taken:**	NCCT Academic Core v2 National Center for Construction Education and Research (NCCER) At the end of Masonry I		NCCT Academic Masonry Level I National Center for Construction Education and Research (NCCER) At the end of Masonry II	

COMPLETER: Welding Technology CREDITS: 6

Careers: Welder Fabricator, Sheet Metal Worker, Welding Engineer, Welding Supervisor, Welding Inspector, Underwater Welder, Ironworker, Robotic Welding Technician, Boilermaker, Pipeline Welder, Shipfitter

Grade →	9	10	11	12
Completer Program Requirements			Welding Technology I (3)	Welding Technology II (3)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied) 8 credits possible per year	❖**Recommended AP Connections: AP Calculus AB (1), AP Physics I (1)** Advanced Design Applications (1), Math Elective beyond Algebra II (.5-1), Principles of Business Administration and Management (1), Business Communications and Keyboarding (1), Managing Personal Finances Using Excel (1), Honors Career Related Internship (.5-1), Honors Art II (.5-1), Honors Mixed Media (.5-1)			
Value Added: **From:**	Up to 1 year toward Apprenticeship Associate Builders and Contractors		American Welding Society (AWS) Certification	
End of Program Test: **Industry:** **Taken:**	NCCT Academic Core v2 National Center for Construction Education and Research (NCCER) At the end of Welding I		NCCT Academic Welding National Center for Construction Education and Research (NCCER) At the end of Welding II	

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CARROLL COUNTY PUBLIC SCHOOLS

PROGRAM OF STUDIES

COURSE OFFERINGS AND DESCRIPTIONS
2022-2023

INDEX OF COMPLETERS AND MAJORS TABLE OF CONTENTS CAREER PATHWAYS

ORGANIZATION

Course descriptions are listed by subject area. The course numbers are coded to facilitate organization of instructional groups and provide student record information. The first two digits identify the subject area, the third and fourth digits identify the course, the fifth digit identifies the credit for the course, and the sixth digit specifies the level of instruction defined as follows:

1 – Basic
6 – Academic
7 – Articulated
8 – Honors
9 – AP and Transcripted

Articulated Credit Courses – Students may receive college credit for these courses as a part of a completer program. These credits, that do not transfer to other post and secondary institutions, are awarded under the terms of an agreement made with a specific postsecondary institution.

Transcripted Credit Courses – Students may earn college credits by taking these courses and successfully completing the corresponding competency tests. Credit is documented on an official transcript from the specific postsecondary institution that awarded the credit. These credits may transfer to other postsecondary institutions.

NCAA Eligibility – CCPS Courses that meet NCAA eligibility criteria are marked with a in the course descriptions.

Completer Program – C Indicates an approved completer program. The suggested course sequence for each completer program can be found in the Career Pathways Guide.

AGRISCIENCE

CASE AGRICULTURAL SCIENCE – ANIMAL – Four Credit Completer
CASE AGRICULTURAL SCIENCE – PLANT – Four Credit Completer
CASE NATURAL RESOURCES – Four Credit Completer

HONORS AGRICULTURAL COOPERATIVE INTERNSHIP

Course:	504108 (Honors)	½ credit
	504118 (Honors)	1 credit
	504128 (Honors)	2 credits

Students in an agricultural program, in the senior year, may earn up to two credits for their work experience in an agricultural-related business. The work experience in a business setting will be an extension of the classroom program and provide the student with on the job experiences. The place where the student works must be pre-approved by the program coordinator. An agreement detailing the cooperative work experiences to be gained by the student will be agreed upon and signed by the employer, student, student's parents, and the program coordinator. Experiences gained in this course will be valuable as the student transitions from school to the world of work or post-secondary education.

Prerequisites and other notes: 2.5 overall GPA, 94% attendance (previous semester). Parents are responsible for student transportation. This is the culminating course for the CASE Natural Resources completer program only. All courses in the completer sequence must be completed prior to the internship.

CASE AGRICULTURE BUSINESS, RESEARCH, AND DEVELOPMENT
Course: 500219 (Transcripted) 1 credit

This course is the capstone course available to students through the CASE™ curriculum. Students will have the opportunity to focus on their specific area of interest in agriscience. Instruction and continued inquiry-based projects will be implemented to integrate key learning from pervious CASE courses. Students will apply their learning to real-world career situations through research projects, extensive portfolios, Supervised Agricultural Experience (SAE) projects or other internship/work-based learning opportunities.

Prerequisites and other notes: This is the culminating course for the CASE completers. All courses in the CASE completer sequence must be completed prior to taking this class. This course is open only to 12th grade students. Students who want to participate in an internship as a part of this class must have a 2.5 overall GPA in Academic classes and 94% attendance from the previous semester. Parents are responsible for student transportation. CASE capstone course must be taught by a CASE trained teacher.

CASE AGRICULTURAL SCIENCE—ANIMAL
Course: 501219 (Transcripted) 1 credit

This course is one of the foundational courses within the CASE™ sequence. It is structured to enable all students to have a variety of experiences that will provide an overview of the field of agricultural science with a foundation in animal science. Through the use of hands-on projects and activities, students will learn animal science concepts and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, or industry personnel face in their respective careers.

Prerequisites and other notes: Honors CASE Introduction to Agriculture, Food and Natural Resources is a prerequisite. This course is part of a CASE completer program. It is recommended for 10th and 11th grade students.

CASE ANIMAL AND PLANT BIOTECHNOLOGY
Course: 501619 (Transcripted) 1 credit

This course is the third course within the CASE™ sequence of classes. It is designed to increase student understanding of biotechnology concepts. Students will complete hands-on activities, projects, and problems designed to build content knowledge and technical skills. They will become proficient at projects involving micro pipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations.

Prerequisites and other notes: CASE Agricultural Science—Animal **or** CASE Agricultural Science—Plant is a prerequisite. Biology is a prerequisite or may be taken concurrently. This course is part of a CASE completer program. It is recommended for 11th and 12th grade students.

HONORS CASE INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES
Course: 500118 (Honors) 1 credit

This course introduces students to the world of agriculture and its career pathways. Students will experience hands-on activities, projects, and problems that involve the study of communication, sciences of agriculture, plants, animals, natural resources, and agricultural mechanics. They will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning.

Prerequisites and other notes: This course is the first class for all agriscience completer programs. It is recommended for 9th and 10th grade students.

HONORS CASE NATURAL RESOURCES AND ECOLOGY
Course: 500318 (Honors) 1 credit

Natural Resources and Ecology course is a foundation course within the CASE sequence of courses. The course provides students a variety of experiences that in the fields of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Study of the natural world including biomes, land, air, water, energy, use and care as well as a focus on issues surrounding man's interaction with the Earth will be addressed in this course. Students will select an ecosystem to study throughout the course and apply principles of natural resources and ecology from each unit of study to that ecosystem.

Prerequisites and other notes: This is the second course of a 4-credit completer. Honors CASE Introduction to Agriculture, Food, and Natural Resources must be successfully completed prior to this course.

HONORS CASE ENVIRONMENTAL SCIENCE ISSUES
Course: 500418 (Honors) 1 credit

The CASE Environmental Science Issues course is a specialization-level course that enables students to research, analyze, and propose sustainable solutions to environmental issues. Students are immersed in inquiry-based exercises filled with activities, projects, and problems, which develop data acquisition and analysis techniques, critical thinking and evaluation abilities related to environmental issues, as well as independent research and problem solving.

Prerequisites and other notes: This is the third course of a 4-credit completer. CASE Natural Resources and Ecology must be successfully completed prior to this course.

BUSINESS EDUCATION

C

ACCOUNTING – Four Credit Completer
BUSINESS ADMINISTRATION AND MANAGEMENT – Four Credit Completer
MARKETING – Four Credit Completer

HONORS ACCOUNTING I
Course: 352818 (Honors) 1 credit

Accounting I covers concepts that are equivalent to the first-half of a college accounting class. Students will study accounting as it relates to the business environment. Major units of study will include recording business transactions, the adjusting process, completing the accounting cycle, and merchandising operations.

Prerequisites and other notes: Recommended for grades 10 - 11. This course is a required foundational course for all business education completer programs.

ACCOUNTING II
Course: 353219 (Transcripted) 1 credit

Accounting II covers concepts that are equivalent to the second-half of a college accounting class. Major units of study will include internal control and cash, receivables, plant assets, intangibles, current liabilities, and long-term liabilities and bonds payable.

Prerequisites and other notes: Honors Accounting I is a prerequisite. This course is part of the Accounting and Financial Services completer programs. At the end of this course, students will take the Carroll Community College Accounting 101 final exam. Students who successfully complete this course and the exam will receive transcripted credit from Carroll Community College.

ADVANCED BUSINESS MANAGEMENT
Course: 353319 (Transcripted) 1 credit

This course provides students with the knowledge that will prepare them for postsecondary levels of education and entry-level positions in the work force. Focus will be on the role of business in society; the changing nature of contemporary business practices; major management concepts, theories, and theorists; the processes of management (functional, operational, human relations); business law and ethics; and business communications. Career pathways and the use of business management will be examined in a variety of career clusters. Awareness of ethical issues and application of ethical decision-making models will be reinforced throughout the course.

Prerequisites and other notes: Principles of Business Administration and Management is a prerequisite. Honors Accounting I is a prerequisite or may be taken concurrently. This course is part of the Business Administration and Management completer program. Students will take the Principles of Management CLEP exam at the end of the course at the CCPS CLEP testing center. Parents are responsible for student transportation.

HONORS BUSINESS EDUCATION CAPSTONE
Course: 353418 (Honors) 1 credit

This is the final course in the Accounting and the Business Administration and Management completer programs. Students will apply the knowledge and skills acquired in previous business management courses to complete an individualized senior project and portfolio. The project will involve intense problem-solving in accounting or business management and apply learning to authentic situations. Projects and portfolios will be presented for review and critique.

Prerequisites and other notes: This is the final course in the Accounting and the Business Administration and Management completer programs. In lieu of this course, students may opt to take AP Macroeconomics, Career Related Internship, or Dual Enrollment-Business as their final course in the completer programs. All courses in these program sequences are prerequisites to this capstone class.

BUSINESS COMMUNICATIONS AND KEYBOARDING
Course: 350616 (Academic) 1 credit

Business Communications and Keyboarding assists students in developing effective workplace communication skills, while gaining the ability to keyboard using the touch-key system. The course includes instruction in computer hardware and software systems, digital citizenship, and use of the internet and World Wide Web. Students will be required to develop and work with authentic tasks using word processing, spreadsheet, multimedia presentation and publishing skills. This course provides a solid foundation for the use of computers in both academic and business settings

MANAGING PERSONAL FINANCES USING EXCEL
Course: 355616 (Academic) 1 credit

This course provides students with knowledge and practice in managing personal finances while developing skills in spreadsheet software applications. Students will learn about making informed, financially responsible decisions; relating career, education and income; planning and managing money; managing credit and debt, creating and building wealth and managing risk to preserve wealth.

Prerequisites and other notes: This course meets the graduation requirement for financial literacy.

HONORS MARKETING
Course: 506118 (Honors) 1 credit

This course introduces the student to the essential concepts of marketing theory and the foundations, functions and benefits of marketing in a free enterprise system. Throughout the course, students will use and incorporate technologies to conduct research and communicate the results. In addition, students will investigate the various and ever-improving alternatives for electronic marketing. Students will integrate their knowledge of legal issues, the importance of ethics, and social responsibilities in marketing. Students will understand and demonstrate strong interpersonal skills and develop an appreciation of human diversity as they build a solid understanding of the many career opportunities in the field of marketing.

Prerequisites and other notes: Principles of Business Administration and Management and Honors Accounting I are prerequisites. This course is part of the Marketing completer program.

ADVANCED MARKETING
Course: 506619 (Transcripted) 1 credit

This course builds on all of the concepts studied in Honors Marketing by providing in-depth, comprehensive project-based learning opportunities. Students will apply their understanding of consumer buying behavior and relationships; the tools and techniques used by organizations that influence marketing strategy decisions; and market segmentation and target marketing in order to create a marketing plan. Throughout the course, students will use strong interpersonal skills and incorporate technologies when conducting primary and secondary research. In addition, students will include electronic and internet marketing within their marketing plan. Students will create and/or use a marketing information system(s) when working with or collecting data. Students will integrate their knowledge of legal issues, ethics, diversity and social responsibilities in developing the marketing plan.

Prerequisites and other notes: Honors Marketing is a prerequisite. This course is part of the Marketing completer program. Students will take the Principles of Marketing CLEP exam at the end of the course at the CCPS CLEP testing center. Parents are responsible for student transportation.

PRINCIPLES OF BUSINESS ADMINISTRATION AND MANAGEMENT
Course: 350417 (Transcripted) 1 credit

This course provides a foundational understanding of the role of business in a global society, American business as a dynamic process, forms of business ownership, management concepts, marketing, production and distribution, and accounting and finance. Along with a brief historical perspective, business terminology and principles will be emphasized. Students will learn to analyze the functions of business through evaluating, planning, organizing, and controlling. Strong communication skills will be emphasized as necessary for success in the workplace and college. Students will think analytically; practice using teamwork for making decisions and solving problems; and apply skills for career success. Students' understanding of the business world gained in this course will help to prepare them to meet their career and college goals and objectives.

Prerequisites and other notes: This course is one of two foundation courses that are required for all business education completer programs. It is recommended for 10th grade students.

CAREER AND TECHNICAL EDUCATION (OCCUPATIONAL)

CAREER AND TECHNICAL EDUCATION RESEARCH AND DEVELOPMENT

Course:	Must Apply & Be Accepted (Academic)	½ credit
	Must Apply & Be Accepted (Academic)	1 credit
	Must Apply & Be Accepted (Academic)	2 credits
	Must Apply & Be Accepted (Academic)	3 credits

This course is designed primarily for those students who wish to take additional course work in a program at the Carroll County Career and Technology Center. Learning may focus on research and development projects/activities within the classroom/lab setting or at a local business through cooperative work experience. Detail for the student's individual learning plan will be worked out with the respective teacher and/or career coordinator.

Prerequisites and other notes: Must complete appropriate prerequisites and obtain approval of the instructor.

C

ACADEMY OF HEALTH PROFESSIONS – Four to Six Credit Completer

FOUNDATIONS OF MEDICINE AND HEALTH SCIENCE

Course:	Must Apply & Be Accepted (Academic)	1 credit
	Must Apply & Be Accepted (Transcripted)	1 credit

This course is designed to provide students with an overview of the therapeutic, diagnostic, environmental and information systems of the health care industry. Students will begin to prepare for a medical and health science career by developing a broad understanding of the pathways in the Health and Biosciences career cluster. Students will learn about ethical and legal responsibilities, as well as the history and economics of health care. Students will engage in processes and procedures that are used in the delivery of essential healthcare services. As students learn to use medical technology within a variety of medical and health care environments, they will develop academic, technical and workplace skills for success necessary to function as a health professional.

Prerequisites and other notes: Chemistry II must be completed or taken concurrently. This course is the first course in a 4 - 6 credit completer program. Students in the transcripted course take a college-level exam at the end of the course.

STRUCTURE AND FUNCTIONS OF THE HUMAN BODY

Course:	Must Apply & Be Accepted (Academic)	1 credit
	Must Apply & Be Accepted (Transcripted)	1 credit

Students in this course study the structure and functions of the human body, including cellular biology and histology. Systematic study involves homeostatic mechanisms of the body systems and special senses. Students will investigate the body's responses to the external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy processes. Students will conduct laboratory investigations and field work, use scientific methods during investigations to solve problems and make informed decisions. Students will learn the medical terminology related to body systems.

Prerequisites and other notes: Foundations of Medicine and Health Science must be completed or taken concurrently. This course is part of a 4 - 6 credit completer program. Students in the transcripted course take a college-level exam at the end of the course.

HONORS CNA: THEORY AND CLINICAL EXPERIENCE

Course:	Must Apply & Be Accepted (Honors)	1 credit

Students will acquire the knowledge and skills required to provide basic health care to clients/patients with a variety of health care needs. Instruction includes theory, practical application in the laboratory, on-site observations and planned clinical experiences in several health care service areas. Clinical experiences are supervised by registered nurses and other health care professionals. Students will work toward Certified Nursing Assistant (CNA) and Geriatric Nursing Assistant (GNA) certification. This course meets the standards set by the Maryland Board of Nursing.

Prerequisites and other notes: Foundations of Medicine and Health Science and Structure and Functions of the Body must be completed or taken concurrently. This course is part of a 4 - 6 credit completer program. Parents are responsible for student transportation. Students must meet all requirements established by the health facility partner. Students are required to take an end of program assessment.

HONORS PHYSICAL REHABILITATION: THEORY AND CLINICAL EXPERIENCE

Course:	Must Apply & Be Accepted (Honors)	1 credit

Students will acquire the knowledge and skills required to provide basic physical rehabilitation care to clients/patients with a variety of rehabilitation needs. Instruction includes theory, practical application in the laboratory, on-site observations and planned clinical experiences in several health care service areas. Clinical experiences are supervised by health care professionals. Students have an opportunity to earn clinic hours in rehabilitation settings that meet prerequisite requirements in many post-secondary school physical rehabilitation programs. These types of programs include but are not limited to: physical therapy; occupational therapy; speech/language pathology; athletic training; and sports medicine.

Prerequisites and other notes: Foundations of Medicine and Health Science and Structure and Functions of the Human Body must be completed or taken concurrently. This course is part of a 4-6 credit completer program. Parents are responsible for student transportation. Students must meet all requirements established by the health facility partner.

SPECIALIZED MEDICAL OPTION

Course:	Must Apply & Be Accepted (Academic)	1 credit

Students will have the opportunity to attend Carroll Community College to focus on and earn certification in a specialized area of health care. Options will vary according to the current schedule at Carroll Community College and may include but are not limited to: Dental Assistant/Oral Radiography, Pharmacy Technician, and medical records coding. Other specialized medical options are available at CCCTC: Surgical Technology and Certified Clinical Medical Assistant.

Prerequisites and other notes: Foundations of Medicine and Health Science and Structure and Functions of the Body must be completed or taken concurrently. This course is part of a 4-6 credit completer program. Parents are responsible for the cost of the course at Carroll Community College and student transportation. Students are required to take an end of program assessment.

HONORS ACADEMY OF HEALTH PROFESSIONS SEMINAR AND INTERNSHIP

Course:	Must Apply & Be Accepted (Honors)	½ credit
	Must Apply & Be Accepted (Honors)	1 credit
	Must Apply & Be Accepted (Honors)	2 credits
	Must Apply & Be Accepted (Honors)	3 credits

Students will have the opportunity to integrate content and knowledge of specific medical areas, such as surgical technology, or medical assisting through classroom preparation and clinical experience in a healthcare setting. Student knowledge will be extended through practical application under the supervision of health care professionals. Students will finalize their career portfolio and present it for review and critique.

Prerequisites and other notes: Foundations of Medicine and Health Science and Structure and Functions of the Body must be completed or taken concurrently. CNA certification may be required for some placements. This course is part of a 4 - 6 credit completer program. Parents are responsible for student transportation. Students must meet all requirements established by the health facility partner. This class may be extended for a maximum of three (3) credits.

C

APPLIED MECHANICAL ENGINEERING – Six Credit Completer

APPLIED MECHANICAL ENGINEERING

Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted -II (Articulated) 3 credits

This program prepares students for a beginning career as a machinist, production operator, quality control technician, or manufacturing engineering technologist in the computer-enhanced manufacturing environment. The program focuses heavily on hands-on experiences using industrial tools and advanced computer numerically controlled (CNC) equipment. Machinists use their knowledge and understanding of metals and their skills with tools to design, plan, and carry out the processes needed to make products with precise specifications. An engineering technologist works closely with engineers to design, develop, and test industrial and consumer products by applying mathematics and science. Students will learn about workplace safety, teamwork, metallurgy, computer aided manufacturing software, robotics, control systems, project management, fabrication, lean manufacturing, and quality assurance. Throughout the course, students will work toward specific certifications from the National Institute of Metalworking Skills (NIMS).

