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## MAKING CHOICES

As students move into high school, they make decisions about their future quickly. This urgency, however, does not mean those decisions are to be made without careful thought and planning.

This handbook is designed to assist the student and parent in making the high school experience pleasant, informative, and successful. The information outlines graduation requirements and diploma options. Therefore, it provides valuable guidance in curriculum choices. Parents and students should use this information while working closely with school personnel to plan a five-year plan of study with post-secondary included will accomplish the needs and goals of the student.

In a highly competitive and changing society, a quality high school education is essential as a springboard to a rewarding future. Planning ahead for one's life choices provides a foundation of success. Students are encouraged to take seriously the choices they make in regards to high school, especially in the courses selected and effort put forth.

Although high school is new and exciting, it is perfectly natural to have some apprehension about the changes. High school is very different than middle school from the responsibility put upon the student to the academic challenges it affords. With the accepted responsibility, however, come more individual choices and freedoms. Students have many choices to make, and those decisions are not to be taken lightly when it comes to class selections.

Becoming familiar with the information in this handbook is a good start for a successful high school experience. Many questions about the changes and requirements of the high school program can be answered in this booklet. Students and parents should use it at this critical time of beginning high school, as well as throughout the high school experience.

The Student/Parent Handbook that all students will receive at the beginning of the school year compliments this handbook. Please be sure to read that handbook thoroughly for additional information.

*It is the policy of the Hart County Board of Education not to discriminate on the basis of sex, race, marital status, age, religion, national origin, or handicap in its educational programs, activities, or employment practices.*

# Career Pathway Opportunities

## *Career Technical Pathways*

### What are Pathways?

Career Pathways are state-approved career enhancement programs designed as coherent, articulated sequences of rigorous academic and career-related courses starting in the ninth grade. This sequential set of pathway courses may lead to an industry-recognized certificate or licensure. In addition, the three sequential pathway courses provide a strong foundation for an associate and/or baccalaureate degree.

Career, Technical and Agricultural Education (CTAE) provides students with the opportunity to select at least three sequence courses in a career pathway. In addition, currently pathway courses are also offered in the fine arts, world language and journalism.

**CTAE CONCENTRATOR:** A concentrator is defined as a student who takes at least three Career Technical Courses in a specific program area during his/her high school career.

**PATHWAY COMPLETER:** A pathway completer is a concentrator who completes three sequential pathway courses.

Selection of a pathway is based on self-awareness and the investigation of occupations plus related educational levels aligned with the pathway. Most high-demand, high-skilled, high-wages occupations in all concentrations still require education beyond high school.

Implementation of career pathways is a collaborative effort between the Hart County Charter System, Georgia Department of Education, the Technical College System of Georgia and the University System of Georgia.

**Disclaimer:** Information contained within this book is as accurate as possible at time of publication. Classes offered at the high school can change due to scheduling and allotment conflicts.



# CTAE CERTIFICATION

When a program becomes industry certified, it receives a “Stamp of Excellence,” which represents the apex of program quality. Only those programs that have successfully undergone rigorous reviews by leaders from business and industry are recognized with this distinction.

This formal process strengthens all program components, including:

- Classrooms and labs which are equipped with state-of-the-art equipment and technology;
- CTAE and academic performance standards that are aligned to national standards;
- In-depth, project-based instruction in all curriculum areas;
- Appropriate and varied Career Related Education (CRE);
- Career and Technical Student Organizations (CTSO) which offer co-curricular competitive events on the local, state and national level and provide leadership development skills for personal and professional growth;
- Business, industry and community involvement in all aspects of the program.

Industry certified programs not only offer outstanding opportunities to students who receive instruction through such programs, but they also offer positive benefits for schools as well as employers.

## **Nontraditional Occupations**

Nontraditional careers are those occupations or fields of work for which individuals from one gender comprise less than twenty-five percent of the individuals employed. Students are encouraged to enroll in courses that fit their career goals regardless of gender make-up in the classroom. Some examples of nontraditional careers are:

- Nursing for males
- Drafting for females
- Cosmetology for males
- Automotive for females

## **Career Planning Services**

- [www.GeorgiaCRN.org](http://www.GeorgiaCRN.org)
- [www.GAcollge411.org](http://www.GAcollge411.org)
- [www.careervoyages.gov](http://www.careervoyages.gov)
- [www.gacareercounselor.org](http://www.gacareercounselor.org)
- [www.bls.gov/oco/](http://www.bls.gov/oco/)

# AGRICULTURE



## **Companion Animal Systems Pathway**

*Basic Agricultural Science, Animal Science and Biotechnology, Small Animal Care*

## **Plant & Floriculture Pathway**


*Basic Agricultural Science, General Horticulture & Plant Science,  
Animal Science and Biotechnology*

## **Food Animal Systems Pathway**

*Basic Agricultural Science, Animal Science and Biotechnology,  
Ag Animal Production & Management*

Agricultural and Environmental Science promotes agricultural awareness and prepares students for the further study and professional degrees in a variety of agricultural related areas. These areas include Animal Science, Horticulture/Plant Science, Landscaping/Turf Management, Floral Design, Forestry Management, Agricultural Leadership and Environmental Science. Classroom and laboratory activities are supplemented through supervised agricultural experiences, leadership programs and FFA Activities.



<div>  <b>HART COLLEGE AND CAREER ACADEMY</b> </div>						
Student Plan of Study – Horticulture and Animal Systems						
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)
02.4710004 Basic Ag	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2). Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	Advanced Academic Pathways ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.
01.4610004 Horticulture	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		World Language Pathways Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.
02.4210004 Animal Science	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		Fine Arts/Performing Arts Pathway Arts: Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		Legend: *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Nursery and Greenhouse Managers	Bachelor's Degree	\$69,300	450
Soil and Plant Scientists	Bachelor's Degree	\$68,900	10
Animal Scientists	Doctoral Degree	\$61,700	1

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
****Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or	3
III. *Science	4	***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected [4th Science](#) courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.


NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admission may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="#">Staying On Course: (www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)</a></li> <li>Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>	

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a>	

*Related Pathway Occupations:	Other Related Agriculture, Food, & Natural Resources Occupations:
Agricultural Sciences Teachers Nursery and Greenhouse Managers Soil and Plant Scientists Animal Scientists Animal Breeders Nonfarm Animal Caretakers Nursery Workers Animal Trainers	First-Line Supervisors of Animal Husbandry and Animal Care Workers Career/Technical Education Teachers *ONET Online

Horticulture & Animal Science
<p>Animal scientists conduct research to develop better ways to produce and process meat, poultry, eggs, and milk. Much of the research focuses on the health and breeding of livestock, but domestic animals, such as cats and dogs, are also a research concern. Animal scientists are experts in genetics, nutrition, reproduction, and animal production management. Developing new characteristics to introduce into animals (such as chickens that lay more eggs) and reducing the cost of raising animals and processing animal products are other goals of workers in this pathway.</p> <p>Employment opportunities in the horticulture field should be good, with more job openings than job seekers. Employment is expected to increase in response to the increasing demand for both products and services by commercial producers, landscape contractors, turf managers and the general public. New avenues of research in biotechnology to develop plant and food crops that require less fertilizer, fewer pesticides and herbicides, and less water will also increase the demand for careers in plant science and horticulture. Because most jobs in this field are research-based, a bachelor's degree in animal or agriculture science is required. A doctoral degree (Ph.D.) is necessary for leading research projects or teaching on the university level.</p>

<div> <div>  <div> <b>HART</b> COLLEGE AND CAREER ACADEMY </div> </div> <div> <b>Student Plan of Study – Companion Small Animal</b> </div> </div>						
<p><i>Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.</i></p>						
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	basic
02.4710004 Basic Ag	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<p><b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.</p> <p><b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.</p> <p><b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.</p> <p><b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.</p>
02.4210004 Animal Science	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		
02.4230004 Small Animal Care	Course 3: American Literature	Course 3: AMDMT Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Veterinarians	Professional Degree	\$76,600	10
Nonfarm Animal Caretakers	High School Diploma	\$19,100	160
Veterinary Assistants	High School Diploma	\$21,700	10

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

\*\*\*\*Current Georgia Graduation Rule

Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or	3
III. *Science	4	***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	4
		TOTAL	23

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at [Staying On Course. \(www.usg.edu/student\\_affairs/documents/Staying\\_on\\_Course.pdf\)](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)
- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
- Students who will continue their education and training in the US Military should take the ASVAB assessment.
- Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:

Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx>

*Related Pathway Occupations:	Other Related Agriculture, Food, & Natural Resources Occupations:
Veterinarians Veterinary Assistants Nonfarm Animal Caretakers Animal care and service workers Animal Scientists Agricultural Inspectors Veterinary Technicians Agriculture Teachers Animal Breeders	Agricultural Animals Ranch Managers Biological Technicians

\*ONET Online

Companion Animal Systems

Companion animals are a large part of the animal care industry. There are many services and career opportunities in this career pathway area. Veterinarians care for the health of animals and work to improve public health. They diagnose, treat, and research medical conditions and diseases of pets, livestock, and other animals.

Veterinary technologists and technicians perform medical tests under the supervision of a licensed veterinarian to help diagnose the illnesses and injuries of animals. Veterinary assistants and laboratory animal caretakers look after animals in laboratories, animal hospitals, and clinics. They care for the well-being of animals by performing routine tasks under the supervision of veterinarians, scientists, and veterinary technologists and technicians.

Animal care and service workers provide care for animals. They feed, water, groom, bathe, and exercise pets and other nonfarm animals. Job tasks vary by position and place of work.

The need for veterinarians will increase to keep up with the demands of a growing pet population. Many people consider their pets to be a part of their family and are willing to pay more for pet care than owners have in the past. Also, veterinary medicine has advanced considerably, and many of the veterinary services offered today are comparable to health care for humans, including cancer treatments and kidney transplants. Overall job opportunities for veterinarians are expected to be good. There also will be excellent job opportunities for government veterinarians in food safety, animal health, and public health.

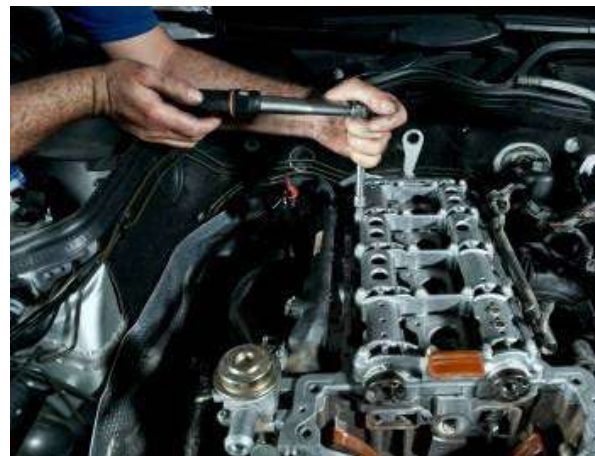
# AUTOMOTIVE



## **Automotive Pathway**

### *Automobile Maintenance and Light Repair I,II,III*

The Automobile Maintenance and Light Repair pathway begins with the fundamentals course. Students in this course will learn the basic skills needed to gain employment as a maintenance and light repair technician. Students will be exposed to courses in automotive preventative maintenance and servicing and replacing brakes, and steering and suspension components. In addition, students learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and determine necessary action. Students learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. The hours completed in this pathway are aligned with ASE/NATEF standards and are a base for the entry-level technician. This pathway's corresponding CTSO is SkillsUSA.