Prerequisites and other notes: These courses are part of the Applied Mechanical Engineering completer program. At the end of this program, students will take the NIMS Measurement, Materials, and Safety, Job Planning, Bench Work and Layout exam. (Other tests optional for qualified students.)

C

APPRENTICESHIP MARYLAND* – Four Credit Completer
(*See School Counselor for Availability)

HONORS APPRENTICESHIP RELATED INSTRUCTION

Course: Must Apply & Be Accepted (Honors) 1 credit

Students are required to complete one credit of related classroom instruction to prepare students with the information needed to be successful and perform the duties necessary on the job. In addition, the related classroom instruction will assist the student in meeting the goals outlined in the student's training plan and personalize the learning process for students by integrating the knowledge and skills from their classroom instruction with information learned at the worksite. The collaborative designed training plan will serve to align instruction to on the job training.

Prerequisites and other notes: This course may be completed prior to or in conjunction with Apprenticeship Work-Based Learning.

HONORS APPRENTICESHIP WORK-BASED LEARNING

Course: Must Apply & Be Accepted (Honors) 3 credits

This work based learning apprenticeship experience takes place at the work site and must be a paid experience (at least minimum wage) with a minimum of 450 hours. This is experience is guided by a formal work-based learning (WBL) agreement and student work plan development among the student, parent, apprenticeship coordinator, and eligible employer. The student work plan identifies the appropriate competencies, duties, tasks and outcomes in academic, technical and workplace readiness areas that apply to the student's goals for the work related placement. The experience focuses on student's interests in manufacturing and STEM-related pathways, Maryland's career clusters/pathways and employer demand. Continuous supervision and regular communication among the student, employer and work-based learning coordinator will provide the student with feedback and evaluation. The student's final portfolio will document proficiency in academic, technical and workplace readiness skills as outlined in the WBL plan.

Prerequisites and other notes: This course is the second and final course in the Apprenticeship Maryland Completer. Parents/Guardians are responsible for arranging transportation for their child.

C

ARMY JUNIOR RESERVE OFFICER TRAINING CORPS (JROTC) – Three Credit Completer

LEADERSHIP EDUCATION AND TRAINING (LET) I
Course: 570116 (Academic) 1 credit

This course includes classroom and laboratory instruction in the history, customs, traditions, and purpose of Army ROTC. It contains the development of basic leadership skills, communication skills, and conflict management and resolution skills. Emphasis is placed on writing skills and oral communication techniques. Financial planning is introduced. Physical fitness, healthy lifestyles, and basic first aid measures are discussed. An overview of geography and the globe are incorporated into this course. Also included is a study of the U.S. Constitution, Bill of Rights, responsibilities of U.S. citizens, and the federal justice system. Students will participate in drill activities.

Prerequisites and other notes: This course is part of the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING II
Course: 570216 (Academic) 1 credit

This course includes classroom and laboratory instruction on skills taught in LET I. This course introduces equal opportunity and sexual harassment. It provides instruction in leadership styles and practical time to exercise leadership theories as well as the basic principles of management. The course provides self-assessments to help students determine their skill sets and opportunities to teach using accepted principles and methods of instruction. Students will participate in drill activities.

Prerequisites and other notes: LET I. This course is part of the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING III
Course: 570316 (Academic) 1 credit

This course includes classroom and laboratory instruction. Leadership and decision-making skills are emphasized throughout the course. Topics addressed include: services available in the military, financial management, United States History, career exploration, and the development of a career portfolio. The research, identification, planning, and execution of a service-learning activity are also included. Students will participate in drill activities.

Prerequisites and other notes: LET II. This course is part of the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING IV
Course: 570416 (Academic) 1 credit

This course includes classroom and laboratory instruction. LET IV includes requirements for the practical application of leadership duties. An emphasis is placed on exercises in writing skills. Physical fitness is also a part of this course. Other topics that are included are: geography, environmental issues, the judicial system, the Constitution, and local government. Students will participate in drill activities.

Prerequisites and other notes: LET III. This course is a recommended elective for the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING V

Course: 570516 (Academic) 1 credit

The advanced curriculum LET V course includes both classroom and laboratory instruction. It builds on leadership and management skills cadets learned in the four (4) previous LET levels of JROTC. Emphasis is placed on study skills, thinking skills, communications skills, and personnel and unit management skills to enable students to develop their maximum potential. Cadets will use self-assessment and peer counseling tools and techniques to determine the current status of the unit, develop plans and schedules for the unit's improvement and growth, and continue to make strides toward graduation. Students will continue to participate in and lead drill, physical fitness, and leadership development activities.

Prerequisites and other notes: LET IV. This course is a recommended elective for the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING VI
Course: 570616 (Academic) 1 credit

This course includes and expands on unit organization and management skills cadets developed in the previous LET levels of JROTC. Topics explored and expanded in this course include conflict resolution, teaching skills, making a difference with service-learning, career knowledge and preparing for the future, planning skills and social responsibility, and the high school financial planning program. Cadets will use a hands-on approach to assist instructors with developing better U.S. citizens of their fellow cadets, assist with instructions in the classroom, during drills, at physical fitness sessions, and assist with extracurricular team activities-to include Color Guard, Drill Team, and Cadet Raider Challenge Team. Students will participate in unit activities.

Prerequisites and other notes: LET V. This course is a recommended elective for the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING VII
Course: 570716 (Academic) 1 credit

This course gives senior level JROTC cadets the opportunity to provide direct assistance to lower level cadets through classroom assisted instruction, on the field drill instruction and inspections, and conduct of leadership lab. Cadets will demonstrate to fellow cadets-through their conduct-the importance of maintaining a physical fitness regimen, healthy lifestyle and diet, and proficiency in basic first aid/life-saving skills. Continued emphasis will be placed on the importance of completing high school. Likewise, continued emphasis will be placed on drug awareness and substance abuse, substance abuse-intervention and prevention, and improving your surroundings and environment through personal involvement. Cadets will receive instruction in citizenship and leadership development.

Prerequisites and other notes: LET VI. This course is a recommended elective for the JROTC completer program.

LEADERSHIP EDUCATION AND TRAINING VIII
Course: 570816 (Academic) 1 credit

This final course includes enabling senior cadets to employ the leadership, management, and citizenship skills they developed in the classroom and laboratory to prepare for graduation. Cadets will assume leadership positions in the unit, serve as advisors to fellow cadets, oversee unit activities, help prepare fellow cadets for annual summer leadership camp, and provide advice and assistance to instructors for strategies to improve the JROTC program. Emphasis will be placed on exploring the world, your job as an American citizen, sources of power, the Federal judicial system, and growth of a nation. Cadets will oversee, assist, and direct service-learning projects and activities of fellow students. Cadets will assist with the overall operation of the JROTC program while continuing to prepare for graduation.

Prerequisites and other notes: LET VII. This course is a recommended elective for the JROTC completer program.

C

AUTO SERVICE TECHNOLOGY - Six Credit Completer

AUTO SERVICE TECHNOLOGY
Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted -II (Articulated) 3 credits

This program provides the necessary knowledge and skills to enter the automotive service field. Students learn about all the major systems of the automobile including the electrical, lubrication, fuel, cooling, ignition, suspension, braking, engine, transmission, and emissions. Training includes the use of technical manuals, computerized diagnostic equipment, and a variety of hand and power tools. At the end of the program, students take certification tests.

Prerequisites and other notes: These courses are part of the Auto Service Technology completer program. At the end of this program, students take will take the Auto Service Excellence exam – Developed by Auto Service Excellence (ASE), National Automotive Technicians Education Foundation (NATEF), and Skills USA Certification Tests for Maintenance and Light Repair, Brakes, Electrical/Electronic Systems, Engine Performance, and Suspension and Steering.

C

BIOMEDICAL SCIENCES – PROJECT LEAD THE WAY – Four Credit Completer

PRINCIPLES OF BIOMEDICAL SCIENCES
Course: Must Apply & Be Accepted (Transcripted) 1 credit

This course is an introduction to the biomedical sciences through hands-on projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions. Key biological concepts including homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops, fluid dynamics and the relationship of structure to function are also incorporated. This career program is designed for students who have career interests in biomedical research and biotechnology. Student interested in patient care should pursue the Allied Health Careers program.

Prerequisites and other notes: This course is part of the Biomedical Sciences completer program. This 11th grade class is the first course of a four credit Career and Technical Education completer program. Student must have completed or be concurrently enrolled in Algebra II and a college preparatory science class in both 9th and 10th grades. A minimum of one credit each in both college preparatory math and science is required in both 11th and 12th grades.

HUMAN BODY SYSTEMS
Course: Must Apply & Be Accepted (Transcripted) 1 credit

This course will engage students in the study of the human body and its physiology, especially in relationship to human health. Students will use a variety of monitors to examine body systems at rest and under stress, and observe the interactions between the various body systems. Students will use software to design and build systems to monitor body functions.

Prerequisites and other notes: This course is part of the Biomedical Sciences completer program. This 11th grade class is part of a four credit Career and Technical Education completer program. It may be taken concurrently with Principles of Biomedical Sciences. Student must have completed or are concurrently enrolled in Algebra II and a college preparatory science class in both 9th and 10th grades. A minimum of one credit each in both college preparatory math and science is required in both 11th and 12th grades.

MEDICAL INTERVENTION
Course: Must Apply & Be Accepted (Transcripted) 1 credit

Students will use problems and project based instructional strategies to investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation and supportive care. Students will study the design and development of various medical interventions including vascular stents, cochlear implants, and prosthetic limbs. They will review the history of organ transplants and gene therapy, and become aware of current developments. Using 3-D imaging software and current research, students will design and build a model of a therapeutic protein.

Prerequisites and other notes: This course is part of the Biomedical Sciences completer program. Human Body Systems is a prerequisite or may be taken concurrently. This 12th grade class is part of a four credit Career and Technical Education completer program. A minimum of one credit each in both college preparatory math and science is required in 12th grade.

BIOMEDICAL INNOVATION
Course: Must Apply & Be Accepted (Transcripted) 1 credit

This capstone course gives student teams the opportunity to work with a mentor, identify a science research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers. Each team will have one or more mentors from the scientific and/or medical community guiding their scientific research. This course may be combined with the capstone course from the PLTW Engineering program, allowing students from both pathways to work together to engineer a product that could impact healthcare.

Prerequisites and other notes: Completion of all three prerequisite PLTW Biomedical Sciences classes. Medical Intervention may be taken concurrently. This course is part of a 4 credit completer program. Students are required to take end of program assessments.

C BUILDING MAINTENANCE - Four Credit Completer

BUILDING MAINTENANCE
Course: Must Apply & Be Accepted (Academic) 3 credits

Students in this program will be provided the opportunity to acquire the knowledge and experience needed to work in a wide range of entry-level positions concerned with maintaining commercial buildings. Skills learned in this program will help students perform minor and routine painting, plumbing, electrical wiring, and other related maintenance activities, using appropriate tools and equipment. Students will also receive experience in shipping, receiving, and organizing supplies needed for maintenance and repair work. Program completers should be able to demonstrate a wide range of skills needed by employees in the expanding building engineering industry.

Prerequisites and other notes: Students are required to take the National Construction Career Test (NCCT) titled Academic Core-Introductory Craft Skills at the end of Level I.

MANUFACTURING AND CONSTRUCTION TECHNOLOGIES
Course: Must Apply & Be Accepted (Academic) 1 credit

Manufacturing is the process of converting raw materials into products. The manufacturing world consists of a variety of materials such as wood, plastics, ceramics, composites, and metals. Processes consist of forming, separating, conditioning, and fabrication (combining). Students will learn about durable and non-durable goods. Construction is the building of structures. The construction world consists of homes, roads, bridges, and other structures. Using hands-on activities, students will learn that structures are made from a wide variety of products and processes. During this course, an equal emphasis will be placed on manufacturing and construction systems. This course is for all students interested in designing and building physical products or structures.

Prerequisites and other notes: This course is part of the Building Maintenance completer program. This course is only offered at Carroll County Career and Technology Center.

C CAREER RESEARCH AND DEVELOPMENT – Four Credit Completer

CAREER RESEARCH AND DEVELOPMENT
Course: Must Apply & Be Accepted (Academic) 1 credit

Students in this course use the Maryland career development framework to explore potential career areas through the process of self-awareness, career awareness, career exploration, and setting academic and career-related goals. Course content will integrate the development of competency in business writing, as well as the Skills for Success (communication, learning, interpersonal, technology, and critical thinking). Students will also be required to prepare for and participate in a mock job interview process and maintain a career portfolio.

Prerequisites and other notes: Recommended for grades 11 and 12. This course is available only to students attending Gateway School or Flexible Student Support. This course is part of the Career Research and Development completer program.

CAREER PREPARATION AND TRANSITION
Course: Must Apply & Be Accepted (Academic) 1 credit

Students in this class will learn how to effectively plan for their future incorporating employment, education and training goals, building financial literacy skills, and integrating the Maryland's Skills for Success as they begin to manage their career and educational choices. They will continue to build and strengthen their career portfolio to demonstrate proficiencies in workplace readiness.

Prerequisites and other notes: Recommended for grades 11 and 12. Career Research and Development is a prerequisite. This course is available only to students attending Gateway School or Flexible Student Support. This course is part of the Career Research and Development completer program.

HONORS CAREER RESEARCH AND DEVELOPMENT INTERNSHIP

Course:	Must Apply & Be Accepted (Honors)	1 credit
	Must Apply & Be Accepted (Honors)	2 credits

The work-based learning experience takes place at the worksite, includes a minimum of 250 hours, and may be paid or unpaid. An individualized training plan identifies the appropriate competencies, duties, and tasks in academic, technical, and workplace readiness areas that apply directly to the students' goals.

Prerequisites and other notes: Available for 12th grade students only. Career Research and Development and Career Preparation and Transition are prerequisites. This course is available only to students attending Gateway School or Flexible Student Support. This course is part of the Career Research and Development completer program.

C

CARPENTRY – Six Credit Completer

CARPENTRY

Course:	Must Apply & Be Accepted -I (Articulated)	3 credits
	Must Apply & Be Accepted -II (Articulated)	3 credits

This program prepares students to be successful in the construction industry. The program focuses on general construction trade skills such as safety with hand and power tools, blueprint reading, construction math, rigging, and employability skills. Units of study specific to carpentry include: building materials; foundations; concrete forms; floor systems; framing; window and door installation; site layout; exterior finishing; roofing applications; thermal and moisture protection; and, interior finish.

Prerequisites and other notes: These courses are part of the Carpentry completer program. Students are required to pass the National Construction Career Test (NCCT) titled Academic Core-Introductory Craft Skills to achieve Level II status in construction programs. At the end of Level II, students take the NCCT Academic Carpentry Level I.

C

CISCO NETWORKING ACADEMY: CYBER OPERATIONS – Six Credit Completer

(Level I: 3 credits and Level II: 3 credits)

CISCO CYBER OPERATIONS I

Course:	Must Apply & Be Accepted (Transcripted)	3 credits

This class introduces and describes the architecture, structures, functions, components, models and operations of computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media and operations are introduced. Students also learn the fundamentals of the Linux operating system and command line, and basic open source concepts. This career-oriented approach to learning networking empowers students to enter a career and further their education in the computer networking field.

Prerequisites and other notes: This course is the first course in a 6-credit completer program.

CISCO CYBER OPERATIONS II

Course:	Must Apply & Be Accepted (Transcripted)	3 credits

This course introduces students to the Python programming language and its use for web development, data analysis, artificial intelligence and scientific computing. Students also develop a foundational understanding of cybersecurity, and the security principles, technologies, and procedures to defend networks. Students learn core security skills needed for detecting and responding to security events, thus protecting systems and organizations from cybersecurity risks.

Prerequisites and other notes: Completion of Cisco Networking Academy: Cyber Operations I. This course is the final class in a 6-credit completer program. All students in this class are required to take an industry-standard end of program assessment.

CISCO NETWORKING ACADEMY: CYBERSECURITY – Six Credit Completer
(Level I: 3 credits and Level II: 3 credits)

HONORS CISCO CYBERSECURITY I
Course: Must Apply & Be Accepted (Honors) 3 credits

This class introduces and describes the architecture, structures, functions, components, models and operations of computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media and operations are introduced. Students learn how to build simple LANs, perform basic configurations and troubleshoot problems of routers and switches, implement IP addressing schemes, and resolve common network issues. This career-oriented approach to learning networking empowers students to enter a career and further their education in the computer networking field.

Prerequisites and other notes: This course is the first course in a 6-credit completer program.

CISCO CYBERSECURITY II
Course: Must Apply & Be Accepted (Transcripted) 3 credits

This class delves deeper into network infrastructure and protocols, while developing foundational understanding of cybersecurity, and how it relates to information and network security. The course also introduces students to characteristics of cyber-crime, security principles, technologies, and procedures to defend networks. Students will implement and operate core security technologies including network security, cloud security, content security, endpoint protection and detection, as well as secure network access and enforcement.

Prerequisites and other notes: Completion of Cisco Networking Academy: Cybersecurity I. This course is the final class in a 6-credit completer program. All students in this class are required to take an industry-standard end of program assessment.

COLLISION REPAIR TECHNOLOGY – Six Credit Completer

COLLISION REPAIR TECHNOLOGY
Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted -II (Articulated) 3 credits

This program stresses the development of the skills and knowledge necessary to succeed in the field of collision repair and refinishing. Students will learn how to repair and replace automotive structural and non-structural components. This includes replacing panels, frame repair, refinishing, straightening metal, replacing glass, and paint preparation. Emphasis will also be placed on repairing plastic, estimating repair cost, welding, cutting, minor automotive service repair, and customization.

Prerequisites and other notes: These courses are part of the Collision Repair Technology completer program. At the end of the program, students take the Auto Service Excellence assessment – developed by Auto Service Excellence (ASE) in partnership with Automotive Youth Educational Systems (AYES), National Automotive Technicians Education Foundation (NATEF), and Skills USA. Certification Tests for Non-Structural Analysis and Damage Repair, Painting and Refinishing, and Structural Analysis and Damage Repair.

COMPUTER SCIENCE – Three Credit Completer (*Beginning January 2021 at comprehensive high schools)*

AP COMPUTER SCIENCE A
Course: 550719 (AP) 1 credit

This course introduces students to computer science through programming. Fundamental topics include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. Both object-oriented and imperative problem solving and design using

Java language are emphasized. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.

Prerequisites and other notes: Completion of either Exploring Computer Science or AP Computer Science Principles. This course is a level 9 AP course, and is part of a 3 credit completer program.

HONORS ADVANCED TOPICS IN COMPUTER SCIENCE
Course: 550418 (Honors) 1 credit

This course is designed to provide students with the opportunity to delve deeper into another programming language such as Python. Students will be able to build upon their prior programming knowledge and solidify their skills and ability through the creation of new programs and applications. The teacher and students may select a specific programming language to enhance prior learning or explore new applications.

Prerequisites and other notes: Completion of AP Computer Science A. This course is a level 8 course, and is part of a 3 credit completer program. Students are required to take end of program assessments.

HONORS COMPUTER SCIENCE CAPSTONE
Course: 550618 (Honors) 1 credit

This course is designed to integrate key learning from previous courses and have students apply them to real-world career situations through inquiry-based projects. Students will be able to pursue specific topics of interest to gain more in-depth knowledge and experience focused toward their career path. Assessments and certifications may include Google IT Specialist, Microsoft Technology Associate, or other certification.

Prerequisites and other notes: Completion of Honors Advanced Topics in Computer Science. This course is the final course in the Computer Science completer program. In lieu of this course, students may opt to take a Career Related Internship or Dual Enrollment – Computer Science as their final course in the completer programs.

C

COSMETOLOGY - Nine Credit Completer

PRINCIPLES AND PRACTICES OF COSMETOLOGY
(2nd Semester Junior Year)
Course: Must Apply & Be Accepted (Academic) 3 credits

This course provides an introduction to the field of cosmetology. Students develop and practice basic skills in cosmetology, develop a broad understanding of the variety of career options available to a licensed cosmetologist, and learn how science and math are fundamental aspects of the practice of cosmetology.

Prerequisites and other notes: Human Anatomy and Physiology is a recommended prerequisite that may be taken concurrently. All other course requirements for graduation should be completed by the end of grade 11. This course is part of the Cosmetology completer program.

ADVANCED COSMETOLOGY: THEORY AND APPLICATION
(1st Semester Senior Year)
Course: Must Apply & Be Accepted (Academic) 3 credits

This course allows students to develop and practice more advanced techniques in the field of cosmetology. Students will demonstrate knowledge and skill in the areas of esthetics, thermal hair procedures and hair color; and artificial nail techniques. They will apply foundation knowledge in science as it relates to cosmetology and practice technical and workplace skills in a school salon setting.

Prerequisites and other notes: Upon successful completion of the first 1,000 hours of the program and the instructor's recommendation, students may apply for the 1000-hour letter to be eligible to participate in up to 300 hours of a supervised work-based experience in a salon setting. This course is part of the Cosmetology completer program.

MASTERY OF COSMETOLOGY
(2nd Semester Senior Year)
Course: Must Apply & Be Accepted (Academic) 3 credits

This course provides students the opportunity to further refine and apply skills that support all aspects of the cosmetology industry. It will assist in preparing students to obtain employment and advance in the field of cosmetology upon passing the State Board of Cosmetologists' licensing examination.

Prerequisites and other notes: This course is part of the Cosmetology completer program. Students are required to take the State Board of Cosmetologists' licensing examination at the conclusion of this class.

C — CULINARY ARTS – AMERICAN CULINARY FEDERATION (ACF) – Six Credit Completer

CULINARY ARTS I – CULINARY BASICS
Course: Must Apply & Be Accepted (Articulated) 3 credits

This course is the introduction to the fundamental concepts and techniques in the profession of culinary arts. It provides hands-on clinical experience through school-based enterprises, giving the students the opportunity to develop the technical skills required in future culinary and baking courses as well as the foodservice industry. Students will be introduced to professional standards of the industry, safety and sanitation procedures, knife skills, including handling and care, cooking processes and procedures, product identification, vocabulary and terminology, industry equipment, recipe costing and quantity adjustments. Students participate in demonstration and group exercise to supplement their development of technical skills and knowledge.

Prerequisites and other notes: This course is part of the Culinary Arts completer program. At the end of this course, students take the American Culinary Federation (ACF) Culinary Arts Cook Level I exam.

CULINARY ARTS II – PROFESSIONAL COOKING
Course: Must Apply & Be Accepted (Articulated) 3 credits

This course continues to build on the foundation concepts and techniques from the Culinary Basics course. Students will be instructed on the fundamental concepts, techniques, theories, ingredients, and methodologies involved in the preparation of basic menu items. Students rotate through food handling methods and techniques, portion control, costing, production, plating and garnishing of soups, salads, starches, vegetables, and entrees. Students participate in demonstrations, group exercises and school-based enterprises to supplement the students' development of technical skills and knowledge.

Prerequisites and other notes: Culinary Arts I. This course is part of the Culinary Arts completer program. At the end of this course, students take the American Culinary Federation (ACF) Culinary Arts Cook Level 2 exam.

CULINARY ARTS II - PROFESSIONAL BAKING AND PASTRY
Course: Must Apply & Be Accepted (Articulated) 3 credits

Students in this course explore the fundamental concepts and techniques in baking. They will be instructed in the fundamentals of baking science, terminology, equipment, ingredients, weights and measurements, formula conversion and costing of recipes while maintaining the professional standards of the foodservice industry. Students will prepare a variety of baked goods including breads, rolls, pastries, cakes, tortes, pies, and cookies. Students participate in demonstrations, group exercise and school-based enterprises to supplement the students' development of technical skills and knowledge.

Prerequisites and other notes: Culinary Arts I. This course is part of the Culinary Arts completer program. Students are required to take the American Culinary Federation (AFC) Retail Commercial Baking exam.

C — DIGITAL FABRICATION AND MANUFACTURING – Three Credit Completer

HONORS ADVANCED DESIGN APPLICATIONS
Course: 553118 (Honors) 1 credit

This course is comprised of four core technology and engineering units: Manufacturing Technologies, Energy and Power Technologies, Construction Technologies, and Transportation Technologies. Students participating in the course learn concepts and principles in an authentic, project-based learning environment utilizing Science, Technology, Engineering, and Mathematics (STEM) principles through hands-on applications and research. Students will focus on the design of different technologies and investigate the product development process.

Prerequisites and other notes: This course is part of a 4-credit completer.

HONORS TECHNOLOGICAL DESIGN
Course: 553218 (Honors) 1 credit

Students in this course apply Science, Technology, Engineering, and Mathematics (STEM) concepts and skills to solve and innovate engineering designs. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. Emerging Technologies: Design, Research, and Develop; and Universal Design concepts will focus the design learning projects. Additive manufacturing and production technologies will be used to produce product prototypes.

Prerequisites and other notes: This course is part of a 4-credit completer.

INTRODUCTION TO 3D PRINTING
Course: 553319 (Transcripted) 1 credit

This course provides students with a hands-on immersive experience in digital design and fabrication by utilizing cutting edge, 3D printing technology. Students will obtain a rich understanding of what 3D printing is, how 3D printers work, and how this new technology is being used by both individuals and companies to revolutionize our world. Students will learn key historical facts that have shaped manufacturing, including the advantages, limitations, applications and economic implications. Students will acquire the knowledge, skills, tools, and understanding necessary to transform ideas into real physical objects.

Prerequisites and other notes: Successful completion of Advanced Design Applications and Technological Design are prerequisites. This course is the third course in the Digital Fabrication and Manufacturing completer. At the end of this course, students will take the Carroll Community College final exam for DFAB 101. Students who successfully meet the exam and credit requirements will be eligible for transcripted credits from Carroll Community College.

HONORS DIGITAL FABRICATION CAPSTONE
Course: 553318 (Honors) 1 credit

This is the final course in the Digital Fabrication and Manufacturing completer. Students will integrate key learning from previous courses and apply that knowledge and skills to real-world career situations through inquiry-based projects. Students will pursue specific topics of interest to gain more in-depth knowledge and experience focused on their career path. Projects and Portfolios will be presented for critique and review.

Prerequisites and other notes: This is an optional fourth course in the Digital Fabrication and Manufacturing completer program. In lieu of this course, students may opt to take an Honors Career Related Internship related to Digital Fabrication or a Digital Fabrication program-related Dual enrollment course. All courses in the Digital Fabrication and Manufacturing sequence are prerequisites to this capstone class.

C

DRAFTING – Six Credit Completer

DRAFTING
Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted -II (Articulated) 3 credits

This program is designed for study of technical communication. Through individual and group instruction, students are prepared to pursue drafting careers in engineering, surveying, construction, manufacturing, and other specialized fields. Projects completed by other career and technology departments are designed and drawn within this program. Frequently, students assist with community projects through design work and drawings. Students with personal interests are encouraged to develop individual projects. The program is intended to provide the student with the required technical skills for blueprint reading in any technical field and to prepare them for certification in AutoCad.

Prerequisites and other notes: These courses are part of the Drafting completer program. Students are required to take the AutoCad certification exam at Carroll Community College. Parents are responsible for student transportation.

EARLY CHILDHOOD EDUCATION – Five Credit Completer

HONORS CHILD AND ADOLESCENT DEVELOPMENT
Course: 401818 (Honors) 1 credit

This course focuses on human development from birth through adolescence. Emphasis is placed on theories of physical, cognitive and psychosocial development, the effect of heredity and the environment, the role of caregivers and the family, health and safety concerns, and contemporary issues. Students explore special challenges to growth and development. Students will have opportunities for guided observation of children from birth through adolescence in a variety of settings to help students further understand theories of human development. Students will work on the process of developing components of a working professional portfolio.

Prerequisites and other notes: This course is the first in a series of courses in two articulated completer programs, Education – Middle and High School and Early Childhood Education. It is a prerequisite to any other course~~s~~ in these programs and additional child development courses. It is open to students in grades 10-12.

CHILD DEVELOPMENT LABORATORY
Course: Must Apply & Be Accepted (Articulated) 1 credit

In this course, students will study children ages three to five, with the primary emphasis being placed on actual experience and observation of three and four year-old children in the preschool laboratory. Classroom and individualized study will increase knowledge of the development of children. Students will study childcare services, safety and health in the preschool, child guidance and discipline, operation of preschool, and the exceptional children.

Prerequisites and other notes: Open to students in grades 10-12 who have completed Honors Child and Adolescent Development. Thirty (30) hours of student Service-Learning credit may be earned. This course is part of the Early Childhood Education completer program.

ADVANCED LABORATORY - CHILD DEVELOPMENT
Course: Must Apply & Be Accepted (Articulated) 1 credit

This course is for students who show a special interest in child development. Advanced work is offered in areas such as childhood personality theories and behavior patterns. Emphasis is placed on expanding the students' knowledge of careers in child development. Topics of study include preschool operation, nurturing the components of intelligence, and school readiness. The laboratory preschool will provide students with an opportunity to develop and integrate preschool learning experiences. This program is recommended for students interested in early childhood and elementary education.

Prerequisites and other notes: Child Development Laboratory. Thirty (30) hours of student Service-Learning credit may be earned. This course is part of the Early Childhood Education completer program.

HONORS EARLY CHILDHOOD EDUCATION SEMINAR AND INTERNSHIP
Course: Must Apply & Be Accepted (Honors) 2 credits

This is the culminating course of the Early Childhood Education completer program. Students will have an opportunity to integrate content and pedagogical knowledge in an early childhood educational setting. They will extend and apply their knowledge about the young child and teaching in a classroom setting under the supervision of a mentor teacher. Students will finalize their working portfolio and present it for review and critique.

Prerequisites and other notes: Completion of Advanced Laboratory - Child Development, 2.5 overall GPA, and 94% attendance (previous semester). This course is part of the Early Childhood Education completer program. During this course, students will take a required end of program assessment. Student transportation is the responsibility of the parent or guardian.

EDUCATION – TEACHER ACADEMY OF MARYLAND (TAM) – Four Credit Completer

HONORS CHILD AND ADOLESCENT DEVELOPMENT
Course: 401818 (Honors) 1 credit

This course focuses on human development from birth through adolescence. Emphasis is placed on theories of physical, cognitive and psychosocial development, the effect of heredity and the environment, the role of caregivers and the family, health and safety concerns, and contemporary issues. Students explore special challenges to growth and development. Students will have opportunities for guided observation of children from birth through adolescence in a variety of settings to help students further understand theories of human development. Students will work on the process of developing components of a working professional portfolio.

Prerequisites and other notes: This course is the first in a series of courses in two articulated completer programs, Education – Middle and High School and Early Childhood Education. It is a prerequisite to any other courses in these programs and additional child development courses. It is open to students in grades 10-12.

HONORS TEACHING AS A PROFESSION
Course: 560318 (Honors) 1 credit

This course focuses on the profession of teaching – its history, purposes, issues, ethics, laws and regulations, role and qualifications. Emphasis is placed on identifying the current, historical, philosophical and social perspectives of American education, including trends and issues. Students will explore major approaches to human learning. Students will participate in guided observations and field experiences in multiple settings to help them assess their personal interest in pursuing careers in this field and to identify effective learning environments. Students will continue to develop the working professional portfolio.

Prerequisites and other notes: Honors Child and Adolescent Development. This course is part of the Education – Middle and High School completer program.

FOUNDATIONS OF CURRICULUM AND INSTRUCTION
Course: 560419 (Transcripted) 1 credit

This course explores curriculum delivery models in response to the developmental needs of all children. Emphasis is placed on the development of varied instructional materials and activities to promote learning, classroom management strategies, and a supportive classroom environment. Students will explore basic theories of motivation that increase learning. Students will participate in guided observations and field experiences to critique classroom lessons in preparation for developing and implementing their own. Students will continue to develop the working professional portfolio.

Prerequisites and other notes: Honors Teaching as a Profession (may be taken concurrently). This course is part of the Education – Middle and High School completer program.

HONORS EDUCATION ACADEMY INTERNSHIP
Course: 560518 (Honors) 1 credit
560528 (Honors) 2 credits

This is the culminating course of the Education Academy completer program. Students will have an opportunity to integrate content and pedagogical knowledge in an educational area of interest. They will extend and apply their working portfolio and present it for review and critique.

Prerequisites and other notes: Completion of Foundations of Curriculum and Instruction. Students must have an identified content area for teaching. 2.5 overall GPA in Academic Level classes, 94% attendance (previous semester). This course is part of the Education – Middle and High School completer program. During this course, students will take an end of program assessment. Parents are responsible for all student transportation.

ELECTRICAL CONSTRUCTION – Six Credit Completer

ELECTRICAL CONSTRUCTION

Course:	Must Apply & Be Accepted -I (Articulated)	3 credits
	Must Apply & Be Accepted -II (Articulated)	3 credits

Students study the generation and transmission of electricity as it applies to home and commercial wiring. Practical work is performed on the installation and functions of wiring apparatus, fixtures, motors, control panels, and insulating materials. Instruction in the electrical wiring code published by the National Board of Fire Underwriters is included in this program. Students are required to pass the National Construction Career Test (NCCT) titled Core-Introductory Craft Skills to achieve Level II status in construction programs. At the end of Level II, students will take the NCCT in Electrical.

Prerequisites and other notes: These courses are part of the Electrical Construction completer program. Students are required to pass the National Construction Career Test (NCCT) titled Academic Core-Introductory Craft Skills to achieve Level II status in construction programs. Students who successfully complete the program will take the Academic Electrical Level I National Construction Career Test (NCCT).

ENGINEERING – PROJECT LEAD THE WAY – Five Credit Completer

PRINCIPLES OF ENGINEERING

Course:	Must Apply & Be Accepted (Transcripted)	1 credit

This course provides an overview of engineering and engineering technology. Students develop problem-solving skills with real-world engineering problems. Through theory and practical hands-on experiences, students address the emerging social and political consequences of technological change. Topics include perspectives of engineering, design process, communication and documentation, engineering systems, materials and materials testing, thermodynamics, engineering for quality and reliability, and dynamics.

Prerequisites and other notes: This course is part of the Engineering completer program. Geometry is recommended as a prerequisite or may be taken concurrently. Students can take the college level exam at the end of this course. Students who successfully complete this course and the final exam may apply for transcripted credit from Rochester Institute of Technology (RIT) and University of Maryland Baltimore County (UMBC).

INTRODUCTION TO ENGINEERING DESIGN

Course:	Must Apply & Be Accepted (Transcripted)	1 credit

This class is a part of the Project Lead The Way Engineering Completer Program. This course emphasizes the development of a design. Students use computer software to produce, analyze, and evaluate models of project solutions. Students study the design concepts of form and function and use technology to translate conceptual design into reproducible products. Topics include application of the design process for problem-solving in a team setting, interpretation of sketches to design models, use of mass property calculations to evaluate a parametric model, and cost analysis, quality control, staffing, and packaging for product marketing.

Prerequisites and other notes: Geometry is the recommended prerequisite or may be taken concurrently. This course is part of the Engineering completer program. Students can take the college level exam at the end of this course. A math and science course is required in each year of high school. Students who successfully complete this course and the final exam may apply for transcripted credit from Rochester Institute of Technology (RIT) and University of Maryland Baltimore County (UMBC).

COMPUTER INTEGRATED MANUFACTURING

Course:	Must Apply & Be Accepted (Transcripted)	1 credit

This class is a part of the Project Lead The Way Engineering Program. Using solid modeling techniques, this course teaches the fundamentals of computerized manufacturing technology. Students use 3-D computer software to solve design problems. They assess their solutions through mass property analysis, modify their designs, and use prototyping equipment to produce 3-D models. The course includes computer modeling, computer numerical control, computer-aided manufacturing robotics, and the use of flexible manufacturing systems.

Prerequisites and other notes: Introduction to Engineering Design and Principles of Engineering are prerequisites Algebra II or higher is recommended as a prerequisite or may be taken concurrently. A math and science course is required in each year of high school. This course is part of the Engineering completer program. Students can take the college level exam at the end of this course. Students who successfully complete this course and the final exam may apply for transcripted credit from Rochester Institute of Technology (RIT) and University of Maryland Baltimore County (UMBC).

DIGITAL ELECTRONICS
Course: Must Apply & Be Accepted (Transcripted) 1 credit

This class is a part of the Project Lead The Way Engineering Program. This course introduces students to applied digital logic, a key element of careers in engineering and engineering technology. This course explores the smart circuits found in the electronics we use on a daily basis. Students use industry-standard computer software in testing and analyzing digital circuitry. They design circuits to solve problems, export their designs to a printed circuit auto-routing program, and use appropriate components to build their designs. Topics include analog and digital fundamentals, number systems and binary addition, logic gates and functions, Boolean algebra and circuit design, decoders, multipliers, and demultipliers.

Prerequisites and other notes: Principles of Engineering, Introduction to Engineering Design, and Algebra II or higher are recommended as prerequisites or may be taken concurrently. A math and science class is required in each year of high school. This course is part of the Engineering completer program. Students can take the college level exam at the end of this course. Students who successfully complete this course and the final exam may apply for transcripted credit from Rochester Institute of Technology (RIT) and University of Maryland Baltimore County (UMBC).

HONORS ENGINEERING DESIGN AND DEVELOPMENT
Course: Must Apply & Be Accepted (Honors) 1 credit

This class is the capstone course of the Project Lead The Way Engineering Completer Program. Students will apply what they have learned in academic and prior Project Lead The Way courses as they complete challenging, self-directed projects. Students work in teams to design and build solutions to authentic engineering problems. A community partner engineer will mentor and consult with the teams. Students keep journals of notes, sketches, calculations, and research. Teams present final research papers and defend their projects to an expert panel.

Prerequisites and other notes: Computer Integrated Manufacturing, Digital Electronics, and Trigonometry/Pre-Calculus or higher are recommended as a prerequisite or may be taken concurrently. A math and science class is required in each year of high school.

CIVIL ENGINEERING AND ARCHITECTURE
Course: (Transcripted) 1 credit

This course is part of the Project Lead The Way Engineering Program. In this specialization course, students learn important aspects of building and site design, and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3-D architectural design software.

Prerequisites and other notes: Introduction to Engineering Design and Principles of Engineering are prerequisites; Algebra II or higher is recommended as a prerequisite or may be taken concurrently. A math and science course is required in each year of high school. This course is part of the Engineering completer program. Students may take the college level exam at the end of this course. This course is one of two specialized courses in the Project Lead The Way Engineering Program.

C

FINANCIAL SERVICES – NATIONAL ACADEMY FOUNDATION (NAF)
ACADEMY OF FINANCE – Six Credit Completer

HONORS FINANCE ACADEMY I
Course: 352518 (Honors) 1 credit

This course includes content and skills to prepare students for further studies and careers in the world of finance. Topics will include functions of market economies both domestic and international, modern securities organizations, banking, credit, and the insurance industries.

Prerequisites and other notes: Honors Accounting I is a prerequisite or may be taken concurrently. Managing Personal Finance Using Excel is a recommended prerequisite. Honors Finance Academy I is a prerequisite to the required paid summer internship that is a one of the requirements of the National Academy of Finance. This course is part of the Financial Services completer program.

FINANCE ACADEMY II
Course: 352419 (Transcripted) 1 credit

This course includes content and skills to prepare students for further studies and careers in the world of finance. Topics will include concepts in the areas of financial planning and international economics and finance.

Prerequisites and other notes: Accounting II is a prerequisite or may be taken concurrently. Honors Finance Academy I is a prerequisite for this course and taking an entry level college course in finance, which is one of the requirements of the National Academy of Finance. This course is part of the Financial Services completer program.

HON**ORS ACADEMY OF FINANCE INTERNSHIP**
Course: 352418 (Honors) 1 credit
352528 (Honors) 2 credits

This internship is an extension of the Academy of Finance curriculum. Student knowledge and skills are further developed and challenged in a business environment. This relevant, enriching educational experience exposes the student to a broad array of workplace skills that are part of an individualized training plan.