## Student Plan of Study – Automobile Maintenance



# HART COLLEGE AND CAREER ACADEMY

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
47.5311004 Basic Maintenance and Repair	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	<b>Dual Enrollment</b> - AUTT 1010 Automotive Tech Intro - AUTT 1020 Automobile Component Repair and Replacement - AUTT 1030 Automotive Brake Systems
47.5321004 Maintenance & Light Repair 2	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -Auto Chassis Systems Tech -Auto Climate Controls -Auto Engine Performance Tech <b>Diploma</b> Auto Collision Repair Automotive Technology
47.5331004 Maintenance & Light Repair 3	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Automobile Technician & Mechanics	High School or Registered Apprenticeship	\$33,400	570
Mechanical Engineering Technicians	Some College No Degree Required	\$47,600	10
Automobile Body & Related Repairers	High School or Registered Apprenticeship	\$40,600	100

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

#### \*\*\*\* Current Georgia Graduation Rule

Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

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NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

#### Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at [Staying On Course: \(www.usg.edu/student\\_affairs/documents/Staying\\_on\\_Course.pdf\)](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)
- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
- Students who will continue their education and training in the US Military should take the ASVAB assessment.
- Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

#### Possible Student Pathway Credentialing Opportunities:

Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx>

<b>*Related Pathway Occupations:</b> Automobile Glass Installers & Repairers Automobile Specialty Technicians Electrical & Electronics Installers & Repairers Electronic Equipment Installers & Repairers Engine and Other Machine Assemblers	<b>Other Related Transportation, Distribution &amp; Logistics Occupations:</b> Master Automobile Service Technicians Collision Repairers Small Engine Repairers
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\*ONET Online

#### Transportation, Distribution & Logistics/Automobile Maintenance & Light Repair

Automobile service technicians and mechanics, often called service technicians or service techs, inspect, maintain, and repair cars and light trucks. To become a master automobile mechanic, students can complete the Automobile Maintenance & Light Repair pathway then take the end of pathway assessment in Automobile Maintenance & Light Repair offered by the National Institute for Automobile Service Excellence (ASE) in collaboration with NATEF/AYES/SkillsUSA.

Students completing the Automobile Service Technician pathway may take the end of pathway assessment in Automobile Service Technology offered by the National Institute for Automobile Service Excellence (ASE) in collaboration with NATEF/AYES/SkillsUSA. Students completing the Master Automobile Service Technician pathway may take the end of pathway assessment in Master Automobile Service Technician offered by the National Institute for Automobile Service Excellence (ASE) in collaboration with NATEF/AYES/SkillsUSA.

Most automobile service technicians and mechanics work in well-ventilated and well-lit repair shops. Although mechanical problems can often be fixed with computers, technicians perform many tasks with greasy parts and tools, while sometimes in uncomfortable positions. Service technicians work on traditional mechanical components, such as engines, transmissions, belts, and hoses.

However, they must also be familiar with a growing number of electrosystems. Braking, transmission, and steering systems, for example, are controlled primarily by computers and electronic components. Other integrated electronic systems, such as accident-avoidance sensors, are becoming common as well. In addition, a growing number of technicians are required to work on vehicles that run on alternative fuels, such as ethanol and electricity.

Some employers prefer automobile service technicians and mechanics who have completed a formal training program in a postsecondary institution. Industry certification is usually required once the person is employed. Students may also consider state-registered apprenticeships for additional training after high school. <http://www.doleta.gov/oa/>

Employment of automobile service technicians and mechanics is expected to grow 17 percent from 2010 to 2020, about as fast as the average for all occupations. Job opportunities for qualified jobseekers should be very good.



# BUSINESS MANAGEMENT AND ADMINISTRATION



## **Business and Technology Pathway**

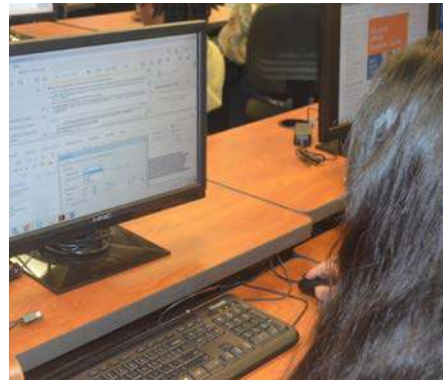
*Introduction to Business Technology, Business & Technology, Business Communications*

## **Entrepreneurship Pathway**

*Introduction to Business Technology, Legal Environment of Business, Entrepreneurship*

Business and Technology is designed to meet the needs of all high school students by providing instruction that helps students develop business, economic and computer literacy. Combining business theories and practical applications, this program will enable the student to better understand the working environment for careers in business.

Courses in the Business and Technology Pathway teach and reinforce the following skills: Learning to learn, listening and oral communication, problem solving, creative thinking, leadership and teamwork. This pathway's corresponding CTSO is FBLA.





# **Student Plan of Study – Business & Technology**

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
07.4413004 Intro to Business and Technology	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.  <b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>Dual Enrollment</b> - Comp 1000 Intro to Computers - MGMT 1100 Principles of Management - MGMT 1115 Leadership
07.4410024 Business and Technology	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -MGMT 2125 Performance Management -MGMT 2130 Employee Training and Development
07.451004 Business Communications	Course 3: American Literature	Course 3: AMDMTechical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Degree</b> -Business Management AAS  <b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.	
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Administrative Services Managers	Bachelor's Degree	\$77,500	450
Supervisors of Office & Admin Support	High School	\$48,100	2,180
*Management Analysts	Bachelor's Degree	\$77,000	1,500

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
*** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or ***World Languages, and/or Fine Arts	3
III. *Science	4	VII. Electives	4
IV. Social Studies	3	<b>TOTAL</b>	<b>23</b>

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Business Management & Administration Occupations:
Administrative Services Managers Computer Operators Database Administrators Word Processor & Typists Management Analysts Stock Clerks Legal Secretaries Medical Secretaries	Shipping & Receiving Clerks Budget Analysts Office Machine Operators Computer & Information Systems Managers *ONET Online

Business and Technology
<p>Career opportunities in every sector of the economy include technical and business skills learned within this pathway. A strong foundation of business concepts integrated with technology skills used in business will prepare workers for every occupation. Specific relevant careers include the support service industry, which is one of the largest job providers in the US economy. Support service positions include tasks such as managing projects, scheduling, planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. As technology continues to advance, support service workers will increasingly assume the role of information and communication managers.</p> <p>Education and training for jobs in this pathway range from high school career and technical career programs to one- and two-year programs. Written, oral and verbal communication skills, flexibility, personal presentation, leadership, time management and teamwork are all skills vital to this career area.</p>



## Student Plan of Study – Entrepreneurship



**HART COLLEGE AND  
CAREER ACADEMY**

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
07.4413004 Intro to Business and Technology	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/P.E Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language, AP, Dual Enrollment, and Georgia Virtual School courses may be available. <b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>Dual Enrollment</b> - MKTG 1130 Business Regulations and Compliance - MKTG 2010 Small Business Management - MKTG 2210 Entrepreneurship
06.4150004 Legal Environment of Business	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History			<b>TCC (Technical Coll Cert)</b> -Entrepreneurship TCC -Marketing Management with Entrepreneurship Specialization
06.4161004 Entrepreneurship	Course 3: American Literature	Course 3: AMDMTechical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Degree</b> -Marketing Management with Specialization in Entrepreneurship AAS  <b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	

SAMPLE Pathway OCCUPATIONS that represent types of small entrepreneurship See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Possible Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
General and Operations Managers	Associates Degree	\$90,300	1590
Marketing Research Analysis & Marketing Specialists	Bachelor's Degree	\$58,900	540
Personal Financial Advisors	Bachelor's Degree	\$68,700	150

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

***Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

**Possible Student Pathway Credentialing Opportunities: To be determined.**  
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx>.

Since there are not specific occupations representing this pathway, the following are resources for small business developers:  
FIRST STOP - [www.sos.ga.gov/firststop](http://www.sos.ga.gov/firststop)  
Georgia Entrepreneur & Small Business Programs – [www.ga.gov/smb](http://www.ga.gov/smb)  
SCORE provides free, one-on-one counseling to potential entrepreneurs and mentoring to those who decide to start their own business.  
[www.score.org](http://www.score.org)  
Georgia Trends Small Business Guide  
<http://www.madisoncountygov.ga.org/SmallBusinessGuide2012-13.pdf>

## Entrepreneurship

Entrepreneurs, innovators, proprietors, and small business owners play a key role in Georgia's economy. According to the United States Small Business Administration, there are 907,068 small businesses in Georgia (<http://www.sba.gov/>). Small business owners manage their own companies.

Job opportunities in business are varied and educational requirements vary according to specialization. Business professionals may be managers, owners, accountants, economists, administrators, or analysts. Those considering a career in business, especially entrepreneurs, should be analytical, detail-oriented, flexible, and decisive. They will be required to coordinate several activities at once, quickly analyze and solve specific problems, and cope with deadlines. Business professionals should also have good communication skills and be able to establish working relationships with many different people, from managers, supervisors and other professionals to clerks and related workers.

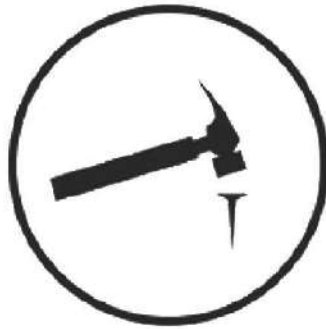
There are basically three types of small businesses: sole

proprietorship, partnerships, and corporations. Marketing skills are critical to a small business owner. It is important for owners to know when to take a risk, adapt to the changing market conditions, improve services, promote their goods or services and hire new employees. As with any other business, owners must be competitive while keeping costs down.

Owners who employ other workers must hire, train, and supervise their employees. Some run the entire business themselves.



# CONSTRUCTION



## Electrical Pathway

*Industry Fundamentals and Occupational Safety, Introduction to Construction, Electrical I*

## Carpentry Pathway

*Industry Fundamentals and Occupational Safety, Introduction to Construction, Carpentry I*

## Plumbing Pathway

*Industry Fundamentals and Occupational Safety, Introduction to Construction, Plumbing I*

People in Construction literally build our future! These are the people that build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools and recreational facilities. The pathway also includes the builders of highways, streets, bridges, tunnels, and airports as well as power plants, chemical plants, refineries and mills. This pathway's corresponding CTSO is SkillsUSA.