Prerequisites and other notes: The internship may be taken following the completion of junior year classes in Academy of Finance. This class is a part of the Financial Services completer and is a requirement in order to receive a National Academy Foundation (NAF) certification.

C

FOOD SERVICE AND HOSPITALITY MANAGEMENT (PROSTART) – Four Credit Completer

FOOD SERVICE PROFESSIONAL I
Course: Must Apply & Be Accepted (Articulated) 1 credit

This course provides an introduction to the food service and hospitality industry. Students develop and demonstrate skills in safe and sanitary food handling and preparation techniques. Students learn to prepare a variety of foods and develop a broad understanding of the variety of career options available in this industry.

Prerequisites and other notes: Introduction to Foods is a prerequisite. This is the first course of a four credit Career and Technical Education Food Service and Hospitality Management completer program. Students will have the opportunity to begin to accrue hours to meet a 400-hour internship requirement through ProStart and earn the ServSafe credential. All students enrolled in this course must take the National Restaurant Association Educational Foundation (NRAEF) Level I end-of-course exam.

FOOD SERVICE PROFESSIONAL II
Course: Must Apply & Be Accepted (Articulated) 1 credit

This course provides instruction on creating menus and demonstrating various types of restaurant service as students continue to prepare a variety of foods. Students will apply purchasing techniques and demonstrate an understanding of inventory monitoring and control.

Prerequisites and other notes: Food Service Professional I is a prerequisite. Principles of Business and Administration and Management is a prerequisite or may be taken concurrently. This is the second course of a four credit Career and Technical Education Food Service and Hospitality Management completer program. Students will have the opportunity to continue to accrue hours in work-based learning. All students enrolled in this course must take the National Restaurant Association Educational Foundation (NRAEF) Level II end-of-course exam.

HONORS PROSTART INTERNSHIP
Course: Must Apply & Be Accepted (Honors) ½ credit
Must Apply & Be Accepted (Honors) 1 credit
Must Apply & Be Accepted (Honors) 2 credits

Students will have the opportunity to integrate content and knowledge of food service and hospitality through an individualized training plan. Student knowledge will be extended through practical application under the supervision of food service and hospitality professionals

Prerequisites and other notes: Completion of Food Service Professional II and Principles of Business Administration and Management. This is the culminating course in a 4 credit completer program. To earn ProStart certification, students must complete a total of 400 hours in internships. Student transportation is the responsibility of the parent or guardian.

HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION (HVAC) – Six Credit Completer

HVAC: HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION

Course:	Must Apply & Be Accepted -I (Articulated)	3 credits
	Must Apply & Be Accepted -II (Articulated)	3 credits

This course is designed to give students basic knowledge and skill in the development of the principles and practices of the air conditioning and refrigeration trade. This course will include the following: sizing equipment, duct layout, installation, repair and maintenance of oil, gas, electric and heat pump forced-air heating systems. Also residential and commercial air conditioning and light commercial refrigeration units are included. Students will learn the proper use and care of tools, parts and test equipment, and how to analyze, adjust, troubleshoot and test such systems. Related study will include math, measuring instruments, blueprint reading, basic electricity, motors, and instruction to trade occupations. Students are required to pass the National Construction Career Test (NCCT) titled Core-Introductory Craft Skills to achieve Level II status in construction programs.

Prerequisites and other notes: These courses are part of the HVAC completer program. Students are required to pass the National Construction Career Test (NCCT) titled Academic Core-Introductory Craft Skills to achieve Level II status in construction programs. At the end of Level II, students will take the NCCT Academic in HVAC exam and EPA certification.

HEAVY EQUIPMENT AND TRUCK TECHNOLOGY – Six Credit Completer

HEAVY EQUIPMENT AND TRUCK TECHNOLOGY

Course:	Must Apply & Be Accepted -I (Articulated)	3 credits
	Must Apply & Be Accepted -II (Articulated)	3 credits

In Heavy Equipment and Truck Technology, students will develop the knowledge and skills necessary to take the ASE Medium/Heavy Truck Technician exams for Suspension and Steering, Brakes, Preventive Maintenance, Diesel Engines and Electrical/Electronics. Students develop diagnostic, technical, and academic skills through classroom instruction and hands-on applications. Through the theory and real-world experiences, students master the concepts and the ability to identify and perform necessary repair tasks utilizing the latest techniques and applications on a variety of equipment and Class 4 through Class 8 trucks and tractors. In addition, this course will address personal and environmental safety practices associated with clothing, respiratory protection, eye protection, entry level medium/heavy truck service technology principles and practices, hand tools, power tools/equipment, safety principles, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations. At the end of the program, students take Automotive Service Excellence (ASE) Certification Tests (or approved end of course assessments) for Diesel Engines, Suspension and Steering, Brakes, Electrical/Electronic Systems, and Preventative Maintenance Inspection.

Prerequisites and other notes: These courses are part of the Heavy Equipment and Truck Technology completer program. At the end of the program, students are required to take an end of course assessment - Heavy Equipment Maintenance and Repair.

HOMELAND SECURITY AND EMERGENCY PREPAREDNESS - CRIMINAL JUSTICE/LAW ENFORCEMENT – Four Credit Completer

HONORS FOUNDATIONS OF HOMELAND SECURITY AND EMERGENCY PREPAREDNESS

Course:	Must Apply & Be Accepted (Honors)	1 credit

Homeland security and emergency preparedness guidelines, concepts, and action plans are key concepts in this course. Emphasis will be placed on unique aspects of public safety and public health. Various methodologies for intelligence gathering and dissemination will

be examined. Students will identify various local, state, and federal assets and prepare an action plan that includes initial notification, emergency response (on and off scene), and recovery.

Prerequisites and other notes: This course is the foundation course for both options in the Homeland Security and Preparedness completer program.

HONORS ADMINISTRATION OF JUSTICE I
Course: Must Apply & Be Accepted (Honors) 1 credit

This class will introduce students to multiple aspects of criminal justice and law enforcement. Students will explore the criminal process, various forces that impact law enforcement, and the rights of citizens. Students will understand the difference between juvenile and adult justice, and classifications of different crimes. This class will give students a general knowledge needed for students to enter various law enforcement careers at the federal, state, and local levels.

Prerequisites and other notes: Foundations of Homeland Security and Emergency Preparedness is a prerequisite or may be taken concurrently. This course is a part of the Criminal Justice/Law Enforcement option in the Homeland Security and Emergency Preparedness completer program.

ADMINISTRATION OF JUSTICE II
Course: Must Apply & Be Accepted (Transcripted) 1 credit

This class will expand upon students' knowledge of criminal justice and law enforcement. Students will be introduced to evidence collection, analysis, and forensic examination. The role of law enforcement officials as a first responder will also be discussed as well as the duties of police officers. Students will explore a range of careers in law enforcement.

Prerequisites and other notes: Administration of Justice I is a prerequisite or may be taken concurrently. This course is a part of the Criminal Justice/Law Enforcement option in the Homeland Security and Emergency Preparedness completer program.

HOMELAND SECURITY AND EMERGENCY PREPAREDNESS CAPSTONE
Course: Must Apply & Be Accepted (Transcripted) 1 credit

This is the final course in the Homeland Security and Emergency Preparedness completer. Students will apply the knowledge and skills acquired in previous courses in authentic ways to complete an individualized senior project. The project will involve intense problem-solving and research in a student selected career-focused area. Experiences may include but are not limited to research projects, extensive portfolios and work-based learning opportunities. Projects and portfolios will be presented for review and critique.

Prerequisites and other notes: This is the capstone course in all Homeland Security and Emergency Preparedness completer programs. All courses in the option's course sequence are prerequisites.

C

HOMELAND SECURITY AND EMERGENCY PREPAREDNESS – GEOGRAPHIC INFORMATION SYSTEMS AND TECHNOLOGY (GIST) – Four Credit Completer

HONORS FOUNDATIONS OF HOMELAND SECURITY AND EMERGENCY PREPAREDNESS
Course: Must Apply & Be Accepted (Honors) 1 credit

Homeland security and emergency preparedness guidelines, concepts, and action plans are key concepts in this course. Emphasis will be placed on unique aspects of public safety and public health. Various methodologies for intelligence gathering and dissemination will be examined. Students will identify various local, state, and federal assets and prepare an action plan that includes initial notification, emergency response (on and off scene), and recovery.

Prerequisites and other notes: This course is the foundation course for both options in the Homeland Security and Preparedness completer program.

HONORS SPATIAL TECHNOLOGY AND REMOTE SENSING (S.T.A.R.S.) COURSE 1 AND 2
Course: Must Apply & Be Accepted (Honors) 1 credit

This class will introduce students to Geographic Information System (GIS) and Remote Sensing (RS) technology through academic study and applied instruction. This course provides the foundational geospatial knowledge for the transcripted GIS "College in the High School" option through subsequent courses in the sequence. Students will use the same data, imagery, and software that federal, state,

and local level governmental agencies use to study their state, county, and school. Students will also learn the skills required to work on and/or build a Geographic Information Systems final project. Through hands-on instruction students will learn skills ranging from introductory digital mapping concepts to image analysis and network analysis. In this course students are introduced to each skill with a real-world application and led in the problem-solving process. Follow-up applied practice application will direct the student to apply acquired skills to cases in the community using curricular and open-source data.

Prerequisites and other notes: Foundations of Homeland Security and Emergency Preparedness is a prerequisite. This course is a part of the Geographic Information Systems and Technology (GIST) option in the Homeland Security Emergency Preparedness completer program.

SPATIAL TECHNOLOGY AND REMOTE SENSING (S.T.A.R.S.) COURSE 3 AND 4
Course: Must Apply & Be Accepted (Transcripted) 1 credit

The STARS 3 and 4 curriculum aligns with Harrisburg University GSTC 140: Introduction to Geographic Information Systems (GIS). Four (4) college credits are possible when successfully completed with Homeland Security and Preparedness Capstone course. The presentation of geospatial data is both an art and a science. The student will learn to use GIS to produce high quality maps that expose complex spatial information and relationships in a clear and easy-to understand display. Cartographic concepts and techniques, used to create not only hard copy printed maps but also prepare cartographic data for modern devices such as web pages and digital media, are explored. The class emphasizes laboratory work and a final project that uses GIS from an initial map concept, through data collection and analysis, to a final product. Students will choose final projects designed to apply geospatial skills.

Prerequisites and other notes: Spatial Technology and Remote Sensing Course 1 and 2 are a prerequisite. This course is part of the Geographic Information Systems and Technology (GIST) completer program.

HOMELAND SECURITY AND EMERGENCY PREPAREDNESS CAPSTONE

Course: Must Apply & Be Accepted (Transcripted) 1 credit

This is the final course in the Homeland Security and Emergency Preparedness completer. Students will apply the knowledge and skills acquired in previous courses in authentic ways to complete an individualized senior project. The project will involve intense problem-solving and research in a student selected career-focused area. Experiences may include but are not limited to research projects, extensive portfolios and work-based learning opportunities. Projects and portfolios will be presented for review and critique.

Prerequisites and other notes: This is the capstone course in all Homeland Security and Emergency Preparedness completer programs. All courses in the option's course sequence are prerequisites.

C

INTERACTIVE MEDIA PRODUCTION – Four Credit Completer

HONORS PRINCIPLES OF ART, MEDIA AND COMMUNICATION
Course: 553518 (Honors) 1 credit

This course provides students an understanding of all aspects of the Arts, Media and Communication industry. Students will examine the opportunities and requirements of the major career pathways in this industry including: Communication and Broadcast Technologies, Multimedia Production, Graphic Design and Print Communication.

Prerequisites and other notes: This is the first course in a 4-credit completer.

HONORS INTERACTIVE MULTIMEDIA PRODUCTION
Course: Must Apply & Be Accepted (Honors) 1 credit

This course further develops student mastery of media design and the interactive media production process. Students will advance their knowledge and skills in media design and production through project planning and product development. Students will demonstrate the use of multiple tools and modalities in the production process.

Prerequisites and other notes: This course is part of a 4-credit completer. Principles of Art, Media and Communication must be successfully completed prior to this course.

ADVANCED INTERACTIVE MULTIMEDIA PRODUCTION
Course: Must Apply & Be Accepted 2 credits

Students will advance their knowledge and skills in multimedia design and production through project planning and product development. Students will demonstrate the use of multiple tools and modalities in the production process. Students will design, code, build, test and troubleshoot basic custom programs for multimedia applications and create web applications with advanced interactive components. Emphasis will be placed on group project development and the development of a layered portfolio.

Prerequisites or other notes: This is one of two options for the final course of a 4-credit completer. Interactive Media Production must be successfully completed prior to this course.

ADVANCED SIMULATION AND GAMING
Course: Must Apply & Be Accepted 2 credits

This course will focus on interactive media design, simulation and gaming using appropriate project management techniques, industry specific tools and skills for a wide range of applications. Students will: design, code, build, test and troubleshoot basic custom programs for simulation and gaming; create gaming applications with advanced interactive components; and effectively adapt visual communication strategies and styles to specific audiences. Emphasis will be placed on group project development and individual portfolio development.

Prerequisites and other notes: This is one of two options for the final course of a 4-credit completer. Interactive Media Production must be successfully completed prior to this course.

C

MASONRY – Six Credit Completer

MASONRY
Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted -II (Articulated) 3 credits

This program provides training in the skills necessary to lay brick, block, veneer, and dry-stack stone, flagstone, ceramic tile, and some concrete work. Layout work, bonds, patterns, blueprint reading, estimating, reinforced masonry, and specifications are also studied. Training is structured according to local requirements and is designed to prepare the student for gainful employment as an advanced apprentice.

Prerequisites and other notes: These courses are part of the Masonry completer program. Students are required to pass the National Construction Career Test (NCCT) titled Academic Core-Introductory Craft Skills to achieve Level II status in construction programs. At the end of Level II, students will take the NCCT Academic Level I in Masonry.

C

PRINT PRODUCTION – Four Credit Completer

HONORS PRINCIPLES OF ART, MEDIA AND COMMUNICATION
Course: 553518 (Honors) 1 credit

This course provides students an understanding of all aspects of the Arts, Media and Communication industry. Students will examine the opportunities and requirements of the major career pathways in this industry including: Communication and Broadcast Technologies, Multimedia Production, Graphic Design and Print Communication.

Pre-requisite and other notes: This is the first course in a 4-credit completer.

PRINT PRODUCTION
Course: Must Apply & Be Accepted (Articulated) 3 credits

Students learn the basic skills needed for a career in printing or graphic design. Students use Adobe Illustrator, Adobe Photoshop, and Adobe InDesign software to prepare publications. Design, layout, prepress, press, digital file prep, binding, and finishing is the focus. Students design products such as packages, advertisements, logos, booklets, books, brochures, and signs.

Prerequisites and other notes: Honors Principles of Art, Media and Communication (1 credit) or Honors Digital Media and Design (1 credit. This course is part of the Print Production completer program. At the end of the program, students are required to take the PrintED exams titled Graphic Communications and Digital File Preparation/Digital Rile Output.

C

TEXTILES AND FASHION CAREERS - Six Credit Completer

TEXTILES AND FASHION CAREERS
Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted -II (Articulated) 2 credits

This course provides students with an opportunity to experience a variety of opportunities and practice skills in the textiles and fashion career areas. Students will participate in learning activities associated with fashion design, pattern making, textiles design, garment construction, fashion merchandising, interior design, upholstery, and retail careers. Special attention will be given to graphic design software and use of computer-aided design to create flat patterns and fashion designs.

Prerequisites and other notes: These courses are part of the Textiles and Fashion Careers completer program.

TEXTILES AND FASHION CAREERS CAPSTONE
Course: Must Apply & Be Accepted (Articulated) 1 credit

This is the final course in the Textiles and Fashions Careers program. Students will apply the knowledge and skills acquired in previous courses in authentic ways to design, construct, and present their own fashion line at the season ending fashion show.

Prerequisites and other notes: This course is part of the Textiles and Fashion Careers completer program.

C

VIDEO PRODUCTION – Four Credit Completer

HONORS PRINCIPLES OF ART, MEDIA AND COMMUNICATION
Course: 553518 (Honors) 1 credit

This course provides students an understanding of all aspects of the Arts, Media and Communication industry. Students will examine the opportunities and requirements of the major career pathways in this industry including: Communication and Broadcast Technologies, Multimedia Production, Graphic Design and Print Communication.

Pre-requisite and other notes: This is the first course in a 4-credit completer.

VIDEO PRODUCTION
Course: Must Apply & Be Accepted (Articulated) 3 credits

Students learn the basic skills for a career in television or corporate video production. Topics covered include lighting and sound for video, video graphics, animation, and script writing.

Prerequisites and other notes: Honors Principles of Art, Media and Communication (1). This course is part of the Video Production completer programs.

C

WELDING TECHNOLOGY – Six Credit Completer

WELDING TECHNOLOGY

Course: Must Apply & Be Accepted -I (Articulated) 3 credits
Must Apply & Be Accepted II(Articulated) 3 credits

This program is a study and application of the process in which metal is melted and fused together by heat producing methods. The program is designed to train students in the basic knowledge and skills of the welding trade. Instruction will focus on using oxyacetylene, electric arc, TIG (Tungsten Inert Gas), MIG (Metal Inert Gas), and CNC (Computer Numerically Controlled) robotic plasma cutting equipment. Brazing, soldering, cutting, hard surfacing, and job fabrication from sketches and blueprints are covered. Individual and group projects are undertaken.

Prerequisites and other notes: These courses are part of the Welding Technology completer program. Students are required to pass the National Construction Career Test (NCCT) titled Academic Core-Introductory Craft Skills to achieve Level II status in construction programs. At the end of Level II, students will take the American Welding Society (AWS) certification tests.

ENGLISH LANGUAGE ARTS

Suggested Course Sequence

Grade 9	Grade 10	Grade 11	Grades 12
▪ English 9 ▪ Electives	▪ English 10 ▪ Electives	▪ English 11 ▪ AP English Language and Composition ▪ Electives including AP Capstone: Seminar	▪ English 12 ▪ AP English Language and Composition ▪ AP English Literature and Composition ▪ AP Capstone: Seminar ▪ AP Capstone: Research ▪ Dual Enrollment English ▪ Electives

ENGLISH 9

Course: 050111 (Basic) 1 credit
050116 (Academic) 1 credit

HONORS ENGLISH 9

Course: 050018 (Honors) 1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards. Students develop reading, writing, language, listening, and speaking skills through integrated instructional approaches using informational and literary texts. Integrated instructional approaches include a focus on active reading, process writing, academic vocabulary, and grammatical structures. Through integrated and collaborative activities, students learn to respond to a text, compose in a variety of modes, control language, and evaluate the content, organization, and language use of texts. This course fulfills one credit of the State graduation requirements in English.

ENGLISH 10

Course: 050211 (Basic) 1 credit
050216 (Academic) 1 credit

HONORS ENGLISH 10

Course: 050218 (Honors) 1 credit

The outcomes of this course are aligned with Maryland College and Career-Ready Standards. Students will master the skills of reading, writing, language, listening, and speaking skills introduced in English 9. The course will continue its focus on integrated instructional approaches and will include collaborative activities. This course fulfills one credit of the State graduation requirements in English.

Prerequisites and other notes: English 9

ENGLISH 11
Course: 050411 (Basic) 1 credit
050416 (Academic) 1 credit
HONORS ENGLISH 11
Course: 050418 (Honors) 1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards. Learning activities include a variety of response methods to print and non-print media which help students to extend and refine creative, research, and critical analysis strategies. Students explore in depth the devices authors use to reveal literal and metaphorical meaning, and to achieve purpose and effect. Students learn how to use and recognize language which effectively communicates experiences, ideas, and opinions and to appreciate the value of their own and others' personal experiences and the validity of drawing upon them for inspiration and learning. Students learn a variety of rhetorical strategies to use in writing academic essays and work to achieve academic competence in clarity, coherence, unity, organization, diction, and language use. This course fulfills one credit of the State graduation requirements in English.