Student Plan of Study – Carpentry							
Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.							
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
46.5450004 Occupational Safety and Fundamentals	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	<b>Dual Enrollment</b> - COFC 1020 Prof. Tool Use and Safety - COFC 1050 Const. Print Reading Fund. -FC71 TCC Framing Carpenter - CARP 1105 – Floor, Wall and Stair Framing -CARP 1110 – Ceiling and Roof Framing - CARP 1070 – Site Layout, Footings and Foundations  <b>TCC (Technical Coll Cert)</b> -CCW1 TCC - Certified Construction Worker -FC71 TCC – Framing Carpenter
46.5460004 Introduction to Construction	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -CCW1 TCC - Certified Construction Worker -FC71 TCC – Framing Carpenter
46.5500004 Carpentry 1	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Diploma</b> -CA 22 Construction  <b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	

SAMPLE Pathway OCCUPATIONS			
See <a href="#">*Georgia's HOT Careers to 2020</a> for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Carpenters	High School	\$35,700	730
Construction Managers	Associate's Degree	\$78,300	490
Construction Inspectors	High School	\$44,900	80

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected [4th Science](#) courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="#">Staying On Course</a>. (<a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a>)</li> <li>Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>

Possible Student Pathway Credentialing Opportunities:
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .

*Related Pathway Occupations:	Other Related Architecture & Construction Occupations:
Carpenters Construction Craft Laborers Construction Foremen Construction Inspectors Construction Managers Drywall Installers Floor Layers	Construction Engineers Painters Paperhangers Project Inspectors Project Managers Roofers

\*ONET Online

Architecture & Construction/Carpentry
<p>Construction is one of the nation's largest industries with over 7 million wage and salary jobs and 1.9 million self-employed workers.</p> <p>Construction includes the building of new structures as well as additions and modifications to existing ones. The construction industry also includes maintenance, repair and improvements on these structures.</p> <p>Carpenters construct and repair building frameworks and structures—such as stairways, doorframes, partitions, and rafters—made from wood and other materials. They also may install kitchen cabinets, siding, and drywall.</p> <p>Because carpenters are involved in many types of construction, from building highways and bridges to installing kitchen cabinets, they may work both indoors and out. The work is sometimes strenuous.</p> <p>Although most carpenters learn their trade through a formal apprenticeship, some learn on the job, starting as a helper.</p> <p>Employment of carpenters is projected to grow 20 percent from 2010 to 2020, faster than the average for all occupations. Job prospects for carpenters should improve over the decade as construction activity rebounds from the recent recession.</p> <p>Carpenters are one of the most versatile construction occupations, with workers usually doing a variety of tasks. For example, some carpenters insulate office buildings; others install drywall or kitchen cabinets in homes. Those who help construct large buildings or bridges often make the wooden concrete forms for cement footings or pillars. Some carpenters build braces and scaffolding for buildings.</p> <p>Carpenters use many different hand and power tools to cut and shape wood, plastic, fiberglass, or drywall. They commonly use handtools, including squares, levels, and chisels, as well as many power tools, such as sanders, circular saws, and nail guns. Carpenters put materials together with nails, screws, staples, and adhesives, and do a final check of their work to ensure accuracy.</p>



## Student Plan of Study – Electrical



**HART COLLEGE AND  
CAREER ACADEMY**

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	basic	
46.5450004 Occupational Safety and Fundamentals	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	
46.5460004 Intro to Construction	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	
46.560004 Electrical 1	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Cost Estimators	Bachelor's Degree	\$57,300	210
Electricians	High School	\$40,700	340
Electronics Engineering Technicians	Associate's Degree	\$56,800	90

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships.			
*** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and /or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Architecture & Construction Occupations:
Cost Estimators Electricians Electrical & Electronic Engineering Techs Electrical & Power Transmission Electronic Systems Techs Linemen	Carpenters Drywall Installers Electrical Engineers Floor Layers Machinists Plumbers, Pipefitters *ONET Online

Architecture & Construction/Electrical
<p>Construction is one of the nation's largest industries with over 7 million wage and salary jobs and 1.9 million self-employed workers. Construction includes the building of new structures as well as additions and modifications to existing ones. The construction industry also includes maintenance, repair and improvements on these structures. Workers in the electrical pathway install and maintain electrical systems in homes, businesses, and factories. Electricians work indoors and out, in nearly every type of facility. Almost all electricians work full time, which may include evenings and weekends. Although the work is not as dangerous as some other construction occupations, common risks include electrical shocks and burns, cuts, and falls.</p> <p>Although most electricians learn through a formal apprenticeship, some start out by attending a technical school. Most states require licensure. Employment of electricians is projected to grow 23 percent from 2010 to 2020, faster than the average for all occupations. Homes and businesses require more wiring than ever before, and electricians will be needed to install the necessary components.</p> <p>Electricians typically do the following: read blueprints, install and maintain wiring and lighting systems, inspect electrical components, such as transformers and circuit breakers, identify electrical problems with a variety of testing devices, repair or replace wiring, equipment, or fixtures using hand tools and power tools, follow state and local building regulations based on the National Electric Code, direct and train workers to install, maintain, or repair electrical wiring or equipment.</p>



Student Plan of Study – HVACR Electrical				 HART COLLEGE AND CAREER ACADEMY			
Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.							
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	
46.5450004 Occupational Safety & Fundamentals	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available. <b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	
47.4140004 Intro to HVACR Systems	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History			
47.4160004 Low Voltage Electrical	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Cost Estimators	Bachelor	\$57,300	210
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	Some College	\$38,500	150
Electricians	No Degree Required	\$40,700	340

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** <a href="#">Current Georgia Graduation Rule</a>			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	

\*Selected [4th Science](#) courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="#">Staying On Course</a>. (<a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a>)</li> <li>Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>	

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Architecture & Construction Occupations:
Cost Estimators Heating, Air Conditioning, & Refrigeration Mechanics & Installers Sheet Metal Workers Pipe Fitters & Steamfitters Helpers-Installation, Maintenance, & Repair Workers Pipe-layers Electricians	Carpenters Stone Masons Welders Machinists

\*ONET Online

Architecture & Construction/HVACR-Electrical
<p>HVACR stands for heating, ventilation, air-conditioning, and refrigeration systems. These systems control the temperature, humidity, and total air quality of indoor environments and permit the storage and transport of food, medicine, and other perishable items.</p> <p>People who work in the HVACR industry install, maintain, and repair such systems. HVACR technicians are highly skilled workers because the systems on which they work consist of mechanical, electrical, and electronic parts, such as motors, compressors, pumps, fans, ducts, pipes, thermostats, and switches. Technicians must be proficient in reading and interpreting blueprints and manufacturers' specification manuals.</p> <p>When mechanics install and service equipment, they must use care, which is especially important when working with cooling systems. The release of refrigerants causes damage to the Earth's atmosphere. Consequently, HVACR technicians must comply with several laws and regulations that protect the environment.</p> <p>HVACR technicians usually train through one- or two-year professional-technical programs. Many heating and cooling system mechanics gain apprenticeship training, normally consisting of four years of on-the-job training. Conditioned air contractors must be licensed in Georgia.</p> <p>Major employers are heating and cooling system installation companies, electrical contractors, and heating and cooling system retailers. Job prospects are excellent because of the growing focus on improving indoor air quality and the increasing use of refrigerated equipment by a growing number of stores and gasoline stations. In addition, environmental concerns will lead to the development of more efficient systems and a growing need for technicians to install, maintain, and repair new systems. If federal and state tax laws continue to encourage individuals and companies to install more efficient HVACR equipment, job growth for HVACR technicians will become even more fast paced.</p>





SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Plumbers	High School Diploma Registered Apprenticeship	\$41,700	210
*Cost Estimators	Bachelor's Degree	\$57,300	210
Construction Inspectors	High School	\$44,900	80

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/ or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admission may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Architecture & Construction Occupations:
Plumbers, Pipefitters, & Steamfitters Cost Estimators Construction Engineers Construction Foremen Construction Inspectors Construction Managers	Drywall Installers Floor Layers Painters Paperhangers Roofers Safety Directors Subcontractors

\*ONET Online

Architecture & Construction/Plumbing
<p>Construction is one of the nation's largest industries with over 7 million wage and salary jobs and 1.9 million self-employed workers. Construction includes the building of new structures as well as additions and modifications to existing ones. The construction industry also includes maintenance, repair and improvements on these structures. Plumbers, pipefitters, and steamfitters install and repair pipes that carry water, steam, air, or other liquids or gases to and in businesses, homes, and factories. They work in factories, homes, businesses, and wherever else there are pipes or septic systems. Workers must often lift heavy materials, climb ladders, and work in tight spaces. Some plumbers travel to a variety of work sites every day.</p> <p>Most plumbers, pipefitters, and steamfitters learn on the job through an apprenticeship. Some start out by attending a technical school. Most states and localities require plumbers to have a license.</p> <p>Employment of plumbers, pipefitters, and steamfitters is expected to grow 26 percent from 2010 to 2020, faster than the average for all occupations. Stricter water efficiency standards and new building and power plant construction are projected to spur demand for workers. There are different levels usually depending on training and experience. For example, a master plumber on construction jobs may be involved with developing blueprints that show where all the pipes and fixtures will go. Their input helps ensure that a structure's plumbing meets building codes, stays within budget, and works well with the location of other features, such as electric wires.</p>

# CULINARY ARTS



## **Culinary Arts Pathway**

*Introduction to Culinary Arts, Culinary Arts I, Culinary Arts II*

Culinary Arts is the pathway designed to introduce students to fundamental food preparation terms, concepts, and methods in Culinary Arts where laboratory practice will parallel class work. Fundamental techniques, skills, and terminology are covered and mastered with an emphasis on basic kitchen and dining room safety, sanitation, equipment maintenance and operation procedures. The pathway also provides an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway to Culinary Arts.

Mastery of standards through project-based learning, technical skills practice, and leadership development activities of SkillsUSA will provide students with a competitive edge for either entry into the education global marketplace and/or the post-secondary institution of their choice to continue their education and training.