Prerequisites and other notes: English 10

ENGLISH 12
Course: 050516 (Academic) 1 credit
HONORS ENGLISH 12
Course: 050518 (Honors) 1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards. Students learn to respond to and write on literal and interpretative levels from a variety of initial perspectives that focus on the techniques authors use to manipulate the effect of text. In addition, students will learn a variety of rhetorical strategies for writing academic and research essays, including timed responses. Students will also achieve competence in academic language usage resulting in greater clarity, coherence, and unity in their writing and speaking. This course fulfills one credit of the State graduation requirements in English. Students in basic and academic level classes will also have additional learning experiences that will prepare them for a college and career readiness re-assessment.

Prerequisites and other notes: English 11

AP LANGUAGE AND COMPOSITION
Course: 052919 (AP) 1 credit

AP Language and Composition is a college-level course designed to engage students in independent and collaborative learning activities that will help them to gain academic proficiency in rhetorical analysis and evaluation, reading, writing, research, and linguistics. Learning activities focus upon writing timed responses to a variety of language related selections and topics. Students work to achieve style in essays that are rhetorically sound and that achieve a high degree of linguistic accuracy. Students explore the following topics in depth: strategies of persuasion and argumentation; linguistic theory, philosophy, and history; methods of grammatical analysis; and the relationships among logic, reading, writing, and thinking. Students are encouraged to sit for the College Board's Advanced Placement English Language and Composition Examination. This course fulfills one credit of the State graduation requirements in English.

Prerequisites and other notes: Students must complete English 10 prior to enrollment in AP Language and Composition.

AP LITERATURE AND COMPOSITION
Course: 052819 (AP) 1 credit

AP Literature and Composition is a college-level course designed to engage students in independent and collaborative learning activities that will help them to gain academic proficiency in critical analysis and evaluation, reading, writing, and research. Learning activities focus upon writing timed critical responses to a variety of literary selections and topics. Students work to achieve style in essays that are rhetorically sound and that achieve a high degree of linguistic accuracy. Students explore in depth the devices authors use to reveal literal and metaphorical meaning, and to achieve purpose and effect. Students are encouraged to sit for the College Board's Advanced Placement English Literature and Composition Examination**.** This course fulfills one credit of the State graduation requirements in English.

Prerequisites and other notes: Students must complete English 11 or AP Language and Composition prior to enrollment in AP Literature and Composition.

CREATIVE WRITING
Course: 053606 (Academic) ½ credit

Creative Writing requires students to improve their writing, speaking, reading, listening, language, and literature skills. Students will learn how to use language which effectively communicates experiences, ideas, and emotions. Students will learn to appreciate the value of their personal experiences and the validity of drawing upon them for inspiration and meaning. Students will learn how

language gives meaning and structure to an everchanging world. This course may not be used to meet the State graduation requirements in English.

MYTHOLOGY
Course: 056906 (Academic) ½ credit

Students explore the myths from various cultures. Students participate in collaborative learning activities to understand how the myths are reflected in the literature, customs, architecture, and religion of the ancient and modern cultures. Students will continue to develop reading and writing skills, as well as critical and creative thinking skills and strategies. This course may not be used to meet the State graduation requirements in English.

PUBLIC SPEAKING
Course: 057606 (Academic) ½ credit

Public Speaking offers student activities and experiences that help to develop skills in oral communication, critical thinking, accessing information, and writing. Students understand and use the stages of speaking for a variety of purposes, including personal, career, and social. Emphasis is on achieving clarity and confidence when speaking to others. This course may not be used to meet the State graduation requirements in English.

HONORS FILM AND LITERATURE
Course: 053008 (Honors) ½ credit

This honors level English elective course is designed to provide students with an overview of the history of film, the devices and techniques that filmmakers use to create meaning, the process of filmmaking, and the transformation of literature into film. While emphasis will naturally be given to the critical study of film, students will also analyze selected literary works which have made the print-to-cinema transition for a better understanding of literary and cinematic rhetorical strategies and techniques. Assessment activities may include creative writing and critical writing activities, research projects, and the creation of original cinematic works of various lengths and genres. This course may not be used to meet the State graduation requirements in English.

Prerequisites and other notes: Successful completion of English 9.

YEARBOOK PRODUCTION
Course: 082116 (Academic) 1 credit

Yearbook Production provides students with journalistic skills and the ability to apply those skills to actual yearbook production. Units of study include: concept, thematic development, section development, reporting and writing, headlines, photos and captions, design, graphics, customer service, and business management. This course may not be used to meet the state graduation requirement in English.

Honors Yearbook Production is an advanced course designed for yearbook editors and business managers. These leaders will organize and maintain the yearbook ladder, supervise daily production, maintain and oversee a coverage calendar, promote campaigns, record and organize book and ad sales, facilitate ad sales with both businesses and parents, coordinate portrait schedules and picture collection, act as liaison between staff members and advisor.

Prerequisites and other notes: Ten (10) service-learning hours for ½-credit course and twenty (20) service-learning hours for 1-credit course may be earned. Academic - Enrollment in the course is dependent upon completion of a yearbook application. Honors - Successful completion of Yearbook Production as well as recommendation of the yearbook advisor are prerequisite.

LITERACY
Course: 050711 (Basic) 1 credit

This course focuses on basic reading skills, functional reading, vocabulary and comprehension skills. Entrance to this class should be on an assigned basis.

Prerequisites and other notes: This course may not be used to meet the State graduation requirements in English. This course may be repeated for credit.

AP CAPSTONE: SEMINAR
Course: 052619 (AP) 1 credit

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using in inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple

sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

Prerequisites and other notes: Successful completion of English 10. AP Capstone: Seminar may be taken concurrently with AP English Language and Composition. AP Capstone: Seminar, if taken in the senior year, may be used to meet the state graduation requirements in English.

AP CAPSTONE: RESEARCH
Course: 052719 (AP) 1 credit

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000 – 5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

Students who earn scores of 3 or higher in AP Seminar and AP Research receive the AP Seminar and Research Certificate™. Students who *also* earn scores of 3 or higher on four additional AP exams of their choosing at any time in high school receive the AP Capstone Diploma™.

Prerequisites and other notes: Successful completion of AP Capstone: Seminar. AP Capstone: Research, if taken in the senior year, may be used to meet the state graduation requirements in English.

FAMILY AND CONSUMER SCIENCES

HONORS CHILD AND ADOLESCENT DEVELOPMENT
Course: 401818 (Honors) 1 credit

This course focuses on human development from birth through adolescence. Emphasis is placed on theories of physical, cognitive and psychosocial development, the effect of heredity and the environment, the role of caregivers and the family, health and safety concerns, and contemporary issues. Students explore special challenges to growth and development. Students will have opportunities for guided observation of children from birth through adolescence in a variety of settings to help students further understand theories of human development. Students will work on the process of developing components of a working professional portfolio.

Prerequisites and other notes: This course is the first in a series of courses in two articulated completer programs, Education – Middle and High School and Early Childhood Education. It is a prerequisite to any other courses in these programs and additional child development courses. It is open to students in grades 10-12.

CHILD DEVELOPMENT LABORATORY
Course: Must Apply & Be Accepted (Articulated) 1 credit

In this course, students will study children ages three to five, with the primary emphasis being placed on actual experience and observation of three and four year-old children in the preschool laboratory. Classroom and individualized study will increase knowledge of the development of children. Students will study childcare services, safety and health in the preschool, child guidance and discipline, operation of preschool, and the exceptional children.

Prerequisites and other notes: Open to students in grades 10-12 who have completed Honors Child and Adolescent Development. Thirty (30) hours of student service-learning credit may be earned. This course is part of the Early Childhood Education completer program.

ADVANCED LABORATORY - CHILD DEVELOPMENT
Course: Must Apply & Be Accepted (Articulated) 1 credit

This course is for students who show a special interest in child development. Advanced work is offered in areas such as childhood personality theories and behavior patterns. Emphasis is placed on expanding the students' knowledge of careers in child development.

Topics of study include preschool operation, nurturing the components of intelligence, and school readiness. The laboratory preschool will provide students with an opportunity to develop and integrate preschool learning experiences. This program is recommended for students interested in early childhood and elementary education.

Prerequisites and other notes: Child Development Laboratory. Student will have the opportunity to earn thirty (30) service-learning hours during this course. This course is part of the Early Childhood Education completer program.

INTRODUCTION TO FOODS
Course: 402506 (Academic) ½ credit

This course is designed to help students analyze how knowledge and skills related to nutrition and food affect the well-being of individuals, family and society. Key concepts include food selection, composition and nutrition, meal planning, food preparation, safety and sanitation, current and emerging technology, resource management and career exploration. Students will make decisions and solve problems related to food choices through critical and creative thinking and apply techniques of successful food preparation.

ADVANCED FOODS
Course: 403306 (Academic) ½ credit

Advanced Foods is a course that focuses on managing meals, using consumer information and resources to understand and evaluate food trends, and developing an in-depth knowledge of food selection and preparation. Its sociocultural perspective examines both United States regional foods and the intercultural cuisines of the world. Students will extend knowledge and skills and strive to increase personal food literacy.

Prerequisites and other notes: Introduction to Foods.

FINANCIAL LITERACY
Course: 406106 (Academic) ½ credit

Financial Literacy is a course based on national standards in economics and personal finance that is designed as part of the transition from high school into the adult world and independent living. Through the use of the decision-making process, active learning, and reflection, students will gain knowledge and skills in the areas of income, money management, consumer rights and responsibilities, spending, credit, saving, and investing.

Prerequisites and other notes: This course meets the graduation requirement in Financial Literacy. This course is open to 11th and 12th grade students only.

FINE ARTS

Completed credit in any Fine Arts course may be applied to the Fine Arts Graduation requirements unless otherwise indicated.

ART
Suggested Course Sequence

Grade 9	Grade 10	Grade 11	Grade 12
▪ Art I	▪ Honors Art II	▪ Honors Level Art Elective courses	▪ Honors Level Art courses or Advanced Placement Art courses
	▪ Honors Level Art Elective courses	▪ Honors Level Art courses or Advanced Placement Art courses	▪ Honors Level Art courses or Advanced Placement Art courses

ART I
Course: 600016 (Academic) 1 credit

Art I is open to all high school students interested in taking art for the first time. Art I is the first course in a sequence of art offerings. This course introduces the students to studio art, art criticism, aesthetics, and arts historical and social context. Students will respond to elegant problems concerning social issues, environmental, and multi-cultural, as they express themselves through artistic voice. A review of the art elements and principles of design are the starting point of this course. Studio Experiences will be explored through units of study emphasizing creating expression and visual culture. Students may be required to purchase sketchbooks. Basic supplies

for learning each technique will be supplied; however, the expense of more advanced materials, if desired, will be the responsibility of each student.

HONORS ART II
Course: 600618 (Honors) 1 credit

Honors Art II is designed to extend artistic concepts introduced in Art I through additional studio experiences. This course stresses the development of student as artist through artistic skill and knowledge, and the application to a student's own artwork and personal exploration. This course will reference artists and exemplars of Art I with newly presented artists, works, and the people and cultures that produced them for in-depth study. Experiences in drawing, printmaking, painting, design, and three-dimensional art will be offered. Emphasis is placed on artistic voice, personal expression, and building student capacity toward developing artistic opinions and the ability to respond to those opinions. Students will create works of art and develop personal criteria for assessing them. Students may be required to purchase sketchbooks. Basic supplies for learning technique will be supplied; however, the expense of more advanced materials, if desired, will be the responsibility of each student.

Prerequisites and other notes: Successful completion of Art I (or permission of the instructor) is a prerequisite.

HONORS CERAMICS
Course: 603018 (Honors) 1 credit

Ceramics is designed for the student who would like to further his/her interest in the various aspects of pottery construction and design. The course will include hand-building techniques, kiln firing procedures, instruction on the potter's wheel, mold-making, clay preparation, and art appreciation. The course is intended to give the interested student an in-depth study of the potter's art. Successful completion of this course will develop the student's foundation portfolio in preparation for Advanced Placement Studio Art. Students should expect some financial responsibility for advanced art materials.

Prerequisites and other notes: Successful completion of Art I or recommendation of the art instructor is a prerequisite.

HONORS DRAWING
Course: 610008 (Honors) ½ credit

Drawing I is specifically designed for the advanced art student. It explores the elements of lines on a college level. Students will study concepts involving positive and negative approaches toward line, rendering, photo-realism, progressive composition, and the effects of light and shadow on form. Portrait studies, landscapes, still life and object rendering will be examined at great length. A variety of drawing tools will be explored such as pastels, charcoal, pen and ink, colored pencils, crayons, and drawing pencils. This course will benefit those who wish to develop their skills in drawing that are necessary for success in the studio or workplace. Students will have the opportunity to build a portfolio of two-dimensional artwork (useful to college or art school admission). Successful completion of this course will develop the student's foundation portfolio in preparation for Advanced Placement Studio Art. Students should expect some financial responsibility for advanced art materials.

Prerequisites and other notes: Successful completion of Art I or recommendation of the art instructor is a prerequisite.

HONORS DIGITAL DESIGN IN PHOTOGRAPHY
Course: 601318 (Honors) 1 credit

Honors 2-D Digital Design is an upper level art course which focuses on the creation of a digital design and photography portfolio. Photography will be presented through historical and contemporary examples. Various traditional and non-traditional photo processes will be experienced. Digital photography principles including camera operation, composition, lighting, and personal expression through photography will be explored. Art elements and design principles will be demonstrated in a digital format. Photo manipulation and software will be presented to assist students in enhancing and/or manipulating photographs. Students should expect some financial responsibility for advanced art materials.

Prerequisites and other notes: Successful completion of Art I or recommendation of the art instructor is a prerequisite.

HONORS MIXED MEDIA
Course: 602418 (Honors) 1 credit

Mixed Media is intended for students who wish to extend experiences in three-dimensional art processes such as sculpture using a variety of media. Students will create individual projects using clay, wood, metal or other appropriate materials. Sculptural skills learned in Ceramics and in Two and Three Dimensional Art will be employed in the production of artwork. Successful completion of this course will develop the student's foundation portfolio in preparation for Advanced Placement Studio Art. Students should expect some financial responsibility for advanced art materials.

Prerequisites and other notes: Successful completion of Art I or recommendation of the art instructor is a prerequisite.

HONORS PAINTING
Course: 611008 (Honors) ½ credit

Painting I is designed for advanced art students wishing to refine their painting skills. A wide variety of techniques for using watercolor, tempera, and acrylics will be explored. Application of paint, composition, and color theory will be discussed. This course will allow students to build a portfolio of painted work. Successful completion of this course will develop the student's foundation portfolio in preparation for Advanced Placement Studio Art. Students should expect some financial responsibility for advanced art materials.

Prerequisites and other notes: Successful completion of Art I or recommendation of the art instructor is a prerequisite.

HONORS STUDIO ART
Course: 601818 (Honors) 1 credit

Studio Art emphasizes personal development in the fine arts. Students will continue experiences in drawing, painting, sculpture, printmaking and processes. Concepts of critical and aesthetic thinking skills learned in previous art courses will be applied to exemplar works and to students' own art works. Students will be encouraged to use these skills in assessment of their own works. Studio Art is intended for students who exhibit a strong interest in art and wish to extend their skills and knowledge. Drawing activities will be assigned as homework throughout the course. Successful completion of this course will develop the student's foundation portfolio in preparation for Advanced Placement Studio Art. Students should expect some financial responsibility for advanced art materials.

Prerequisites and other notes: Successful completion of Art I or recommendation of the art instructor is a prerequisite.

AP STUDIO ART: DRAWING
Course: 601419 (AP) 1 credit

This course enables students to prepare a portfolio for submission to the AP Studio Drawing Exam. AP Studio Art develops the personal commitment to visual expression through rigorous problem-solving and demonstration of material and concept mastery. Each of the portfolios asks the student to demonstrate a depth of investigation and process of discover through the concentration section (Section II). In the breadth section (Section III), the student is asked to demonstrate a serious grounding in visual principles and material techniques. The quality section (Section I) permits the student to select the works that best exhibit a synthesis of form, technique, and content. This course provides students with the means to construct a college-level visual art portfolio in accordance with MSDE learner outcomes and advanced placement Studio Art standards. Focus will include drawing, 2-D design, and 3-D design. Students are encouraged to submit for the College Board's Advanced Placement Studio Art examination. Students should expect some financial responsibility for advanced art materials. AP Studio Drawing is designed to address a very broad interpretation of drawing issues and media. Students will explore light and shade, line quality, rendering of form, composition, surface manipulation, and illusion of depth as drawing issues that may be addressed through a variety of means, which could include painting, printmaking and mixed media. Abstract as well as observational works may also be explored to demonstrate drawing competency.

Prerequisites and other notes: Successful completion of one of the Honors Level Art Electives or recommendation of the art instructor is a prerequisite.

AP STUDIO ART: 2D DESIGN
Course: 601619 (AP) 1 credit

This course enables students to prepare a portfolio for submission to the AP Studio 2D Design Exam AP Studio Art develops the personal commitment to visual expression through rigorous problem-solving and demonstration of material and concept mastery. Each of the portfolios asks the student to demonstrate a depth of investigation and process of discovery through the concentration section (Section II). In the breadth section (Section III), the student is asked to demonstrate a serious grounding in visual principles and material techniques. The quality section (Section I) permits the student to select the works that best exhibit a synthesis of form, technique, and content. This course provides students with the means to construct a college-level visual art portfolio in accordance with MSDE learner outcomes and advanced placement Studio Art standards. Students are encouraged to submit for the College Board's Advanced Placement Studio Art examination. Students should expect some financial responsibility for advanced art materials. AP Studio 2D Design is intended to address two-dimensional design issues. Students will make purposeful decisions about how to use the elements and principles of art in an integrative way. The visual elements (line, shape, color, value, texture, space), help guide artists in making decisions about how to organize elements on a picture plane in order to communicate content. This course will explore the principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, figure/ground relationships), articulated through the art elements in a representational or abstract way.

Prerequisites and other notes: Successful completion of one of the Honors Level Art Electives or recommendation of the art instructor is a prerequisite.

DRAMA

DRAMA I
Course: 060506 (Academic) ½ credit

Drama I is an introduction to theatre. In this course the students will study early history of theatre, theatre terminology, and basic performance skills. The students will participate in theatre games, mine and pantomime, improvisation, and scene study. The memorization of a short scene and the review of a live stage performance will be required in this course.

Prerequisites and other notes: Public performance may be an expectation in this course.

DRAMA II
Course: 061006 (Academic) ½ credit

Drama II is a continuation of the study of theatre. In this course the students will examine character development through scene study and monologues, auditioning techniques, and video production. Drama II will also focus on several aspects of technical theatre such as makeup and publicity. The memorization of short scenes and monologues, and the review of a live stage performance will be required in this course.

Prerequisites and other notes: Drama I. Public performance may be an expectation in this course.

DRAMA III
Course: 062006 (Academic) ½ credit

Drama III is a continuation of the study of theatre. In this course the students will further examine character development through scene study using modern and classical works. Students will participate in auditioning for a musical, directing, play writing, children's theatre, and video production. The memorization of short scenes and monologues, and the review of a live stage performance will be required in this course.

Prerequisites and other notes: Drama II. This course may be repeated for elective credit. Public performance may be an expectation in this course.

TECHNICAL THEATER I
Course: 060606 (Academic) ½ credit

Students will learn the technical and business aspects of theatre production. In Tech I, students will receive an overview of the various elements of technical theatre including scenic, costumes, sound, light, and production. Career opportunities in each related field of technical theatre will also be discussed. Students will participate in a variety of instructional activities to demonstrate understanding in the various areas of technical theatre.

Prerequisites and other notes: Drama I. This course may be repeated for elective credit. Public performance may be an expectation in this course.

MUSIC
Suggested Course Sequence

Grade 9	Grade 10	Grade 11	Grade 12
Students Interested in Band			
▪ Band I	▪ Honors Wind Ensemble ▪ or Honors Jazz Ensemble ▪ Honors Music Theory	▪ Honors Wind Ensemble ▪ or Honors Jazz Ensemble ▪ and AP Music Theory ▪ or Honors Music Theory	▪ Honors Wind Ensemble ▪ or Honors Jazz Ensemble ▪ and AP Music Theory ▪ or Honors Music Theory
Students Interested in Orchestra			
▪ Orchestra	▪ Honors Orchestra ▪ Honors Music Theory	▪ Honors Orchestra ▪ and AP Music Theory ▪ or Honors Music Theory	▪ Honors Orchestra ▪ and AP Music Theory ▪ or Honors Music Theory
Students Interested in Chorus			
▪ Chorus	▪ Honors Festival Chorus ▪ or Honors Vocal Ensemble ▪ Honors Music Theory	▪ Honors Festival Chorus ▪ or Honors Vocal Ensemble ▪ and AP Music Theory ▪ or Honors Music Theory	▪ Honors Festival Chorus ▪ or Honors Vocal Ensemble ▪ and AP Music Theory ▪ or Honors Music History

Grade 9	Grade 10	Grade 11	Grade 12
Students Interested in Non-performance Music Study			
▪ Electronic Music	▪ Electronic Music ▪ Honors Music Theory	▪ Electronic Music ▪ Honors Music Theory ▪ or AP Music Theory	▪ Electronic Music ▪ Honors Music Theory ▪ or AP Music Theory

In all music performance classes students use compositions of noted composers, to explore units of study that focus on critical analysis, aesthetic thinking, musical form and style, artistic expression of various cultures, and the social and intellectual influence affecting music as an art. Students must be enrolled in band front or an instrumental performance ensemble to be eligible to participate in marching band. Students should expect some financial responsibility for proper performance attire and proper care of the instruments they use.

BAND I CONCERT BAND
Course: 650016 (Academic) 1 credit
HONORS WIND ENSEMBLE
Course: 650418 (Honors) 1 credit

Two levels of band are offered, Band I and Wind Ensemble. Wind Ensemble utilizes materials more technically demanding than those for Band I. Wind Ensemble is designed for the student of advanced ability level. All band classes focus on the study of band literature as well as transcriptions of orchestral literature. Students will advance in technical skill, stylistic understanding of historical background, and aesthetic awareness through the study and performance of quality music literature. The instrumental music teacher will place students in the organization which, in his/her best judgment, will provide the most beneficial educational experience for the individual. Performances at school and community events are an integral part of the program. Participation in the public performances is a required component of this course. Instruction in the honors level performing organizations will include foundations in music theory to prepare students for participation in Advanced Placement Music Theory.

Prerequisites and other notes: Band may be repeated for credit. Participation in this class is required for students to be eligible should they choose to participate in All-County and All-State organizations. Performance attire as well as additional rehearsals and performances may be an expectation.

HONORS JAZZ ENSEMBLE
Course: 651718 (Honors) 1 credit

This activity provides the opportunity for the study of dance band, jazz, and popular music. The stylistic elements of performance as well as some of the important artists and music of the jazz and popular field will be studied. The Jazz Ensemble is made up of qualified students selected on the basis of performing skill and required instrumentation. Instruction in the honors level performing organizations will include foundations in music theory to prepare students for participation in Advanced Placement Music Theory.

Prerequisites and other notes: Permission of the band director is required prior to selecting this activity. Jazz Ensemble may be repeated for credit. Performance attire as well as additional rehearsals and performances may be an expectation.

ORCHESTRA
Course: 652416 (Academic) 1 credit
HONORS ORCHESTRA
Course: 652418 (Honors) 1 credit

Two levels of orchestra are offered, Orchestra and Honors Orchestra. Honors Orchestra utilizes materials more technically demanding than those for Orchestra. Orchestral activities focus on the study of music through orchestral performance. All qualified orchestral string instrumentalists are assigned to this group. Wind and percussion players are selected on the basis of qualifying auditions by the instrumental music teacher. Honors Orchestra is for students who have successfully completed one year of high school orchestra and is an honors level performing course. Instruction in the honors level performing organizations will include foundations in music theory to prepare students for participation in Advanced Placement Music Theory.

Prerequisites and other notes: Orchestra may be repeated for credit. Participation in this class is required for students to be eligible should they chose to participate in All-County and All-State organizations. Performance attire as well as additional rehearsals and performances may be an expectation.

CHORUS
Course: 654816 (Academic) 1 credit
HONORS FESTIVAL CHORUS
Course: 655718 (Honors) 1 credit

Two levels of chorus are offered, Chorus and Honors Festival Chorus. Honors Festival Chorus utilizes materials more technically demanding than those for Chorus. Honors Festival Chorus is designed for the student of advanced vocal ability level. All chorus classes

focus on the study of choral literature. Students will advance in technical skill, stylistic understanding of historical background, and aesthetic awareness through the study and performance of quality music literature. The chorus music teacher will place students in the organization, which, in his/her best judgment, will provide the most beneficial educational experience for the individual. Performances at school and community events are an integral part of the program. Participation in the public performances is a required component of this course. Instruction in the honors level performing organizations will include foundations in music theory to prepare students for participation in Advanced Placement Music Theory.

Prerequisites and other notes: Successful completion of Chorus or teacher recommendation is a prerequisite for honors level chorus classes. Honors level chorus classes may be repeated for credit. Performance attire as well as additional rehearsals and performances may be an expectation.

HONORS VOCAL ENSEMBLE
Course: 656018 (Honors) 1 credit

Vocal Ensemble provides an opportunity to be organized into ensembles on a regular basis and explore some of the significant vocal ensemble music. This course may include Madrigal group, women's and men's ensembles, and other ensembles appropriate to the needs and abilities of the students. Instruction in the honors level performing organizations will include foundations in music theory to prepare students for participation in Advanced Placement Music Theory.

Prerequisites and other notes: Vocal Ensemble is by audition only. This course may be repeated for credit. Performance attire as well as additional rehearsals and performances may be an expectation.

ELECTRONIC MUSIC
Course: 650916 (Academic) 1 credit

Students will learn how to use the computer, music synthesizer, and music software to listen, perform, and compose music. They will experience increases in computer knowledge, musical notation and composition and digital sequencing. Students will have the opportunity to create multimedia presentations using music, images, and video.

Prerequisites and other notes: This course may be taken in sequence with Honors Music Theory. This course may be repeated for credit.

HONORS MUSIC THEORY
Course: 653618 (Honors) 1 credit

Students gain academic proficiency in reading and writing music notation, scales and intervals, basic harmony, basic melody, and form. Successful completion of the course will provide an understanding of melody, harmony, rhythm, and form, thereby equipping the students to better understand existing music and to compose music using the principles of music theory as a guide. Training on notation software will be included when available. By the end of the course the student will compose a short original composition utilizing four-part chorale texture and score it for a mixed quartet of instruments. This course will provide the students foundations in music theory in preparation for Advanced Placement Music Theory.

Prerequisites and other notes: Students should complete 1 credit of music course work or recommendation of instructor.

AP MUSIC THEORY
Course: 653519 (AP) 1 credit

AP Music Theory is an advanced level course designed to engage students in learning activities that will help them to achieve the outcomes measured by the College Board's Advanced Placement Music Theory Examination. The design of the AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. These abilities will be developed through knowledge in aural skills, sight singing skills, written skills, compositional skills, and analytical skills. Students are encouraged to sit for the College Board's Advanced Placement Music Theory examination.

Prerequisites and other notes: Students must successfully complete an Honors level performance course or Honors level Music Theory.

HEALTH

HEALTH I
Course: 300006 (Academic) ½ credit

This course encourages students to develop skills, attitudes, and behaviors that will enable them to make the responsible decisions that promote healthful behaviors. Issues that will be included are: mental and emotional health; alcohol, tobacco, and other drugs; personal and consumer health; Family Life and Human Sexuality; safety and injury prevention; nutrition and fitness; and disease prevention and control.

Prerequisites and other notes: This ½ credit course is required for graduation and is designed for coeducation classes.

Note to Parents: A letter will be sent home from your child's health educator explaining the Family Life and Human Sexuality component of the Health I program. This letter will include a permission slip which must be returned to school for your child to participate.

HEALTH II
Course: 302006 (Academic) ½ credit

This elective course provides an additional opportunity for students to pursue their interests in health. Through research and projects, students will explore various health topics including but not limited to, body systems, diseases, safety, nutrition, human sexuality and current health issues. Instruction will be offered in CPR/AED First Aid certification. Attention will be given to health-related career opportunities.

Prerequisites and other notes: Successful completion of Health I, and may only be taken by grade 10, 11, or 12 students.

MATHEMATICS

Suggested Course Sequence

Grade 9	Grade 10	Grade 11	Grade 12
Students Completing Honors Algebra I in 8th Grade			
• Honors Geometry	• Honors Algebra II	• Honors Trigonometry/Pre-Calculus	• AP Calculus AB • AP Calculus BC • AP Statistics
Students Completing 8th Grade Math			
• Conceptual Algebra	• Algebra I	• Geometry	• Technical Mathematics or Algebra II
• Algebra I	• Geometry	• Algebra II	• Higher Level Math
Notes: • Students on track to meet the University System of Maryland graduation requirements must take and pass Algebra II or a course beyond Algebra II during the final year of high school • Following successful completion of Algebra II, students may also elect to take the following courses: Trigonometry/Pre-calculus, Probability and Statistics, AP Statistics, Honors Calculus, AP Calculus			

CONCEPTUAL ALGEBRA
Course: 201316 (Academic) 1 credit

In this course, students will strengthen their algebraic foundations in solving linear equations and inequalities in one variable, applying graphical and algebraic methods to analyze and solve systems of linear equations in two variables, and developing fluency writing and interpreting real world application problems. Students will perform operations with polynomials including addition, subtraction, multiplying, and factoring. In addition, they will compare/contrast linear, exponential, and quadratic functions both graphically and algebraically.

Prerequisites and other notes: This course will fulfill one of the three required graduation credits for mathematics.

ALGEBRA I
Course: 201811 (Basic) 1 credit
201816 (Academic) 1 credit
HONORS ALGEBRA I
201918 (Honors) 1 credit

Algebra I deepens and extends the understanding of linear and exponential relationships by comparing and contrasting them with each other and with quadratic functions and by applying linear models to data. Students will engage in methods for analyzing, solving, and applying quadratic functions, as well as solve systems of equations involving linear, exponential, and quadratic functions. In addition, students will create and solve equations and inequalities and examine data sets in one and two variables. Students will expand their experience with functions to include more specialized functions – absolute value, step, and piecewise defined functions. The Standards for Mathematical Practices will be applied throughout the course to help students experience mathematics as a coherent, useful, and logical subject that requires students to make sense of problem situations. This curriculum is aligned to the Maryland College and Career Ready Standards. Students will take the Maryland Assessment for Algebra I at the completion of this course.

GEOMETRY
Course: 203911 (Basic) 1 credit
203916 (Academic) 1 credit
HONORS GEOMETRY
Course: 203918 (Honors) 1 credit

Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Transformations are emphasized, and students draft geometric constructions and formally analyze their conclusions. Students extend their experience with two dimensional and three dimensional objects, build on their work with triangles, circles and other polygons, while continuing their study of quadratics by connecting the geometric and algebraic definitions.

Prerequisites and other notes: Algebra I.

TECHNICAL MATHEMATICS
Course: 201616 (Academic) 1 credit

The Technical Math course is designed to deepen students' math understanding of different branches of math by focusing on application skills that are used in current trades. This course is intended for students interested in pursuing a trade or two-year college program. The math concepts in this course are presented completely within the context of practical on-the-job applications, making math tangible and relevant. The practical math used in the trades includes mathematical concepts from algebra and geometry with applications relevant to these topics. Students will review applications of operations with integers, fractions, decimals, order of operations, exponents, multi-step equations, and plane geometry. Additionally, students will analyze real-world problems using statistical models as well as the application of triangle trigonometry, unit conversions, variation, and measurement of geometric figure. Special attention has been given to on-the-job math skills by using a wide variety of practical applications in the context of real world problems. This course will include students preparing for performance assessments that are often part of job applications, apprenticeships, the civil service exam, and other assessments related to specific trades and the workforce.

Prerequisites and other notes: Algebra I and Geometry.

ALGEBRA II
Course: 202616 (Academic) 1 credit
HONORS ALGEBRA II
Course: 202618 (Honors) 1 credit

This course is designed to prepare students for college and career readiness as they explore polynomial, rational, radical, exponential, and logarithmic functions through multiple representations and applications. Students will build on their prior knowledge of solving linear, quadratic, and exponential equations and the effects of transformations on graphs of diverse functions.

Prerequisites and other notes: Algebra I and Geometry.

PROBABILITY AND STATISTICS
Course: 205016 (Academic) 1 credit

The (.5) course is designed for students desiring to learn how to organize and interpret quantitative data and to understand concepts of probability. Applications in other content areas will be stressed. Topics included in the full credit course (1.0) are broken into four main categories: Exploratory Analysis, Planning a Study, Probability, and Statistical Inference. Focus will be on basic skills, statistical interpretation, and real world applications. Students will complete a culminating course project and be sufficiently prepared to take Statistics in college.

Prerequisites and other notes: Algebra II highly recommended.

AP STATISTICS
Course: 205019 (AP) 1 credit

Topics included in this course are broken into four main categories: Exploratory Analysis, Planning a Study, Probability, and Statistical Inference. Students are expected to sit for the AP Statistics Examination. Possible college credit can be earned with a score of 3, 4, or 5 on the examination. Students are encouraged to sit for the College Board's Advanced Placement Statistics Examination.

Prerequisites and other notes: Algebra II.

TRIGONOMETRY/PRE-CALCULUS
Course: 204516 (Academic) 1 credit
HONORS TRIGONOMETRY/PRE-CALCULUS
Course: 204518 (Honors) 1 credit

This course is intended for college-bound students who will use higher level mathematic as they continue their education after high school. Topics studied include trigonometric functions, radian measure, graphing trigonometric functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, law of sines and cosines, vectors, conic sections, polar and parametric equations, sequences and series, and an introduction to limits.

Prerequisites and other notes: Algebra II (Level 8 highly recommended for Honors Trig/Pre-Calculus). Algebra II and Trigonometry/Pre-Calculus should be taken in back-to-back semesters or in back-to-back years to preserve the needed prerequisite skills.

HONORS CALCULUS
Course: 205718 (Honors) 1 credit

In this course students explore the concepts of limits, derivatives, and integrals and prepare for further studies in calculus. Limits are essential since they provide the foundation for both differential and integral calculus. Students will learn the interpretations, techniques, and applications of both derivatives and integrals.

Prerequisites and other notes: Trigonometry / Pre-calculus.

AP CALCULUS AB
Course: 205319 (AP) 1 credit

In this course, students study graphs, functions, limits, derivatives, and integrals, and prepare for further studies in calculus. Students will learn the interpretations, techniques, and applications of both derivatives and integrals. Much work will be done with graphing calculators. Students are expected to sit for the College Board's Advanced Placement Calculus AB Examination.

Prerequisites and other notes: Honors Trigonometry / Pre-calculus or Honors Calculus.

AP CALCULUS BC
Course: 205219 (AP) 1 credit

Much emphasis is placed on preparing for the AP Calculus BC test. In addition to applying concepts from Calculus, students investigate advanced techniques of integration, polar and parametric equations, and infinite series. Topics such as Taylor, Power, and Maclaurin series will be emphasized. Students are expected to sit for the College Board's Advanced Placement Calculus BC Examination.

Prerequisites and other notes: AP Calculus AB.

PHYSICAL EDUCATION

Suggested Course Sequence

Grade 9	Grade 10	Grade 11	Grade 12
▪ Physical Education I (required)	▪ Team Sports ▪ Individual/Dual Sports ▪ Weight Training ▪ Personal Fitness ▪ Gymnastics	▪ Team Sports ▪ Individual/Dual Sports ▪ Weight Training ▪ Personal Fitness ▪ Gymnastics	▪ Team Sports ▪ Individual/Dual Sports ▪ Weight Training ▪ Personal Fitness ▪ Gymnastics

PHYSICAL EDUCATION I
Course: 250006 (Academic) ½ credit

Physical Education I is required as ½ credit towards the CCPS Physical Education 1.0 graduation requirement and is the prerequisite for all other PE courses. Emphasis will be placed on concepts of personal fitness and knowledge to achieve and maintain a healthy level of physical fitness. Students will participate in a variety of sport theme activities that can be used for lifetime recreation and personal fitness. The following is a listing of sport theme offerings: Fitness (Warm-ups, Plyometrics, Walking/Jogging, Heart Rate Fitness), Throwing and Catching (Ultimate Frisbee, Volleyball, Flag Football, Soccer, Basketball), Striking (Tennis, Pickle ball, Badminton, Golf, Table Tennis), and Speed/Timing /Accuracy (Archery, Bowling).

Prerequisites and other notes: Recommended for all grade 9 students.

ADAPTED PHYSICAL EDUCATION
Course: 252406 (Academic) ½ credit

This course is designed to provide individualized and group learning experiences for students with special needs. Students in this class must have an IEP with stated goals and objectives for physical education, a section 504 plan, or special permission. This course may be taken in place of Physical Education I if it provides the least restrictive environment for the special needs of the student. This course may be repeated for credit.

Prerequisites and other notes: Admittance to the course is determined by the school counselor, physical education staff, and special education staff.

GYMNASTICS AND TUMBLING
Course: 255406 (Academic) ½ credit

This course is designed for students with beginning, intermediate, and advanced skills in balance beam, floor exercise, horizontal bars, parallel bars, rings, side horse, trampoline, uneven bars, and vaulting. Spotting and safety will be emphasized at all levels.

Prerequisites and other notes: Successful completion of Physical Education I. This course may be repeated for credit.

INDIVIDUAL/DUAL SPORTS
Course: 250806 (Academic) ½ credit

Previously learned concepts and skills from Physical Education I provide the foundation for this course. Emphasis will be placed on personal improvement of sport-specific movement patterns, strategies, and rules. Both skill-related and health-related components of physical fitness will be emphasized. Student will develop their skill competencies, participate in Individual/Dual sports, and work towards achievement of personal fitness levels. Students within a class will be performing at varying levels of competency. The following is a listing of Individual/Dual sports activities:

Archery	Handball	Tennis
Badminton	Pickle Ball	Bowling
Golf	Table Tennis	Horseshoes

Prerequisites and other notes: Successful completion of Physical Education I. This course may be repeated for credit.

PERSONAL FITNESS
Course: 257006 (Academic) ½ credit

Students will be educated in the areas of health, fitness, and wellness to give them the self-maintenance skills, physical skills and knowledge base to help them adopt a healthy lifestyle. The following is a listing of Personal Fitness activities:

Body Toning	Low Impact Aerobics	Tae-Bo
Flexibility Exercises	Walking Program	Pilates
High Impact Aerobics	Step Aerobics	Yoga
Jogging Program	Strength Conditioning	

Prerequisites and other notes: Successful completion of Physical Education I. This course may be repeated for credit.

TEAM SPORTS
Course: 251006 (Academic) ½ credit

Previously learned concepts and skills from Physical Education I provide the foundation for this course. Emphasis will be placed on personal improvement of sport-specific movement patterns, strategies and rules. Both skill-related and health-related components of physical fitness will be emphasized. Students will develop their skill competencies, participate in Team Sports and work towards achievement of personal fitness levels. Students within a class will be performing at varying levels of competency. The following is a listing of Team Sports activities:

Basketball	Indoor Soccer	Softball
Field Hockey	Lacrosse	Volleyball
Flag Football	Mass Games	Speedball
Floor Hockey	Soccer	Ultimate Frisbee

Prerequisites and other notes: Successful completion of Physical Education I. This course may be repeated for credit.

WEIGHT TRAINING
Course: 253006 (Academic) ½ credit

This course is designed for the student who wants to improve and maintain a physical fitness level which will allow him/her to produce physically to maximum proficiency. This course will include endurance, strength, agility, and aerobic activities.

Prerequisites and other notes: Successful completion of Physical Education I. This course may be repeated for credit.