## Student Plan of Study – Culinary Arts

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
20.5310004 Introduction to Culinary Arts	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	- CUUL 1000 Fundamentals of Culinary Arts -CUUL 1110 Culinary Safety & Sanitation -CUUL 1122 Foundations of Cooking Principles -CUUL 1124 Foundations of Cooking Techniques
20.5321004 Culinary Arts I	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -PC31 Prep Cook  <b>Diploma</b> -Culinary Arts AAS
20.5331004 Culinary Arts II	Course 3: American Literature	Course 3: AMDMTechical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Food Service Managers	Some College No Degree Required	\$48,000	340
Chefs & Head Cooks	Some College No Degree Required	\$37,900	90
*Meeting, Convention & Event Planners	Bachelor's Degree	\$45,000	170

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.				
*** Current Georgia Graduation Rule				
Coursework	Credits	Coursework		Credits
I. English/Language Arts	4	V. Health & Physical Education		1
II. Math	4	VI. **Career, Technical & Agricultural Education		3
III. *Science	4	and/or ***World Languages, and/or Fine Arts		4
IV. Social Studies	3	VII. Electives		23
		TOTAL		

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a>	

*Related Pathway Occupations:	Other Related Human Services Sciences Occupations:
Bakers Baristas Chefs Cooks Food Service Managers Meeting, Convention & Event Planners Waiters & Waitresses	Lodging Managers Food Prep Workers First-Line Supervisors of Food Prep and Serving Workers

\*ONET Online

Culinary Arts	
<p>A career in culinary arts involves more than simply cooking. Many job opportunities exist in this field, from executive chefs to part-time food service workers.</p> <p>Chefs, cooks, and food preparation workers prepare, season and cook a wide range of foods in a variety of restaurants and other food service establishments. Food service managers are responsible for the daily operations of restaurants and other establishments that prepare and serve meals and beverages to customers.</p> <p>Most fast-food or short-order cooks and food preparation workers require little education or training since most skills are learned on the job. Executive chefs and head cooks who work in fine-dining restaurants require many years of training and experience. They may receive training through post-secondary vocational programs, independent cooking schools, professional culinary institutes or 2- or 4-year degree programs in hospitality or culinary arts. Many restaurant and food service management positions, particularly self-service and fast-food, are filled by promoting experienced food and beverage preparation and service workers. Many national or regional restaurant chains recruit management trainees from 2- and 4-year college hospitality management programs which require internships and real-life experience to graduate.</p> <p>Important characteristics for those interested in culinary arts include working well as part of a team, working efficiently, personal cleanliness, self-discipline and initiative.</p> <p>Job openings for chefs, cooks, food preparation workers and food service managers are expected to be plentiful through 2020. However, competition will be keen for jobs in the top kitchens of higher-end restaurants. Employment growth will be spurred by increases in population, household income, and leisure time that will allow people to dine out and take more vacations.</p>	

# Hospitality & Tourism




## **Sports & Entertainment Marketing Pathway**

*Marketing Principles, Intro to Sports & Entertainment, Advanced Sports & Entertainment Marketing*

## **Hospitality, Recreation, & Tourism Pathway**

*Marketing Principles, Hospitality, Recreation, & Tourism Essentials, Hospitality, Recreation, & Tourism Management*



Student Plan of Study – Sports & Entertainment Marketing							 HART COLLEGE AND CAREER ACADEMY	
Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.								
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)		
08.4740004 Marketing Principles	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	Advanced Academic Pathways ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.		
08.4780004 Intro to Sports & Entertainment	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		World Language Pathways Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.		
08.4850004 Advanced Sports & Entertainment Marketing	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		Fine Arts/Performing Arts Pathway Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	Bachelor of Science The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate masters, doctoral and professional degrees.	
Work-Based Learning, Dual Enrollment, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		Legend: *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.		



SAMPLE PATHWAY OCCUPATIONS			
See <a href="#">*Georgia's HOT Careers to 2020</a> for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Sports Marketing Managers	Bachelor's Degree	\$60,000	Georgia data N/A
*Meeting, Conventions & Events Planners	Bachelor's Degree	\$45,000	170
Set and Exhibit Designers	Bachelor's Degree	\$37,000	20

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

#### \*\*\* Current Georgia Graduation Rule

Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected [4th Science](#) courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

#### Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at [Staying On Course](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf). ([www.usg.edu/student\\_affairs/documents/Staying\\_on\\_Course.pdf](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf))
- Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
- Students who will continue their education and training in the US Military should take the ASVAB assessment.
- Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

#### Possible Student Pathway Credentialing Opportunities:

Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx>

*Related Pathway Occupations:	Other Related Hospitality & Tourism Occupations:
Team Sports Bloggers Fan Communications Directors Brand Partnerships Coordinators Media Communications & Social Network Associates Publicity Assistants Sports Agents	Artist Managers Gaming Managers Marketing Campaign Coordinators Music Marketers & Promoters Sports Officials


\*ONET Online

### Sports & Entertainment Marketing

The sports and entertainment industry has grown as a result of rising incomes and increased leisure time. Perhaps most notable on the entertainment side of the industry is the Georgia Film and TV Production sector. Film and TV production professionals know that Georgia is Camera Ready due to tax incentives, location diversity, production resources and professional support. In 2012 alone, television networks, Hollywood studios, production companies and independent producers invested nearly \$3.1 billion in Georgia.

Jobs offered by this industry can be categorized into two groups: (a) live performances or events and (b) entertainment activities. Live performances and events include professional and amateur sports, gambling or gaming establishments, physical fitness, rentals of sporting goods, and musical and theatrical productions. The entertainment activities include theme parks, movies, arcades, and casinos.

Entry level jobs in the sports and entertainment industry are more likely to be part-time than those in other industries and staffed by workers younger than the average. High level employment in the industry includes marketing, brand development, business management, event coordination, talent management, and public outreach. These positions usually require a bachelor's degree. Agents and business managers of artists, performers, and athletes promote their clients to prospective employers and manage contract negotiations and other business concerns. Public relations specialists promote the sports and entertainment industry by creating favorable publicity material and utilizing various communications media to market an event, promotion, or activity. Market research analysts conduct studies to determine market conditions and potential sales of an entertainment or sports product, event, or service.

Student Plan of Study – Hospitality, Recreation, & Tourism				 HART COLLEGE AND CAREER ACADEMY		
Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.						
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)
08.4740004 Marketing Principles	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.
08.4530004 Intro to Hospitality, Recreation, & Tourism	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.
08.4540004 Hospitality, Recreation, & Tourism Management	Course 3: American Literature	Course 3: AMDMTechical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.
Work-Based Learning, Dual Enrollment, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.
						<b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Meeting, Convention, Events Planners	Bachelor's Degree	\$45,000	170
Lodging Managers	Bachelor's Degree	\$45,100	60
Security Managers (national data- considered to be a new and emerging occupation because of a rapid change in knowledge and skills)	High School	\$99,540	National projected increase in job openings 3-9%

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

*** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	23

\*Selected 4<sup>th</sup> Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course. (www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)</a></li> <li>Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>	

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Gorgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Gorgia-Assessments.aspx</a>	

*Related Pathway Occupations:	Other Related Hospitality & Tourism Occupations:
Interpreters & Translators Cruise Ship Directors Facilities Managers Reservationist & Transportation Ticket Agents Travel Bloggers Tourism Advisors	Food Service Managers Special Events Coordinators Curators Resort Salespersons Ecotourism Directors Multipurpose Sports Club Managers

\*ONET Online

Hospitality, Recreation & Tourism
<p>Georgia represents the 8<sup>th</sup> largest tourism economy in the country and the 2<sup>nd</sup> largest industry in Georgia. Georgia's tourism industry results in 400,000 jobs, \$6 billion in resident wages and \$25 billion in visitor spending. Atlanta is 3<sup>rd</sup> in the nation in relation to the number of hotel rooms occupied.</p> <p>The Hospitality, Recreation and Tourism Industry consists of the following five sectors: (1) Lodging, Hotels and Resorts; (2) Conventions, Meetings, Trade Shows and Events; (3) Restaurants and Food Service; (4) Recreation, Attractions, Sporting Events and Parks and (5) Travel, including Air, Rail, Auto and Coach. Hospitality management jobs include executive positions from a variety of vertical areas within the industry (e.g., business, marketing, public relations, etc.). Other occupations in the pathway vary widely from travel agents in tourism, to gaming managers in recreation, to financial supervisors in lodging. Since the industry is primarily a service-oriented industry, workers will need good communication skills including both active listening and speaking skills, critical thinking and decision-making skills, and they will have to understand the importance of meeting the needs of individuals.</p> <p>One of the fastest growing occupations in Georgia is a meeting, convention and event planner. These workers ensure that commercial hotel operations meet the needs of the customer or organization in planning large-scale meetings or events. These events might include every aspect of the industry, including lodging arrangements, recreational activities/tourism and food and beverages.</p> <p>Recreational workers design and lead leisure activities for groups in volunteer agencies or recreation facilities, such as playgrounds, parks, camps, gaming facilities, and senior centers. Other activities include areas such as arts and crafts, sports and music. Employment is expected to grow by 19 percent from 2010 to 2020, about as fast as the average for all occupations.</p>



# PERSONAL CARE SERVICES



## Human Services Pathway

*Introduction to Personal Care Services, Cosmetology 1, Cosmetology 2*

This pathway is designed to provide the student with an opportunity to earn credit hours toward completion of the 1,500 credit hours required for the Georgia State Board of Cosmetology licensure. The competencies in the fundamental theory and skills required include: shampooing, hair cutting, hair styling design, permanent waving and management (State and Local Laws, Human Resources, Planning, Management, Retailing, Marketing, Receptionist Duties and Client Retention) and the theory related to diseases and disorders of skin, nails and hair. Sufficient practice is included in order for students to acquire the number of procedures required by the the Georgia State Board of Cosmetology. Instruction is also provided in the theoretical study of Anatomy and Cosmetology. Safety and sanitation procedures are stressed throughout the pathway in all procedures. This pathway's corresponding CTSO is SkillsUSA.



# HART COLLEGE AND CAREER ACADEMY

Student Plan of Study – Cosmetology							
<p><i>Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.</i></p>							
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
12.5440024 Intro to Personal Care	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<p><b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.</p> <p><b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.</p>	<p><b>Dual Enrollment</b></p> <ul style="list-style-type: none"> <li>- COSM 1000 Intro to Cosmetology</li> <li>- COSM 1020 Hair Care &amp; Treatment</li> <li>- COSM 1040 Styling</li> <li>-COSM 1120 Salon Management</li> </ul> <p><b>TCC (Technical Coll Cert)</b> -HD21 Hair Designer</p> <p><b>Diploma</b> Cosmetology</p>
12.4110024 Cosmetology III	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics  Course 3: Biology	Course 2: World History  Course 3: US History		<p><b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.</p>	<p><b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.</p>
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<p><b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.</p>	



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Cosmetologists, Hairdressers & Barbers	High School	\$19,100	620
Electrologists	High School	\$21,300	120
Pedicurists/Manicurists	Postsecondary	\$18,100	30

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
*** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course (www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)</a>.</li> <li>Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>

Possible Student Pathway Credentialing Opportunities:
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .

*Related Pathway Occupations:	Other Related Personal Care Services Occupations:
Barbers	Funeral Directors/Morticians
Cosmetologists	Embalmers
Shampoo Technicians	Funeral Attendants
Nail Technicians	Personal and Home Care Aides
Skin Care Technicians	Make-up Artists
Electrolysis Technicians	
Electrologists	

\*ONET Online

Personal Care Services (Cosmetology)
<p>Although the pay is good in many of the jobs in Personal Care Services, people choose these jobs because they want to serve others. They are motivated by the need to assist others and to help make someone else's life better. Occupations are many and varied including cosmetologists, estheticians, nail techs, and barbers. These type jobs help people feel and look better.</p> <p>Personal Care Services workers assist individuals with their personal appearance including shampooing, cutting, coloring, and styling hair; providing manicures, pedicures, and scalp and facial treatments; providing makeup analysis; cleaning and styling wigs and hairpieces; and providing personal fitness training. Also, within personal care services, funeral directors and attendants make funeral arrangements for grieving families.</p> <p>Cosmetologists cut, trim, shampoo, style, color, bleach, highlight hair and offer permanent wave service. They also provide scalp and facial treatments and makeup analysis. Some also clean and style wigs and hairpieces and a growing number of actively sell skin care products. Barbers and cosmetologists usually work in a barbershop or salon. Physical stamina is important, because workers are on their feet for most of their shift. Many work part time, and nearly half were self-employed according to 2010 data.</p> <p>All states require barbers and cosmetologists to be licensed, with the exception of shampoo technicians. To qualify for a license, candidates must graduate from a state-approved cosmetology or barbering program. Overall employment of barbers and cosmetologists is expected to grow 14 percent from 2010 to 2020, as fast as the average for all occupations. Most job openings will result from the need to replace workers who leave the occupation.</p>



# EDUCATION



## Teaching as a Profession Pathway

*Examining the Teaching Profession, Contemporary Issues in Education, Teaching as a Profession Internship*

Teaching as a Profession prepares candidates for future positions in the field of education. Teaching Profession candidates study, apply, and practice the use of current technologies, effective teaching and learning strategies, the creation of an effective learning environment, the creation of instructional opportunities for diverse learners and students with special needs, and plan instruction based on knowledge of subject matter, students, community, and curriculum performance standards.

Candidates will be prepared to practice their skills and knowledge at a variety of elementary and secondary education sites. learning strategies, the creation of an effective learning environment, the creation of instructional opportunities for diverse learners and students with special needs and plan instruction based on knowledge of subject matter, students, community and curriculum performance standards. This pathway's corresponding CTSO is FEA.





# HART COLLEGE AND CAREER ACADEMY

## Student Plan of Study – Teaching as a Profession

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
13.0110004 Examining the Teaching Profession	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available. <b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
13.0120004 Contemporary Issues in Education	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	
13.0130004 Teaching as a Professional Practicum	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment			



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Postsecondary Business Teachers	Advanced Degree	\$64,400	120
*Middle School Teachers, except Special & Technical/ Career Education	Bachelor's Degree	\$53,300	790
*Clinical, Counseling & School Psychologists	Advanced Degree	\$63,900	140

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

#### \*\*\* Current Georgia Graduation Rule

Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

#### Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at [Staying On Course](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf). ([http://www.usg.edu/student\\_affairs/documents/Staying\\_on\\_Course.pdf](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf))
- Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
- Students who will continue their education and training in the US Military should take the ASVAB assessment.
- Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

#### Possible Student Pathway Credentialing Opportunities:

Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx>

*Related Pathway Occupations:	Other Related Education & Training Occupations:
Educational Administrators Instructional Coordinators Instructors Librarians School Psychologists Adapted PE Specialists Graduate Teaching Assistants	Postsecondary Instructors Social Workers Special Education Teachers, all levels *ONET OnLine

#### Teaching as a Profession

Educational services are the second largest industry, accounting for about 13 million jobs. The educational services industry includes a variety of institutions that offer academic education, vocational or career and technical instruction and other education and training to millions of students each year. Institutions include elementary, middle and secondary schools, universities, colleges, professional schools, community or junior colleges and career and technical institutes.

School and working conditions often vary from town to town. Some schools may have few supplies and equipment while some are well equipped. Conditions at postsecondary institutions are generally very good. Some educational institutions operate 10 months a year while institutions that cater to adult students generally operate year-round. Many teachers spend significant time outside of school preparing for class, doing administrative tasks, conducting research, writing articles and books and pursuing advanced degrees.

Kindergarten, elementary and secondary school teachers in public schools must have a bachelor's degree and must be licensed. Teachers in private elementary, middle and secondary schools do not have to be licensed.

Postsecondary teachers who teach at 4-year colleges and universities generally must have a doctoral degree. Vocational or career and technical education teachers typically need work or other experience in their field and may need to be licensed in that field.

The overall demand for workers in educational services will increase as a result of a growing emphasis on improving education and making it available to more people. Retirements will also create large numbers of job openings. However, budget constraints at all levels of government may place restrictions on educational services. National analysis of labor market information regard school counselors, social workers, elementary school teachers, middle school teachers, pre-school teachers, secondary teachers, special education teachers, teaching assistants and tutors as occupations that are expected to grow rapidly with numerous openings. (O\*NET "Bright Outlook"

<http://www.onetonline.org/find/bright?b=2&g=Go> )

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# DRAFTING



## **ARCHITECTURAL DRAWING & DESIGN PATHWAY**

*Introduction to Drafting & Design and Architectural Drawing & Design I, II*

## **ENGINEERING DRAFTING & DESIGN PATHWAY**

*Introduction to Drafting & Design, Survey of Engineering Drawing, 3D Modeling & Analysis*

Drafting is a process in which someone creates drawings containing technical information that precisely convey the specifications and materials needed to create something, whether it's a building or a cellular phone. While today's drafting uses advanced computer technology, drafting has existed since ancient times. Students at Hart College and Career Academy need a basic understanding of math, fractions, decimals and a ruler to be successful in drafting. The intro class starts with board drafting and advances to AutoCad. There are several drafting classes a student may take after Intro. A student may choose the Mechanical or the Architecture field. Students will be using AutoCad, Revit and Inventor. This pathway's corresponding CTSO is SkillsUSA.





## Student Plan of Study – Architectural Drawing & Design

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia must meet minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)
48.5410004 Intro to Drafting & Design	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.  <b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.
48.5450004 Architecture I	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.
48.5460004 Architecture II	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Landscape Architects	Bachelor's Degree	\$59,300	10
Architectural & Civil Drafters	Associate's Degree	\$49,700	40
Surveyors	Bachelor's Degree	\$44,200	30

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
*** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Students should contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a>.</li> <li>Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>	

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Architecture & Construction Occupations:
Architects Architectural and Civil Drafters Landscape Architects Surveyors Computer Aided Drafters (CAD) Renderers	Civil Engineers Electrical Engineers Environmental Designers Regional and Urban Planner/Designers

\*ONET Online

Architecture & Construction/Drawing & Design
<p>Drawing and design is the process of turning ideas of how things should be constructed into technical drawings. These drawings are based on sketches and calculations made by engineers, surveyors, architects and/or scientists. The drawings provide visual guidelines such as dimensions, materials to be used, and procedures to be followed to build everything from manufactured products such as spacecraft, automobiles, and industrial machinery to structures such as homes, office buildings, and oil and gas pipelines.</p> <p>Opportunities will be best for those who have at least two years of postsecondary training in a drafting program that provides strong technical skills and for those who have considerable skill and experience using CADD systems. As technology continues to advance, employers will look for drafters who have a strong background in fundamental drafting principles with a higher level of technical sophistication and an ability to apply this knowledge to a broader range of responsibilities. Although employers usually do not require drafters to be certified, certification demonstrates an understanding of nationally recognized practices and standards of knowledge. Jobs in this field may be found in construction, architecture, engineering and related service firms, and manufacturing industries.</p> <p>Drafters can expect slower than average employment growth, with the best opportunities expected for those with at least 2 years of postsecondary training. Employment of drafters is expected to grow 6 percent from 2010 to 2020. Developments in software programs used by drafters and other professionals they work with are changing the nature of drafters' work and how this work will have to be done. Growth will vary by specialty and competition will be keen.</p>



# HART COLLEGE AND CAREER ACADEMY Student Plan of Study – Engineering Drafting & Design

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
48.5410004 Intro to Drafting and Design	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	<b>Dual Enrollment</b> - DFTG 1101 CAD Fundamentals - DFTG 1103 Multiview Basic Dimensions - DFTG 1105 3D Mechanical Modeling
48.5420004 Survey of Engineering Graphics	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -DA31 Drafters Assistant  <b>Diploma</b> -Drafting Technology -Drafting Technology AAS
48.5430004 3D Modeling and Analysis	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Mechanical Engineers	Bachelor's Degree	\$74,100	110
Electrical Engineers	Bachelor's Degree	\$80,100	90
Architectural & Civil Drafters	Associate's Degree	\$49,000	40

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4<sup>th</sup> Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course- (www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)</a>
•	Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a>	

*Related Pathway Occupations:	Other Related STEM Occupations:
Electronic Drafters Architectural Drafters Mechanical Drafters Civil Drafters Electrical Drafters Cartographers Civil Engineering Technicians	Aerospace Engineers Agricultural Engineers Architectural Drafters Biochemical Engineers Cost Estimators Fuel Cell Engineers Materials Engineers
	*ONET Online

Engineering Drafting & Design	
<p>Engineering Drafting &amp; Design occupations translate ideas from design layouts, specifications, rough sketches, and calculations of engineers and architects into working drawings, maps, plans, and illustrations that are used in making products. They prepare 3D computer models and 2D drawings using computer-aided design and drafting (CADD) and 3D modeling systems. Workers may enjoy new systems such as building information modeling (BIM) and product data management (PDM). They perform design and drafting work in mechanical, electrical/electronic, structural, architectural, civil, piping, and technical illustration fields. They make mathematical calculations related to the above fields using algebra, trigonometry, plane and solid geometry, applied mechanics, strength of materials and basic physics. These occupations usually require working closely with both professional and nonprofessional people. It is essential they have good communication skills.</p> <p>Degrees are not specifically in the Engineering Drafting and Design area. They are in manufacturing, mechanical, industrial, electrical, engineering, engineering technology, or engineering technician programs.</p> <p>Employers prefer applicants who have completed postsecondary education in drafting, typically an associate's degree from a technical institute or community college. Drafters who specialize in architecture and engineering may need a higher degree, such as a bachelor's degree.</p> <p>Developments in new technology are causing entry-level requirements to rise. An associate's degree is the typical level of education needed to enter the occupation. In addition, drafters need skills from academic programs so that they may move into the work of designing directly for professionals such as engineers or architects.</p>	



# HEALTH SCIENCE



## **Therapeutic Services / Patient Care Pathway**

*Intro to Healthcare Science, Essentials of Healthcare, Patient Care Fundamentals*

## **Therapeutic Services / Allied Health and Medicine Pathway**

*Intro to Healthcare Science, Essentials of Healthcare, Allied Health and Medicine*

Healthcare Science Technology Education, within the first two levels, gives the student a fundamental knowledge of the health field that includes anatomy and physiology, math, practical and functional applications, skills, medical terminology, a professional portfolio and cognitive thinking skills as they apply to medical scenarios. In-depth area specific information is taught in lab, dental, medical, nursing, CPR, First Aid, AED, radiology and other health fields. Advanced levels incorporate students in partnerships with medical professionals providing opportunities to build on the academic foundations of the classroom. The acquired knowledge, practical application and active student preceptorship are the standards for success. The Healthcare program offers the student the challenge of attaining that first important step of state and/or national certification in a health area that serves as the foundation of his/her future. This pathway's corresponding CTSO is SkillsUSA.