SCHOOL COUNSELING PROGRAM

HONORS CAREER RELATED INTERNSHIP

Course:	Must Apply & Be Accepted (Honors)	½ credit
	Must Apply & Be Accepted (Honors)	1 credit
	Must Apply & Be Accepted (Honors)	2 credits
	Must Apply & Be Accepted (Honors)	3 credits

This course provides twelfth grade students with the opportunity to obtain actual work experience in a specific career field based on a completer or major area of study. Program or major prerequisites, an application, and an interview must be completed prior to the selection of this course. Students will complete a training plan geared to their career goals and will be placed in a local business for a nine or eighteen week period in a paid or unpaid experience.

Prerequisites and other notes: An overall 2.5 GPA, 94% attendance (previous semester), and coursework completed in a Pathways To Careers completer or major related to the internship experience. Student transportation is the responsibility of the parent or guardian. This course may be taken as the final course in the Accounting and Business Administration and Management completer programs in lieu of Honors Business Education Capstone.

CONCURRENT ENROLLMENT

Course:	Must Apply & Be Accepted (Non-Credit)	0 credit
	Must Apply & Be Accepted (Academic)	½ credit
	Must Apply & Be Accepted (Academic)	1 credit
	Must Apply & Be Accepted (Academic)	2 credits

This course provides students who meet prerequisites the opportunity to attend a pre-approved program at an institution of higher learning and/or career program that does not provide college credit during the school day. Students seeking concurrent enrollment must have a parent conference for post-secondary planning with their counselor.

Prerequisites and other notes: The student must complete all Student Service requirements and maintain 94% attendance during the 9 weeks preceding the application. In addition, the student must have completed or be enrolled at the home school in courses meeting graduation requirements, including those courses designed to satisfy the requirement of earning 4 credits beyond grade 11.

DUAL ENROLLMENT - General

Course: Must Apply & Be Accepted (Transcripted) ½ credit
Must Apply & Be Accepted (Transcripted) 1 credit

Dual enrollment provides high school juniors and seniors the opportunity to enroll in college level courses through local colleges while enrolled in a Carroll County public high school. Dually enrolled students may take college courses for which they have met the prerequisite requirements and for which they have received authorization by both a parent/guardian and a designated school official. Approval for participation is dependent upon the student's GPA, service-learning hours, and attendance requirements. Courses may be selected from either the general education component or the career completer courses of CCPS state-approved programs offered at the College. Courses not eligible for the dual enrollment program include summer courses and non-credit bearing courses. Upon successful completion of the course(s), the student will receive college credit. The grade report will be forwarded at the conclusion of each semester directly to the high school. Students must make an appointment with their school counselor and have a parent conference to review the educational plan, discuss course options at the college, fees, and obtain appropriate paperwork. Prior to the student enrolling in the dual enrollment program, a parent conference will be held with the school counselor for post-secondary planning. The student/parent must complete the Dual Enrollment Application. Dual enrollment courses will be reflected on the student's high school transcript and the final grade will be calculated into the high school GPA. College courses at the 100 level or above will receive .5 high school credit for 1-2 college course credits and 1.0 high school credit for 3-5 college course credits. Dual enrollment courses will be weighted as a transcripted/AP course and may count toward graduation requirements. Students must be enrolled in a total of four credits for the semester (college and minimum of 1 CCPS credit combined). Select dual enrollment courses are also offered at the high school location. Procedures and the application process still apply.

PEER FACILITATING

Course: 800006 (Academic) ½ credit

This course is designed for students who are interested in developing leadership skills which will permit them to recognize and intervene in problems identified in their school. Peer Facilitators may be requested to work one-on-one or in small groups with other students on school, peer, and family related concerns. Peer Facilitators may also do classroom presentations on conflict resolution. Students selected must evidence satisfactory academic achievement, as well as emotional maturity and leadership potential. Students must exemplify, model, and maintain appropriate behavior. Students will work under the direct supervision of a school counselor. Grading will be on a pass/fail basis. Students must apply and be selected as peer facilitators.

Prerequisites and other notes: Students must complete a summer peer facilitating training program and at least one mid-year training during the school year. Students may earn ten (10) service-learning hours for the ½ credit course and twenty (20) hours for the 1 credit course.

will also develop an understanding of the need for vision in goal-setting, personally and professionally.

SCIENCE

Suggested Course Sequence

Grade 9	Grade 10	Grade 11	Grade 12
• Conceptual Physics	• Chemistry I • Biology	• Science Electives	• Science Electives
Or Suggested Honors Track			
• Conceptual Physics • Chemistry I	• Biology • Chemistry II	• Science Electives	• Science Electives

CONCEPTUAL PHYSICS
Course: 155316 (Academic) 1 credit
HONORS CONCEPTUAL PHYSICS
Course: 155318 (Honors) 1 credit

In this course, students use inquiry to construct a conceptual understanding of motion, forces, energy, waves, electricity, and magnetism. Learning experiences provide students with opportunities to apply physical science ideas in order to explain and predict a variety of phenomena. Students use science and engineering practices and relate crosscutting concepts of science to predict an object's motion; explain how energy is transferred and conserved; and explain how waves are used to communicate information.

CHEMISTRY I
Course: 151616 (Academic) 1 credit
HONORS CHEMISTRY I
Course: 151618 (Honors) 1 credit

This course provides students the opportunity to use inquiry to explore scientific phenomena centered on the structure and properties of matter, chemical reactions, space systems, Earth's systems, and the regulation of weather and climate. Learning experiences blend these core ideas with science and engineering practices and crosscutting concepts to support students in constructing knowledge that can be applied to other science disciplines and used to construct explanations related to both physical science and earth and space science.

Prerequisites and other notes: Conceptual Physics.

BIOLOGY
Course: 150816 (Academic) 1 credit
HONORS BIOLOGY
Course: 150818 (Honors) 1 credit

In this course, students use inquiry to construct an understanding of the structures and processes of organisms, the inheritance and variation of traits, matter and energy in organisms, interdependent relationships in ecosystems, natural selection and evolution, earth's systems, and human activity and sustainability. Learning experiences provide students with opportunities to apply science and engineering practices and crosscutting concepts in order to explain and predict life science and earth and space science phenomena that occur in their everyday lives.

Prerequisites and other notes: Chemistry I.

CHEMISTRY II
Course: 154816 (Academic) 1 credit
HONORS CHEMISTRY II
Course: 154818 (Honors) 1 credit

Chemistry II is offered to those students who wish to extend their study of chemistry. This laboratory/lecture oriented course is designed to specifically cover organic chemistry, qualitative analysis, and aspects of physical and biochemistry. Strong emphasis will be placed on the methods of production and analysis of organic and inorganic compounds, the commercial impact and cost analysis of various compounds, and the laboratory techniques necessary to complete these tasks. The inclusion of the Organic Chemistry unit and the associated activities including the manufacture and testing of some pharmaceuticals will incorporate the outcomes of the manufacturing systems of Technology Education. Some of the organic activities are: the synthesis of aspirin, the analysis of aspirin products, the analysis of antacid products, and the production of nylon and rayon as polymers. The presentation of laboratory results including data representation, graphing skills, statistical analysis, writing skills, and critical thinking skills are essential for the success of all students.

Prerequisites and other notes: Biology.

HUMAN ANATOMY AND PHYSIOLOGY
Course: 156016 (Academic) 1 credit
HONORS HUMAN ANATOMY AND PHYSIOLOGY
Course: 156018 (Honors) 1 credit

The course is designed to provide background for students interested in pursuing careers in medical fields. Topics of study will include: the skeleton, control systems, coordinated body functions, respiration, electrolyte balance, digestion, and regulation of water. Related mammalian dissections will enhance some units. Students are encouraged to seek the advice of science teachers when selecting their Anatomy course.

Prerequisites and other notes: Academic - Biology. Chemistry II is recommended prior to this course. Honors - Biology and Chemistry II.

AQUATIC ENVIRONMENTAL SCIENCE
Course: 152506 (Academic) ½ credit

The course is a study of basic aquatic environmental science. It includes lab and field study of water ecosystems of the Carroll County area. Outdoor investigations will be used when feasible. Indoor aquaria will model outdoor systems. Population biology and related management practices will be explored. Aquatic environmental science includes studying local sources of freshwater, ground water, pond ecosystems, and stream management. The connection between Carroll County streams and the Chesapeake Bay will lead to the study of the Bay as a unique ecosystem.

Prerequisites and other notes: Biology. Students will have the opportunity to earn fifteen (15) service-learning hours during the course. The projects for these service hours will be extensions of the aquatic environmental science curriculum.

HONORS EARTH AND SPACE SCIENCE
Course: 153108 (Honors) ½ credit

This course is a study of meteorology and astronomy, and how they interact with one another. A variety of software packages will model content that will enhance the understanding of Earth and Space concepts. Weather satellite images will provide current data to reinforce the understanding of changes in our atmosphere. The Internet will be used to access space related data from space probes, satellites and telescope observations. The Outcomes of this course will reflect the parameters defined by the MSDE Earth and Space High School Core Learning Goals.

Prerequisites and other notes: Biology.

SCIENCE RESEARCH I
Course: 156616 (Academic) 1 credit
HONORS SCIENCE RESEARCH I
Course: 156618 (Honors) 1 credit

Science Research acquaints students with the fundamental skills and procedures of individual research. Students will receive instruction in use of library resources, computer on-line services (Internet), computer applications (data bases, graphing, graphics, spreadsheets, and work processing), and statistical analysis. These processes will be integrated to a series of assigned laboratory activities representative of the different content areas. The use of electronic test equipment, as well as, computer interface probes are an integral part of data collection. There is a direct application of the science content to its appropriate technological applications. Students will be given extensive guidance in the preparation of a research paper to be prepared by the end of the course. An individual research project will also be developed during the course.

Prerequisites and other notes: Biology. Chemistry II is recommended prior to this course. Students will have the opportunity to earn ten (10) service-learning hours.

HONORS SCIENCE RESEARCH II
Course: 156718 (Honors) 1 credit

The student will develop a project and scientific paper suitable for presentation. The project may be a continuation from the previous year's Science Research I class or a new project, though all projects will incorporate lab and computer skills learned in Science Research I. The projects may involve other schools, and students may work in cooperation with community and business leaders, as well as, local scientists and professionals. Students will develop advanced skills in authoring advanced multimedia presentations. The student will have the opportunity to develop the skills needed for more sophisticated laboratory work. Students must be responsible and disciplined as the class requires a large amount of independent work.

Prerequisites and other notes: Science Research I. Recommended for grade 12. Students will have the opportunity to earn ten (10) service-learning hours. This course may be repeated for elective credit.

HONORS SCIENCE RESEARCH III
Course: 157318 (Honors) 1 credit

Students will continue to develop projects that identify specific systems to solve problems. These problem solving systems will be identified and supported by practicing scientists. Creativity will be valued in that there is often not a single correct solution to the problem. Models will start to evolve from the research classroom to real life applications. Support connections between scientists, teachers, and students may be supported via video teleconferencing. Projects such as GIS applications to the return of the American chestnut tree could be developed with support from the private sector and the National American Chestnut Foundation.

Prerequisites and other notes: Science Research II. Students will have the opportunity to earn ten (10) service-learning hours.

HONORS SCIENCE RESEARCH IV
Course: 157418 (Honors) 1 credit

Students' projects will continue to evolve from the scientific understanding of the natural world toward the understanding of nature and the development of technologies in the solution of problems. Students will develop projects and integrate science, technology, and the needs of society. They will identify the characteristics of the designed world that humans have built and how it impacts the real world. Partnerships will continue to provide the necessary support students will need to identify and generate solutions to specific projects. An example of a project would be the application of the Anammox bacteria to fish farming and/or sewage applications. The University of Maryland's Sea Grant Program would provide the expertise needed for these projects.

Prerequisites and other notes: Science Research III.

AP BIOLOGY
Course: 154319 (AP) 1 credit

The AP Biology course is designed to be the equivalent of a college introductory course taken by biology majors during their first year at college. Topics covered will be: (1) Molecules and Cells, (2) Heredity and Evolution, and (3) Organisms and Populations. Students will develop a conceptual framework for modern biology and gain an appreciation for the processes of science. Twelve AP laboratories will be offered during the class. Students are encouraged to sit for the College Board's Advanced Placement Biology Examination.

Prerequisites and other notes: Biology and Honors Human Anatomy and Physiology. Honors Human Anatomy and Physiology may be taken concurrently with AP Biology.

AP CHEMISTRY
Course: 154919 (AP) 1 credit

The AP Chemistry course is designed to be the equivalent of a college introductory Chemistry course taken by chemistry majors during their first year at college. Topics such as the Structure of Matter, Kinetic Theory of Gases, Chemical Equilibria, Chemical Kinetics, and the basic concepts of thermodynamics will be presented in considerable depth. Twenty-two AP laboratories will be completed. Students are encouraged to sit for the College Board's Advanced Placement Chemistry Examination.

Prerequisite: Chemistry II.

AP ENVIRONMENTAL SCIENCE
Course: 153019 (AP) 1 credit

The AP Environmental Science course is designed to cover one semester of an introductory college course in Environmental Science. Topics included in the course will be: (1) Interdependence of Earth's Systems, (2) Human Population Dynamics, (3) Renewable and Non-renewable Sources, (4) Environmental Quality, (5) Global Changes, and (6) Environment and Society. Eighteen laboratories format content via the processes of science. Students are encouraged to sit for the College Board's Advanced Placement Environmental Studies Examination.

Prerequisites and other notes: Biology. Chemistry II is recommended prior to this course.

AP PHYSICS I
Course: 155719 (AP) 1 credit

This course is an algebra based, college level, introductory physics course designed for students pursuing any majors in science related fields. The course will cover kinematics, mechanics, electricity/magnetism, and waves. Students are encouraged to sit for the College Board's Advanced Placement Physics I exam.

Prerequisites and other notes: Biology and Geometry.

AP PHYSICS C
Course: 155619 (AP) 1 credit

This is a calculus-based physics course that is the equivalent of the first two semesters of college-level, calculus based physics for scientists and engineers. The course covers two main topics, mechanics, and electricity and magnetism. Students will be encouraged to sit for the AP Physics C exams in mechanics and electricity/magnetism.

Prerequisites and other notes: Biology, concurrently enrolled in or having completed Calculus, AP Physics I is highly recommended prior to this course.

SOCIAL STUDIES

Suggested Course Sequence

Grade 9/10	Grade 11	Grade 12
• Government • U.S. History • Electives (10th grade only)	• World History • Electives	• Electives

GOVERNMENT
Course: 100116 (Academic) 1 credit
HONORS GOVERNMENT
Course: 100118 (Honors) 1 credit

This course provides students with the opportunity to learn the Constitutional framework and democratic process that structure Maryland and the national political system. Students will develop an understanding of how different types of governments make political and economic decisions, foundation and principles of American Government, political parties and participation, structure and function of the three branches of government, role of the government in domestic and foreign policy, how the United States government balances protecting rights with maintaining order, landmark Supreme Court cases, and civil rights. The topics and outcomes of this course reflect the parameters defined by MSDE's Government High School Standards and Framework and support student success on the Government Maryland Comprehensive Assessment Program (MCAP), a graduation requirement.

Prerequisite and other notes: Recommended for grade 9; required for graduation. Students will have the opportunity to earn five (5) service-learning hours.

AP UNITED STATES GOVERNMENT AND POLITICS
Course: 100119 (AP) 1 credit

This course is designed to provide students with a nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project. Students taking this course must meet the graduation requirement for the Government High School Assessment by passing the Government High School Assessment or earning a 3, 4, or 5 on the Advanced Placement United States Government and Politics exam.

Prerequisites and other notes: Fulfills the graduation requirement for a course in Government.

UNITED STATES HISTORY
Course: 100316 (Academic) 1 credit
HONORS UNITED STATES HISTORY
Course: 100318 (Honors) 1 credit

This course is designed to provide students the opportunity to study United States History from 1900 to the present. Students will examine the social, economic, and political issues through the analysis of sources and synthesis of evidence to craft explanations and arguments about the major concepts and themes in US History. Students will consider events from multiple perspectives to understand the impact of different cultures on the development of an American identity. The topics and outcomes of this course reflect the parameters defined by MSDE's United States History High School Standards and Framework.

Prerequisites and other notes: Recommended for grade 10 and 11; required for graduation. Ten (10) service-learning hours may be earned.

AP UNITED STATES HISTORY
Course: 100419 (AP) 1 credit

This course is designed to provide students the opportunity to investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides eight themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and

national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. Students are encouraged to sit for the College Board's Advanced Placement United States History Examination.

Prerequisites and other notes: Fulfills the graduation requirement for a course in United States History.

WORLD HISTORY
Course: 102116 (Academic) 1 credit
HONORS WORLD HISTORY
Course: 102118 (Honors) 1 credit

This course provides students the opportunity to form an understanding of world history from approximately 1300 to the present. Students will examine social, economic and political issues through the analysis of sources in order to understand major developments across the globe. Students will examine the following units: World before 1300, Origins of the Modern World, Age of Revolutions, 19th Century, Modern Global Conflict, and Contemporary World by situating them in global, interregional, and regional contexts in order to develop an understanding of global patterns of change and continuity. The topics and outcomes of this course reflect the parameters defined by MSDE's Modern World History High School Standards and Framework

Prerequisites and other notes: Recommended for grades 10-11. Required for graduation.

AP WORLD HISTORY: MODERN
Course: 102219 (AP) 1 credit

This course provides students the opportunity to investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. Extensive interpretive writing and outside readings will be required of each student. Students are encouraged to sit for the College Board's Advanced Placement World History Examination.

Prerequisites and other notes: Fulfills the graduation requirement for a course in World History.

AP EUROPEAN HISTORY
Course: 100719 (AP) 1 credit

This course is designed to provide students the opportunity to investigate significant events, individuals, developments, and processes from approximately 1450 to the present. Students develop and use the same skills and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world, economic and commercial development, cultural and intellectual development, states and other institutions of power, social organization and development, national and European identity, and technological and scientific innovations. Students are encouraged to sit for the College Board's Advanced Placement European History Examination.

Prerequisites and other notes: A course in World History is recommended for students who want to prepare for AP European History.

AMERICAN REVOLUTION/CIVIL WAR
Course: 103006 (Academic) ½ credit

This course provides students with an opportunity to investigate the causes, events, and results of both conflicts. "American Revolution" will help students understand the revolt of the American colonists against the British. "Civil War" will help them examine the major battles, leaders, and weapons related to this era.

ISSUES IN AMERICAN SOCIETY
Course: 101506 (Academic) ½ credit

This course is designed to make the student aware, concerned, and active in the pursuit of solutions to issues and problems which confront Americans today. Students will learn and apply a systematic approach, the social investigation model, to examine and evaluate course issues. These issues are: crime, poverty, censorship, aging, and death. A number of views are presented to help students examine issues from different perspectives. A wide variety of resources are used to familiarize students with the issues analyzed. Students are expected to engage in class and group discussions.

Prerequisites and other notes: Recommended for grades 11-12. Students will have the opportunity to earn ten (10) service-learning hours.

HONORS LAW, CITIZENSHIP, AND SOCIETY
Course: 100308 (Honors) ½ credit

This course provides students the opportunity to extend their knowledge of civil and criminal law in the United States. They will deepen their understanding of the Constitution's provisions for the judicial system and examine how the legal system balances rights while protecting society. The students will explore current and pertinent issues related to the justice and legal system while also having the opportunity to participate in authentic learning experiences such as a mock trial.

Prerequisites and other notes: Recommended for grades 11-12.

WORLD GEOGRAPHY
Course: 106006 (Academic) ½ credit

This general elective course is designed to enable students to acquire geographic knowledge and skills and to use them to investigate developed and developing nations, local, national and global environmental issues, human geographic issues and linkages between physical and human characteristics of regions. Emphasis will be placed on using geographic skills related to selecting, designing and interpreting appropriate maps, drawing conclusions from different types of data, planning and organizing a geographic research project, and using appropriate forms of graphs, tables, diagrams, and charts. Students will work to develop a spatial perspective and an increased sense of global responsibility.