Student Plan of Study – Patient Care		 HART COLLEGE AND CAREER ACADEMY					
Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.							
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
25.5210004 Intro to Healthcare Science	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	Advanced Academic Pathways ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	Dual Enrollment - ALHS 1000 Introduction to Healthcare - ALHS 1090 Medical Terminology - NAST 1100 Nurse Aid Fundamentals
25.4400004 Essentials of Healthcare	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		World Language Pathways Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	TCC (Technical Coll Cert) -ALHS 1060 Diet and Nutrition
25.4360004 Patient Care Fundamentals	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		Fine Arts/Performing Arts Pathway Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	Bachelor of Science The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		Legend: *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Registered Nurses	Associate's Degree	\$63,200	3,300
*Medical and Health Services Managers	Bachelor's Degree	\$87,000	510
*Healthcare Social Workers	Advanced Degree	\$46,800	220

Source: Georgia Department of Labor/ONET

Go to [GAcollege411](http://www.GAcollege411.org) at <http://www.GAcollege411.org> for more information about your education and career planning, including valuable financial aid information that includes grants and scholarships.

#### \*\*\* Current Georgia Graduation Rule

Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or ***World Languages, and or Fine Arts	3
III. *Science	4	VII. Electives	4
IV. Social Studies	3	TOTAL	23

\*Selected 4th Science courses may be used to meet both the required science and required elective in CTAE sequence of courses.

\*\*Students must complete 3 credits to complete CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete 2 years of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

#### Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Admission's testing varies from institution to institution. Students should contact the selected institution for specific testing information. Additional admissions information can be found at [Staying On Course: \(www.usg.edu/student\\_affairs/documents/Staying\\_on\\_Course.pdf\)](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf)
- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
- Students who will continue their education and training in the U.S. Military should take the ASVAB assessment.
- Students should utilize [GAcollege411](http://www.GAcollege411.org) to select the most appropriate postsecondary opportunities to match their selected career field, including state registered apprenticeships.
- Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

#### Possible Student Pathway Credentialing Opportunities:

Certified Nursing Assistant (CNA)  
National Healthcare Association-Certified Patient Care Technician (NHA-CPCT)-Students may sit for this exam if they take an additional 4th course, 25.52600 Allied Health & Medicine  
American Red Cross CPR and First Aid Certification

*Related Pathway Occupations:	Other Related Health Science Occupations:
Certified Nursing Assistants (CNA) Licensed Practical Nurses (LPN) Registered Nurses (RN) Specialized Nursing Athletic Trainers Home Health Aides Anesthesiologist Assistants Athletic Trainers	Medical Assistant Occupational Therapist / Assistants Physician's Assistants Recreation Therapists Respiratory Therapists Surgical Technicians *ONET Online

#### Therapeutic Services/Patient Care

Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly with patients and may provide care, treatment, counseling and health education information. National labor market information indicates that eight out of the top twenty fastest-growing occupations are in the Health Science industry. (OOH)

Based on an aging population and a retiring workforce, the demand for health care workers will remain high through 2020. As roles of careers in Therapeutic Services change, professionals in this pathway will find increased opportunities to work independently. Additionally, an increasing number of career opportunities are becoming available outside of the traditional hospital setting.

Educational levels vary from occupation to occupation. Most Health Science occupations require additional education after high school and require that potential employees acquire the appropriate certification and/or licensing.

Workers in the Health Science industry must have a solid background in math, science, communications, and technical skills, be knowledgeable in their subject area, have the ability to communicate with others, and inspire trust and confidence.

Occupations in the Health Sciences represent the largest and fastest-growing industry in the United States employing over 10 million workers in more than 200 careers. Those considering a nursing career should have a strong desire to help others, a genuine concern for the welfare of patients and clients, and an ability to deal with people of diverse backgrounds in stressful situations.

Rapid job growth is expected in hospital outpatient facilities, such as same-day surgery, rehabilitations, and chemotherapy. Growth is also expected in nursing care facilities and in home health care. RNs with a bachelor's degree will have better job prospects in supervisory and managerial positions than those with either an associate's degree or a diploma. The pay scale will increase as students specialize to nurse practitioner, nurse anesthetist and clinical nurse specialist.

## Student Plan of Study – Allied Health & Medicine



## HART COLLEGE AND CAREER ACADEMY

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	
25.521004 Intro to Healthcare Science	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.
25.4400004 Essentials of Healthcare	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.
25.4370004 Allied Health & Medicine	Course 3: American Literature	Course 3: AMDMT/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.



SAMPLE PATHWAY OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Medical & Health Service Managers	Bachelor's Degree	\$76,800	500
Occupational Health & Safety Specialists	Bachelor's Degree	\$63,800	20
Respiratory Therapists	Associate's Degree	\$50,200	170

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
****Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or	3
III. *Science	4	***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at Staying On Course. ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Health Science Occupations:
Dietetics & Nutritionists Medical Records & Health Information Technicians Health Specialties Teachers Health Diagnosing & Treating Practitioners Medical & Health Service Managers Occupational Health & Safety Specialists Mental Health Counselors	Registered Nurses Informatics Nurse Specialists Epidemiologists Medical Equipment Repairers Direct Support Professionals (DSP)

\*ONET Online

Therapeutic Services - Allied Health and Medicine
<p>Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly with patients and may provide care, treatment, counseling and health education information. National labor market information indicates that eight out of the top twenty fastest-growing occupations are in the Health Science industry. (OOH)</p> <p>Based on an aging population and a retiring workforce, the demand for healthcare workers will remain high through 2020. As the roles change in Therapeutic Services careers, professionals in this pathway will find increased opportunities to work independently. Additionally, an increasing number of career opportunities are becoming available outside of the traditional hospital setting.</p> <p>Educational levels vary from occupation to occupation. Most Health Science occupations require additional education after high school and require that potential employees acquire the appropriate certification and/or licensing.</p> <p>Workers in the Health Science industry must have a solid background in math, science, communications, and technical skills, be knowledgeable in their subject area, have the ability to communicate with others, and inspire trust and confidence in themselves and others.</p> <p>Occupations in the Health Sciences represent the largest and fastest growing industry in the United States employing over 10 million workers in more than 200 careers. Those considering a nursing career should have a strong desire to help others, a genuine concern for the welfare of patients and clients, and an ability to deal with people of diverse backgrounds in stressful situations.</p> <p>Allied health professionals are primarily involved with the delivery of health or related services pertaining to the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; and rehabilitation, among others. Occupations in the field include dental hygienists, surgical technologists, dietitians, pharmacists, occupational therapists, physical therapists, public health workers, respiratory therapists, and speech language pathologists. Most health-related occupations will grow much faster than the average.</p>

# JUNIOR ROTC



## **JROTC - Army Pathway**

*JROTC Army Leadership Education I, II, III, IV, V, VI, VII, VIII*

The JROTC pathway introduces students to leadership principles and develops basic citizenship skills. Subjects include basic leadership, health and fitness, foundational principles of our country, management skills, and financial planning. Students are issued the JROTC uniforms and a physical fitness uniform at no cost to the student. Weekly events include physical fitness, sports, classroom topics, and Drill and Ceremony practice. Each student participates in a Service Learning Project as part of this pathway. This pathway's corresponding CTSO includes the Raider Team and the Drill Team. Successful completion of additional JROTC classes may qualify the student for advanced placement in the military or additional scholarship opportunities if the student chooses this route.





Student Plan of Study – JROTC - Army			 HART COLLEGE AND CAREER ACADEMY			
<i>Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.</i>						
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	basic
28.0310004 JROTC Army Leadership Education 1	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.
28.0320004 JROTC Army Leadership Education 2	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.
28.0330004 JROTC Army Leadership Education 3	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Respiratory Therapy Technicians Respiratory Therapy (Civilian)	Enlisted	N/A	N/A
Nodal Network Systems Operator-Maintainer Network & Computer Systems Administrators	Enlisted	N/A	N/A
Designated Telecommunications Systems Engineer Graphic Designers (Civilian)	Commissioned Officer	N/A	N/A

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
****Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education and/or	3
III. *Science	4	***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		TOTAL	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

Related JROTC-Army Occupations:	
Students can continue career pathways by entering the job market and receiving on-the-job training or by entering a technical, 2-year, or 4-year college/university to receive specific job training relating to a managerial/leadership position of choice. Job fields may include government, private industry, entrepreneurship, and non-profit organizations to name a few.	
ROTC (Reserve Officer Training Corps) programs offered at various colleges/universities in Georgia and throughout the U.S. train qualified young men and women to become officers in the military services upon graduation from college.	

JROTC-Army	
The Junior Reserve Officers' Training Corps is a leadership education program. This program will help students build a strong knowledge base of self discovery and leadership skills applicable to many leadership and managerial situations. Mastery of the Army Junior ROTC standards through project-based learning, service learning and leadership development activities will prepare students for the 21st Century leadership responsibilities. The curriculum focus is reflected in its mission statement, "To motivate young people to be better citizens."	
Desired Learning Outcomes: This program intends to teach students <ul style="list-style-type: none"> <li>•Maximize potential for success through learning, self-management and development of employability "soft skills"</li> <li>•Develop leadership skills</li> <li>•Incorporate principles of mental and physical wellness into behaviors and decisions with health and wellness awareness</li> <li>•Build effective relationships with peers, co-workers, and the community with information and communications skill development</li> <li>•Apply physical and political geography to building global awareness</li> <li>•Understand the importance that financial, economic, business, and entrepreneurial literacy have in the work force</li> <li>•Correlate the rights and responsibilities of citizenship to the purposes of the U.S. government through civic literacy</li> <li>•Relate events in U.S. history to choices and responsibilities Americans have today</li> <li>•Characterize the role of the military and other national service organizations in building a democracy and maintaining peace in a democratic society.</li> </ul>	



# AUDIO-VIDEO TECHNOLOGY AND FILM



## **Audio-Video Technology and Film Pathway** *Audio-Video Technology & Film I, II and III*

In the Audio-Video Technology and Film Pathway topics covered may include, but are not limited to: history of mass media, terminology, safety, basic equipment, script writing, production teams, production and programming, set production, lighting, recording and editing, studio production and professional ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program. This pathway's corresponding CTSO is TSA.



# Student Plan of Study – Audio-Video Technology



**HART COLLEGE AND CAREER ACADEMY**

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
10.5181004 Audio and Video Tech and Film	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	<b>Dual Enrollment</b> - DMPT 1600 Introduction to Video Production - DMPT 2600 Basic Video Editing - DMPT 2605 Intro to Video Compositing and Broadcast Animation -DMPT 2905 Practicum/Internship II
10.5101004 Audio and Video Tech and Film II	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -DMPT 2630 Post-Production Audio -DMPT 2930 Exit Review
10.5201004 Audio and Video Tech and Film III	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Degree</b> -Design & Media Post-Production Technology  <b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	



SAMPLE Pathway OCCUPATIONS			
See <a href="#">*Georgia's HOT Careers to 2020</a> for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Audio & Video Equipment Techs	Some College No Degree Required	\$37,000	80
Camera Operators, Television, Video & Motion Picture Graphic designers	Bachelor's Degree	\$47,300	30
Film & Video Editors	Bachelor's Degree	\$45,600	10

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** <a href="#">Current Georgia Graduation Rule</a>			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	<b>23</b>

\*Selected [4th Science](#) courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at <a href="#">Staying On Course</a> . ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Arts, A/V Technology & Communications Occupations:
Broadcast Technicians Camera & Photographic Equipment Repairers Camera Operators, Television, Video & Motion Picture Graphic Designers Set & Exhibit Designers Sound Engineering Technicians Technical Directors/Managers	Artists & Related Workers Camera & Photographic Equipment Repairers Computer Programmers Photographers Audio & Video Equipment Techs  *ONET Online

## Arts, A/V Technology & Communications/ Audio Video Technology & Film

The broadcasting and digital media industry is comprised of two major employers—radio/television broadcasting companies and movie/television production companies. Approximately 73 percent of employed persons within the industry are in television and radio broadcasting. Jobs within the industry are organized into five major areas: program production (producers, film and video editors, announcers, program directors), news-related (reporters, news analysts, news directors), technical (television/video camera operators, technicians, engineers, network systems administrators), sales (advertising/marketing managers and producers of commercials), and management.

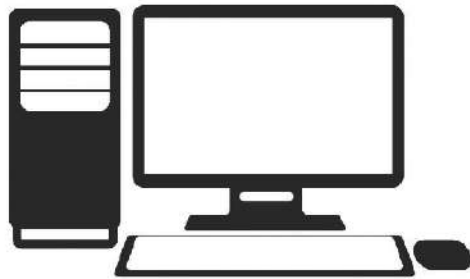
Competition for employment in the broadcasting industry is expected to be keen, particularly in large cities because of the large number of people attracted by the glamour of this industry. While technical jobs in broadcasting often do not require a college education, management and sales occupations do require a college degree. Most broadcast stations prefer individuals with training in broadcast technology, electronics, or engineering from technical, 2-year, or 4-year colleges. Some employers require broadcast technicians to be certified. Relevant work-related experience, such as employment at a college radio/television station or internship at a professional station, is important for future employment in the industry.

Employment of film and video editors and camera operators is projected to grow four percent from 2010 to 2020, slower than the average for all occupations. These occupations should experience intense competition for jobs, and those with more experience at a TV station or on a film set will likely have the best job prospects.

Workers in the industry will need to continually upgrade their skills because of rapidly changing technology. Due to an increase in digital technology, skill in computer networks and software is especially important for potential employees. Other new jobs are expected to be created in the movie and cable TV industries. The number of cable TV stations is expected to grow as cable companies expand the number of channels they carry.



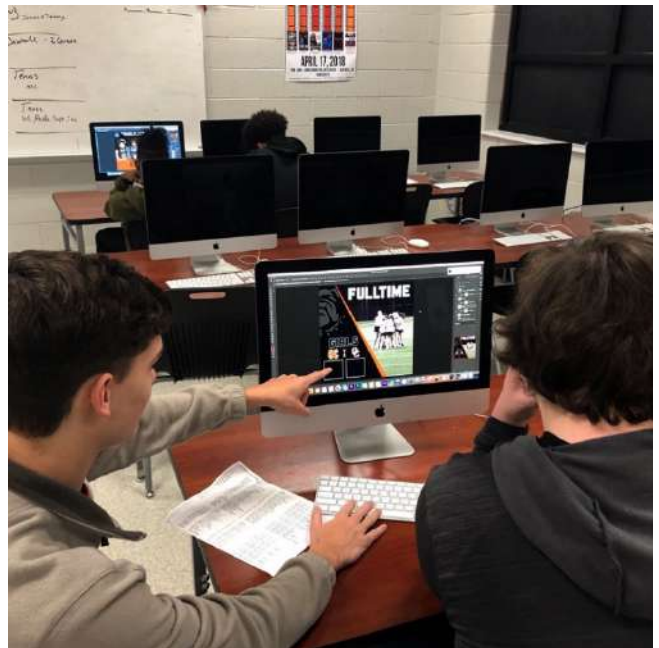
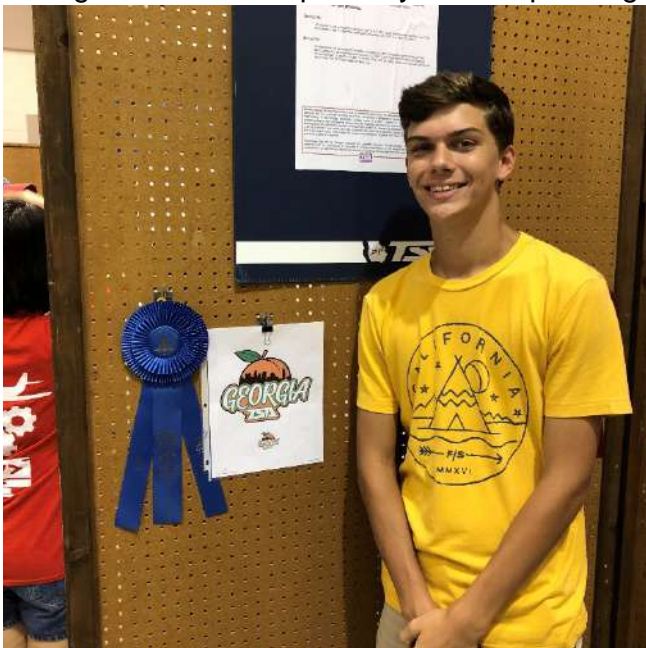
# GRAPHIC DESIGN



## **GRAPHIC DESIGN PATHWAY**

*Introduction to Graphic Design, Graphic Design and Production, Advanced Graphic Design*

The Graphic Production pathway is one of three pathways in the Arts, Audio-Video Technology and Communications Cluster. Graphic Production includes the processes and industries that create, develop, produce and distribute products that incorporate words and/ or pictorial images to convey information, ideas and feelings. Graphic Production includes the market segments embracing the technologies of the many facets of printing, publishing, packaging, electronic imaging and their allied industries. This pathway culminates with the opportunity for students to take the end of pathway assessment provided by SkillsUSA Work Force Ready or earn industry credentials through PrintEd. This pathway's corresponding CTSO is TSA.





Student Plan of Study – Graphic Design				HART COLLEGE AND CAREER ACADEMY			
Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.							
I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
48.5610004 Intro to Graphics and Design	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	<b>Dual Enrollment</b> - DMPT 1000 Introduction to Design - DMPT 1010 Raster Imaging - DMPT 2105 Page Layout
48.5620004 Graphic Design and Production	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -DMPT 1005 Vector Graphics -DMPT 1055 Intro to Media Tech -DMPT 2120 Prepress and Output
48.5280004 Advanced Graphic Design	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Degree</b> -Design & Media Production Tech  <b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
*Graphic Designers	Bachelor's Degree	\$49,900	390
Desktop Publishers	Associate's Degree	\$37,500	30
Commercial & Industrial Designers	Bachelor's Degree	\$54,900	30

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
*** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
TOTAL			

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at Staying On Course. ( <a href="http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf">www.usg.edu/student_affairs/documents/Staying_on_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Arts, A/V Technology & Communications Occupations:
Graphic Designers Desktop Publishers Commercial & Industrial Designers Multimedia Artist & Animators	Occupation Repairers Computer Programmers Print Binding & Finishing Workers Printing Press Operators Proofreaders & Copy Markers *ONET Online

Arts, A/V Technology & Communications/Graphic Design	
Graphic designers—or graphic artists—plan, analyze, and create visual solutions to communications problems. They find the most effective way to get messages across in print, electronic, and film media using a variety of methods such as color, type, illustration, photography, animation, and various print and layout techniques. Graphic designers develop the overall layout and production design of magazines, newspapers, journals, corporate reports, and other publications. They also produce promotional displays, packaging, and marketing brochures for products and services, design distinctive logos for products and businesses, and develop signs and signage systems—called environmental graphics—for business and government. An increasing number of graphic designers also develop material for Internet Web pages, interactive media, and multimedia projects. Graphic designers also may produce the credits that appear before and after television programs and movies.	
Many will sometimes supervise assistants who follow instructions to complete parts of the design process. Designers who run their own businesses also may devote time to developing new business contacts, choosing equipment, and performing administrative tasks, such as reviewing catalogues and ordering samples.	
A bachelor's degree is required for most entry-level and advanced graphic design positions; although some entry-level technical positions may only require an associate degree. Associate degrees and certificates in graphic design also are available from 2-year and 3-year professional schools. These programs usually focus on the technical aspects of graphic design and include few liberal arts courses.	
Workers in the industry will need to continually upgrade their skills because of rapidly changing technology. Due to an increase in digital technology, skill in computer networks and software is especially important for potential employees.	
Employment as a graphic designer will provide potential high-wages, high-demand and high-skilled opportunities throughout the industry. Graphic Designer has been designated as one of Georgia's "HOT" jobs through 2020.	



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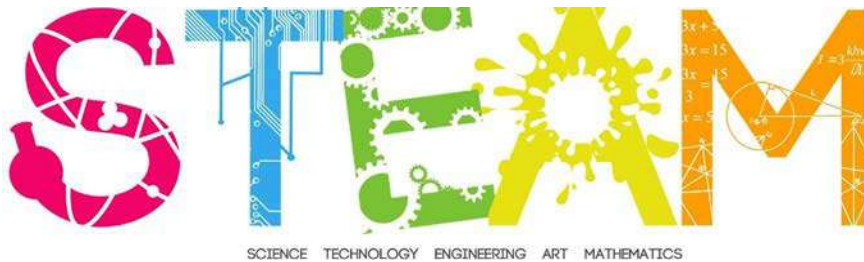
# S.T.E.A.M.