Prerequisites and other notes: The World Geography course is recommended for students who want to prepare for AP Human Geography.

AP HUMAN GEOGRAPHY
Course: 106019 (AP) 1 credit

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). At the conclusion of the course, students are encouraged to sit for the College Board's Advanced Placement Human Geography Examination.

Prerequisites and other notes: Recommended for grades 10-12. A course in Geography is recommended for students who want to prepare for AP Human Geography.

AP MACROECONOMICS
Course: 105419 (AP) 1 credit

This course introduces students to the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination. It also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Students are encouraged to sit for the College Board's Advanced Placement Macroeconomics Examination.

Prerequisites and other notes: Completion of Honors Economics is preferred. This course may be taken as the final course in the Accounting and Business Administration and Management completer programs in lieu of Honors Business Education Capstone.

PSYCHOLOGY I
Course: 104216 (Academic) 1 credit
HONORS PSYCHOLOGY I
Course: 104218 (Honors) 1 credit

This course provides students with an opportunity to explore the connection between mind and behavior. Students explore how psychologists study human thought and behavior, structure of the brain, the major ideas and theories of psychology, intelligence and cognition, human development, personality and psychological disorders. Students will apply the scientific method to explain human behavior and participate in open discussions on the various theories of psychology.

Prerequisites and other notes: Recommended for grades 10-12. Honors Psychology is recommended for students who want to prepare for AP Psychology.

AP PSYCHOLOGY 🏋
Course: 104519 (AP) 1 credit

This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas. Students are encouraged to sit for the College Board's Advanced Placement Psychology Examination.

Prerequisites and other notes: Completion of Honors Psychology I preferred.

SPECIAL EDUCATION RESOURCE EDUCATION

EMPLOYABILITY AND LIFE SKILLS
Course: 801601 (Basic) ½ credit

Students will assess their vocational interests, work maturity skills, and personal values. Emphasis will be placed on the development of positive attitudes and behaviors, social responsibility, communication skills, and good interpersonal relations. Students will continue to set and work toward personal and academic goals as well as improve their decision-making and problem-solving skills. In some schools, computer-aided instruction will be an integral part of this course.

Prerequisites and other notes: Students must be recommended for this course by their school counselor or a Maryland's Tomorrow staff person.

LEARNING RESOURCE CLASSES

Course:	956101 (Basic) English Tutorial	½ credit	956511 (Basic) Science	1 credit
	956111 (Basic) English Tutorial	1 credit	956701 (Basic) Math Tutorial	½ credit
	956301 (Basic) Social Studies	½ credit	956711 (Basic) Math Tutorial	1 credit
	956311 (Basic) Social Studies	1 credit	956901 (Basic) General Tutorial	½ credit
	956501 (Basic) Science	½ credit	956911 (Basic) General Tutorial	1 credit

This placement is designed for the student assigned by the IEP committee depending upon the needs identified in the Individualized Education Plan. The student will be taught how to process information, use content area materials, and be instructed in oral expression, written expression, listening comprehension, mathematics calculation and/or mathematics reasoning, basic reading and/or reading comprehension, social skills, and thinking skills.

Prerequisites and other notes: This course may be used to meet the State requirements for the Maryland High School Certificate and/or to supplement classes in English, Social Studies, Math or Science.

VISION/BRAILLE READING AND WRITING CLASS
Course: 950016 (Academic) 1 credit

The vision impaired/blind student will be taught how to increase speed in reading and writing of Braille. This includes the use of the Perkins Brailler, the Slate and Stylus, the Braille 'N Print, the Braille and Speak, and the computer keyboard converted to a Braille keyboard. Word processing skills using the Braille-Edit Express (BEX) will be taught and reinforced. Instruction in the use of the tape recorder/player as a note-taking device will be provided. Organization of all educational materials (textbooks on tape, notebooks, Braille material, large print materials) will be emphasized. The student will be taught how to improve listening comprehension, social skills, skills of daily living, and basic skills.

ENGLISH 9 - ALTERNATE
Course: 957101 (Basic) ½ credit
957111 (Basic) 1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. Students develop reading, writing, language, listening, and speaking skills through integrated instructional approaches using adapted and modified informational and literary texts with real world applications. Integrated instructional approaches include a focus on active reading, process writing, academic vocabulary, and grammatical structures. Through integrated and collaborative activities, students

learn to respond to a text, compose in a variety of modes, and evaluate the content, organization, and language use of texts. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

ENGLISH 10 - ALTERNATE

Course:	957201 (Basic)	½ credit
	957211 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. Students develop reading, writing, language, listening, and speaking skills through integrated instructional approaches using adapted and modified informational and literary texts with real world applications. Integrated instructional approaches include a focus on active reading, process writing, academic vocabulary, and grammatical structures. Through integrated and collaborative activities, students learn to respond to a text, compose in a variety of modes, and evaluate the content, organization, and language use of texts. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

ENGLISH 11 - ALTERNATE

Course:	957301 (Basic)	½ credit
	957311 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. Students develop reading, writing, language, listening, and speaking skills through integrated instructional approaches using adapted and modified informational and literary texts with real world applications. Learning includes a variety of response methods to print and non-print media which helps students refine creative, research and critical analysis strategies. Students explore the devices authors use to reveal literal and metaphorical meaning, and to achieve purpose and effect. Students learn how to use and recognize language which effectively communicates experiences, ideas, and opinions and to appreciate the value of their own and others' personal experiences and validity of drawing upon them for inspiration and learning. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

ENGLISH 12 - ALTERNATE

Course:	957401 (Basic)	½ credit
	957411 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. This course is designed to provide students access to the development of strategies for reading comprehension, vocabulary, language usage skills, and writing skills. Students will learn the skills to identify and analyze fiction and non-fiction literary texts. Students will engage in reading, writing, speaking and listening activities with real world application. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course is linked to the general education curriculum; however, the student will require a different scope and sequence, adapted and modified materials. This course may not be used to meet the state graduation requirements.

MATHEMATICS 9 - ALTERNATE

Course:	958101 (Basic)	½ credit
	958111 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. In this course students will learn algebraic functions to solve linear equations and inequalities with one variable: apply graphical and algebraic methods to analyze and solve systems of linear equations, and write and interpret real world application problems. Students will perform operations with polynomials including addition, subtraction, multiplying, dividing, and factoring. In addition, students will compare/contrast linear, exponential, and quadratic functions algebraically. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

MATHEMATICS 10 - ALTERNATE

Course:	958201 (Basic)	½ credit
	958211 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. In this course students will continue to learn algebraic functions to solve linear equations and exponential relationships by comparing and contrasting

them with each other and by applying linear models to real world data. Students will engage in methods for analyzing and solving systems of equations involving linear, exponential, and quadratic function. Students will solve equations and inequalities and examine data with one and two variables. This course is designed to facilitate alternate academic learning outcomes appropriate to the

instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

MATHEMATICS 11 - ALTERNATE

Course:	958301 (Basic)	½ credit
	958311 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. In this course students will continue to learn algebraic functions, geometry, statistics, and probability using real world situations/data. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

MATHEMATICS 12 - ALTERNATE

Course:	958401 (Basic)	½ credit
	958411 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. This course is designed to help students work on personal finance issues as they transition from high school into the adult world and independent living. Students will gain knowledge and skills in the areas of income, money-management, consumer rights and responsibilities, spending, credit, saving, and investing. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the state graduation requirements.

INTEGRATING THE SCIENCES - ALTERNATE

Course:	958501 (Basic)	½ credit
	958511 (Basic)	1 credit

This course is designed to provide students access to the study of the basic topics in the four core disciplines of science - Physics, Earth Science, Chemistry, and Environmental Science. Major concepts studied include motion, forces, energy, electromagnetic radiation, earth's surface and interior, solar system, properties of matter, atomic structure, periodic table, chemical bonds, acids and bases, carbon chemistry, interactions of organisms, and diversity of live and environmental issues of the world. Students will be engaged in inquiry based activities, making real world connections to mathematics, history, technology and society. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course is linked to the general education curriculum; however, the student will require a different scope and sequence, adapted and modified materials. This course may not be used to meet the state graduation requirements.

BIOLOGY - ALTERNATE

Course:	958601 (Basic)	½ credit
	958611 (Basic)	1 credit

This course is designed to provide students access to study how living things function, develop, and interact within their environments. Instruction is designed to promote student inquiry through conducting investigations. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course is linked to the general education curriculum; however, the student will require a different scope and sequence, adapted and modified materials. This course may not be used to meet the state graduation requirements.

ENVIRONMENTAL SCIENCE - ALTERNATE

Course:	958701 (Basic)	½ credit
	958711 (Basic)	1 credit

This course is designed to provide students access to basic topics in Environmental Science. Students will investigate the natural environment and the interrelationships among natural systems including biodiversity and population dynamics. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course is linked to the general education curriculum; however, the student will require a different scope and sequence, adapted and modified materials. This course may not be used to meet the state graduation requirements.

SOCIAL STUDIES 9 – ALTERNATE

Course	959101 (Basic)	½ credit
	959111 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. This course is design to develop students' understanding of principles, institutions and processes of the United States' and local political systems. Students will learn significant events of the 18th, 19th, and 20th Centuries. Students will learn and investigate historic, geographic,

political, economic, and socio-cultural themes. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the State graduation requirements.

SOCIAL STUDIES 10 – ALTERNATE

Course:	959201 (Basic)	½ credit
	959211 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. This course is design to develop students' understanding of principles, institutions and processes of the United States' and local political systems. Students will learn significant events of the 18th, 19th, and 20th Centuries. Students will learn and investigate historic, geographic, political, economic, and socio-cultural themes. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the State graduation requirements.

SOCIAL STUDIES 11 – ALTERNATE

Course:	959301 (Basic)	½ credit
	959311 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. This course is design to develop students' understanding of principles, institutions and processes of the United States' and local political systems. Students will learn significant events of the 18th, 19th, and 20th Centuries. Students will learn and investigate historic, geographic, political, economic, and socio-cultural themes. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the State graduation requirements.

SOCIAL STUDIES 12 – ALTERNATE

Course	959401 (Basic)	½ credit
	959411 (Basic)	1 credit

The outcomes of this course are aligned with the Maryland College and Career-Ready Standards - Alternate Framework. This course is design to develop students' understanding of principles, institutions and processes of the United States' and local political systems. Students will learn significant events of the 18th, 19th, and 20th Centuries. Students will learn and investigate historic, geographic, political, economic, and socio-cultural themes. This course is designed to facilitate alternate academic learning outcomes appropriate to the instructional needs of the student, as documented in the Individualized Education Plan (IEP). This course may not be used to meet the State graduation requirements.

TECHNOLOGY EDUCATION

AP COMPUTER SCIENCE PRINCIPLES

Course:	450519 (AP)	1 credit

AP Computer Science Principles (CSP) is a rigorous, entry-level course that introduces students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. This course is not a tour of current events and technologies. Rather, it seeks to provide students with a "future proof" foundation in computing principles so that they are adequately prepared with both the knowledge and skills to live and meaningfully participate in our increasingly digital society, economy, and culture.

Prerequisites and other notes: Successful completion of this course satisfies the technology education graduation requirement.

EXPLORING COMPUTER SCIENCE
Course: 450616 (Academic) 1 credit

This course provides students the opportunity to engage with key content and conceptual ideas in the field of computer science. This focus will promote an understanding of why certain tools or languages might be utilized to solve particular problems. The goal is to develop in students the computational thinking practices of algorithm development, problem solving and programming in HTML and various programming languages within the context of problems that are relevant. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.

Prerequisites and other notes: Successful completion of this course satisfies the technology education graduation requirement.

FOUNDATIONS OF TECHNOLOGY
Course: 450216 (Academic) 1 credit

This course provides the fundamental knowledge and hands-on learning experiences for all students to advance their technological literacy. This class will focus on the study of the designed/human-made world. A technologically literate citizen has the ability to understand, use, manage, and assess technological products and processes. In this course, students will acquire knowledge and complete activities in the following areas of the designed world: agricultural and biotechnology; information and communication technology; manufacturing and construction technology; and, power, energy, and transportation technology. Students will also learn about the nature of technology, technological impacts, engineering design process, core technologies, problem solving techniques, and technological systems.

Prerequisites and other notes: Successful completion of this course satisfies the technology education graduation requirement.

WORLD LANGUAGES

ESOL
Course: 058306-I (Academic) ½ credit
058316-I (Academic) 1 credit
058406-II (Academic) ½ credit
058416-II (Academic) 1 credit
058506-III (Academic) ½ credit
058516-III (Academic) 1 credit
058606-IV (Academic) ½ credit
058616-IV (Academic) 1 credit

These courses are designed for English language learners (ELLs) who have not yet met the criteria for exit from the ESOL Program in Carroll County. Students work in small groups to develop listening, speaking, reading, writing and content area skills.

Prerequisites and other notes: ESOL I and II may count towards world language credit if taken consecutively, or as elective credit. ESOL III and IV may only count towards elective credit, and can only be taken upon successful completion of ESOL I and II. Recommendation from ESOL Program/Designee is required for placements.

GERMAN I
Course: 703016 (Academic) 1 credit

As a building block for further study in German, the students will know and use the present tense and other basic grammatical concepts. The students will also ask and answer questions about personal information and daily life activities through teacher-student interaction and cooperative practice. The students will become aware of the value of learning a world language in a multicultural society. A variety of cultural topics will be introduced. Primary emphasis will be on speaking and listening, with integration of reading and writing.

GERMAN II
Course: 703116 (Academic) 1 credit

Continued emphasis will be placed on speaking and listening, as well as integrating reading and writing. In addition to practicing previously taught topics, students will know and use the past tense and other grammatical concepts. Daily opportunities will be provided for students to converse in German. A variety of cultural topics will be pursued as students further their study of German-speaking countries.

Prerequisites and other notes: Successful completion of German I.

HONORS GERMAN III
Course: 703218 (Honors) 1 credit

Students will achieve greater linguistic accuracy in reading, writing, listening, and speaking. An increased emphasis on grammar study will include additional past tense work and adjective agreement. Students will continue to converse daily as they utilize previously taught and current material. Writing skills will increase as students express their ideas and respond to various reading selections. Additional exposure to the German-speaking countries will be provided.

Prerequisites and other notes: Successful completion of German II.

HONORS GERMAN IV
Course: 703418 (Honors) 1 credit

Students enrolling in German IV will continue to improve their communicative and linguistic proficiency. Students will review and expand on all previously taught grammatical structures. Students actively use German in creative and practical situations on a daily basis. Units focusing on history, art, music, literature, and current events are presented. Students develop independent and collaborative projects based on the content of these units.

Prerequisites and other notes: Successful completion of Honors German III.

AP GERMAN LANGUAGE AND CULTURE
Course: 703519 (AP) 1 credit

Students will continue to improve their communicative and linguistic proficiency. Advanced grammar topics will be addressed in addition to an intensive review of all previously taught concepts. Students are encouraged to sit for the College Board's Advanced Placement German Language Examination.

Prerequisites and other notes: Successful completion of Honors German IV.

LATIN I
Course: 701016 (Academic) 1 credit

Latin I is designed to introduce students to the world of ancient Rome and expose them to the parallels that exist between that ancient culture and their modern one. In addition to basic pronunciation rules and grammatical concepts, students learn vocabulary derivatives and word etymology. Daily life in ancient Rome and Roman mythology are explored by reading and translating Latin stories on these topics. This course may assist students to perform better on the verbal portion of the SAT, as well as aid them with understanding terms encountered in a number of other classes.

LATIN II
Course: 701116 (Academic) 1 credit

In this course, students continue to increase Latin and English vocabulary, knowledge of mythology and Roman life, and understanding of Latin grammar. Students also learn the meaning of the many Latin phrases encountered in law, science, logic, and literature. Through selected readings, students learn more about various aspects of Roman history and civilization.

Prerequisites and other notes: Successful completion of Latin I.

HONORS LATIN III
Course: 701518 (Honors) 1 credit

In this course, students continue to acquire knowledge of the intermediate concepts of Latin language and explore the cultural and historical importance of the Ancient Roman society in the modern world. Moreover, students extend the knowledge of their own language, as well as other world languages, through the continuous exploration of the Latin roots and the derivation study. Students will engage in reading of the authentic Latin literature and find its relevance in the modern world.

Prerequisites and other notes: Successful completion of Latin II.

HONORS LATIN IV
Course: 701618(Honors) 1 credit

In this course, students will study the advanced concepts of Latin language necessary for reading of Virgil and Caesar in AP Latin. More significant exposure to authentic Latin literature will take place during this course which will, in turn, prepare students for successful

advancement to the next level of their language study. Moreover, students will continue to enrich their vocabulary through Latin derivation study and explore the vast world of the rich Ancient Roman culture.

Prerequisites and other notes: Successful completion of Honors Latin III.

AP LATIN
Course: 701219 (AP) 1 credit

In this course, students will be able to read, understand, translate, and analyze Latin poetry and prose. They develop language skills, sight reading skills, and a mastery of terms to analyze syntax and literary style. Students will demonstrate an understanding of Vergil's Aeneid and Caesar's Gallic War which are a big part of the course. Students practice writing essays and answering questions similar to those they will encounter on the AP examination. Students are encouraged to sit for the College Board's Advanced Placement Latin Examination.

Prerequisites and other notes: Successful completion of Honors Latin IV or teacher approval.

SPANISH I
Course: 700016 (Academic) 1 credit

As a building block for further study in Spanish, the students will know and use the present tense and other basic grammatical concepts. The students will also ask and answer questions about personal information and daily life activities through teacher-student interaction and cooperative practice. The students will become aware of the value of learning a world language in a multicultural society. A variety of cultural topics pertinent to the Hispanic world will be introduced. Primary emphasis will be on speaking and listening with integration of reading and writing.

SPANISH II
Course: 700116 (Academic) 1 credit

As in Spanish I, the primary emphasis will be placed on listening and speaking activities. Students will be able to talk about events happening in the past. Students will have an opportunity on a daily basis for conversational practice. Specific topics of a cultural nature will continue to be addressed with special emphasis on the assimilation of Hispanic influence into mainstream United States society.

Prerequisites and other notes: Successful completion of Spanish I.

HONORS SPANISH III
Course: 700618 (Honors) 1 credit

Students will achieve greater linguistic accuracy in reading, writing, listening, and speaking. Increased emphasis on grammar study will include all indicative and subjunctive verb tenses. The students will communicate about the future and other uncertainties through cooperative learning activities. Additional exposure to Hispanic culture will be provided.

Prerequisites and other notes: Successful completion of Spanish II.

HONORS SPANISH IV
Course: 700318 (Honors) 1 credit

As in Spanish III, a high level of linguistic accuracy is expected. The students will review and expand on all previously taught grammatical structures. The study of culture is further stimulated by the in-depth study of literature, geography, history, and art. Based on these units, students will develop individual and group projects. Students will express themselves in both oral and written formats. Opportunity will be provided for both individual and group activities.

Prerequisites and other notes: Successful completion of Honors Spanish III.

AP SPANISH LANGUAGE AND CULTURE
Course: 700719 (AP) 1 credit

Students will continue to improve their communicative and linguistic proficiency. Advanced grammar topics will be addressed in addition to an intensive review of all previously taught concepts. Students are encouraged to sit for the College Board's Advanced Placement Spanish Language Examination.

Prerequisites and other notes: Successful completion of Honors Spanish IV.

HONORS INDEPENDENT STUDY – WORLD LANGUAGES

Course:	700708 (Honors)	½ credit
	700718 (Honors)	1 credit

This course is designed for those students who have completed all levels of a world language offered by a school or who, in the judgment of their teacher, are sufficiently proficient in the language that they can benefit from additional work in this area. Students must have fulfilled their World Languages graduation requirement as this is an elective credit. It is an individualized course, and students may contract for a grade.

Prerequisites and other notes: For South Carroll High School, Honors Independent Study is offered to students in the Latin and German program. Successful completion of Honors German IV or Honors Latin IV.

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