## Engineering and Technology Pathway

*Foundations of Engineering and Technology, Engineering Concepts, Engineering Applications*

S.T.E.A.M. is an acronym for Science, Technology, Engineering, the Arts and Mathematics. The idea of emphasizing these subjects in delivering the curriculum has been driven by the business community, with the goal of preparing an agile and competitive workforce. It is important to note that STEAM is not a program, but a philosophy. In the real world, content knowledge is interwoven, layered and sophisticated, not experienced in isolation such as in traditional education settings (separate math time, separate science time, etc.). S.T.E.A.M. skills are vital for success in the 21st century and critical to our collective future. The "Critical C's" of Collaboration, Cooperation and Communication are emphasized through project-based learning, usually through interdisciplinary (across subjects) activities. This pathway's corresponding CTSO is TSA.





## Student Plan of Study – Engineering & Technology

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)	VIII. Post-Secondary Opportunities
21.4250014 Foundations of Engineering & Technology	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.	<b>Dual Enrollment</b> - ENG 1000 Intro to Engineering Technology - ECET 1101 Circuit Analysis I - DFTG 2010 Engineering Graphics
21.4710004 Engineering Concepts	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.	<b>TCC (Technical Coll Cert)</b> -EBT1 Engineering Technology Basics  <b>Diploma</b> -Engineering Technology, Electrical Engineering Technology AAS
21.4720014 Engineering Applications	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.	<b>Bachelor of Science</b> The University System of Georgia offers students higher education options at 30 institutions throughout the state, providing a wide range of academic programming including certificates and associate, baccalaureate, masters, doctoral and professional degrees.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment.	



SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOI Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
Occupation Specialties	Entry Level of Education Needed	2012 Annual Wage	Annual Openings 2012-2020
Aerospace Engineers	Bachelor's Degree	\$105,700	170
Electrical Engineers	Bachelor's Degree	\$88,000	90
Avionics Technicians	Associate's Degree	\$54,000	40

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** Current Georgia Graduation Rule			
Coursework	Credits	Coursework	Credits
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
<ul style="list-style-type: none"> <li>Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Students should contact the selected institution for specific testing information. Additional admissions information can be found at <a href="http://www.usg.edu/student-affairs/documents/Staying_on_Course.pdf">Staying On Course</a>. (<a href="http://www.usg.edu/student-affairs/documents/Staying_on_Course.pdf">www.usg.edu/student-affairs/documents/Staying_on_Course.pdf</a>)</li> <li>Students who will continue their education in a Program of Study at one of Georgia's Technical Colleges should prepare to take the COMPASS test for admissions.</li> <li>Students who will continue their education and training in the US Military should take the ASVAB assessment.</li> <li>Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities including registered apprenticeships to match their selected career field.</li> <li>Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.</li> </ul>	

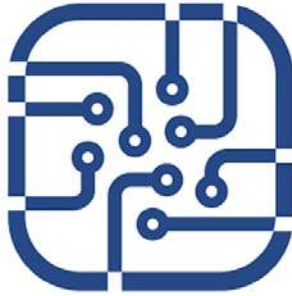
Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a>	

*Related Pathway Occupations:	Other Related STEM Occupations:
All Engineers and Engineering Technologists	Architectural Drafters Civil Drafters Cost Estimators Electrical & Electronics Drafters Mapping Technicians Quality Control Systems Managers Anthropologists Archeologists

\*ONET Online

Engineering & Technology
<p>Today's professionals in the engineering and technology field continue to revolutionize the way we live. They design, produce, operate, and maintain a variety of equipment and services we use in our everyday lives. The rapidly changing engineering and technology field requires a broad educational background and a lifelong commitment to learning new and specialized information.</p> <p>Overall job opportunities in engineering and technology are expected to be good, but will vary by specialty. Technology and technology-related employment will continue to increase as technology changes and new technology is invented.</p> <p>Engineers may work in design and development, testing, production or maintenance. Almost all entry-level engineering jobs require at least a bachelor's degree, and most engineers specialize in a certain field. Those interested in an occupation in the engineering field should be creative, inquisitive, analytical and detail-oriented. They should also have excellent communication skills because working as part of a team and working with others outside the engineering field is often required. Engineering is considered a nontraditional field for women; therefore, it is important that female students investigate different engineering opportunities where salaries are higher than in many traditional occupations for females. Most science, technology, engineering and math related occupations are nontraditional occupations for young women. Both young men and women should explore all their options for future employment. Visit Gacollege411 for more information regarding STEM-related careers.</p>

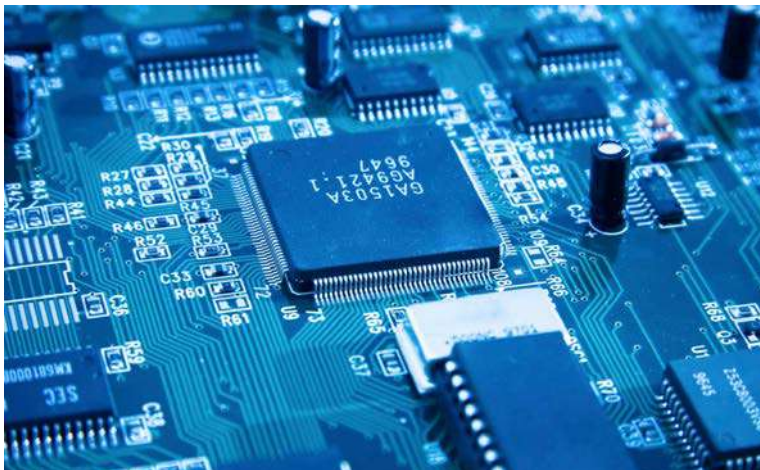
# COMPUTER SCIENCE



## Computer Science Pathway

*Introduction of Digital Technology, Computer Science Principles, AP Computer Science*

The Advanced Programming pathway is one of six pathways in the Information Technology Cluster. This cluster builds linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, and multimedia and systems integration services. Careers in Programming and Software Development involve the design, development, implementation and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages and software development. People with expertise in programming and software development work with cutting-edge technologies to develop tomorrow's products for use by businesses and consumers. While many of the career opportunities in this area are in software companies, large organizations of other types, such as financial Georgia Department of Education Career Pathway Descriptions Georgia Department of Education Dr. John D. Barge, State School Superintendent January 25, 2012 Page 37 of 54 All Rights Reserved services and business, also offer many opportunities. People with expertise in programming and software development are in high demand, doing work such as creating the software that launches and runs NASA space shuttles. Students will qualify to sit for the AP Computer Science exam to earn college credit after successful completion of this pathway. This pathway culminates with an opportunity for students to take the Sun Certified Java Associate or Microsoft Certified Professional Developer as the end of pathway assessment.





## Student Plan of Study – Computer Science



## HART COLLEGE AND CAREER ACADEMY

*Current Area of Interest: Carpentry- This PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia and the Technical College System of Georgia should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.*

I. CTAE Pathway Total 3 credits	II. English/Language Arts Total 4 credits	III. Math Total 4 credits	IV. Science Total 4 credits	V. Social Studies Total 3 credits	VI. Health/Personal Fitness Total 1 credit	VII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)
11.4150004 Intro to Digital Technology	Course 1: 9th Literature	Course 1: Foundations of Algebra (UPON COMPLETION, MUST TAKE Coordinate Algebra as Course 2), Coordinate Algebra	Course 2: Environmental Science, Chemistry	Course 1: Government	Health/Physical Fitness or Summer Online Health/PE Class	<b>Advanced Academic Pathways</b> ELA, Math, Science, Social Studies An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment, and Georgia Virtual School courses may be available.
11.4170004 Computer Science Principles	Course 2: 10th Literature	Course 2: Analytic Geometry	Course 3: Biology	Course 2: World History		<b>World Language Pathways</b> Spanish, Latin Two credits are required for admissions to University System Institutions. Upon graduation, students earn a world language pathway when they complete three credits in the same language. The third course may reflect AP or Dual Enrollment designation.
11.0160004 AP Computer Science	Course 3: American Literature	Course 3: AMDM/Technical Math (non-degree) OR Advanced Algebra	Course 4: Human Anatomy, Chemistry, Physics	Course 3: US History		<b>Fine Arts/Performing Arts Pathway</b> Arts, Band, Chorus, Theatre A fine arts pathway may be followed in any one of the four areas listed above. Upon graduation, students complete a fine arts/performing arts pathway when three courses have been successfully completed in any one of the four areas. The third course may reflect an AP or Dual Enrollment designation.
Work-Based Learning, Youth Apprenticeship or Capstone Project	Course 4: English Literature, Dual Enrollment	Course 4: Pre Calculus, College Readiness Math (associates degree) Dual Enrollment	Course 5: Pathway Science, Dual Enrollment	Course 4: Economics, Dual Enrollment		<b>Legend:</b> *Science: Approved 4th Sciences may be used to meet both the required science and required elective in CTAE. **Students must complete two credits of the same world language for admission to University System of Georgia Institutions. ***Students should complete a CTAE pathway and take the related end of pathway assessment

SAMPLE Pathway OCCUPATIONS			
See *Georgia's HOT Careers to 2020 for more information on high-skilled, high-wage and high-demand occupations.			
<u>Occupation Specialties</u>	<u>Entry Level of Education Needed</u>	<u>2012 Annual Wage</u>	<u>Annual Openings 2012-2020</u>
Computer Programmers	Bachelor's Degree	\$75,400	230
*Computer System Analysts	Bachelor's Degree	\$73,800	810
Software Developers, Application	Bachelor's Degree	\$86,300	340

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.			
**** <u>Current Georgia Graduation Rule</u>			
<u>Coursework</u>	<u>Credits</u>	<u>Coursework</u>	<u>Credits</u>
I. English/Language Arts	4	V. Health & Physical Education	1
II. Math	4	VI. **Career, Technical & Agricultural Education	3
III. *Science	4	and/or ***World Languages, and/or Fine Arts	4
IV. Social Studies	3	VII. Electives	23
		<b>TOTAL</b>	

\*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

\*\*Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

\*\*\*Students must complete two credits of the same world language for admission to Georgia Board of Regents colleges/universities.

\*\*\*\* Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:	
•	Students who will continue their education in a Program of Study at one of the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at Staying On Course. ( <a href="http://www.usg.edu/student_affairs/documents/Staying_On_Course.pdf">www.usg.edu/student_affairs/documents/Staying_On_Course.pdf</a> )
•	Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.
•	Students who will continue their education and training in the US Military should take the ASVAB assessment.
•	Students should utilize electronic college and career databases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.
•	Georgia's dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:	
Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to <a href="http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx">http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx</a> .	

*Related Pathway Occupations:	Other Related Information
Software Engineers	Technology Occupations:
Computer Programmers	Information Security Analysts
Computer & Information Systems Managers	Network & Computer Systems Administrators
Computer Hardware Engineers	Video Game Designers
Computer Network Architects	Game Designers
Computer System Analysts	
Database Administrators	*ONET Online

Computer Science
<p>Careers in Computer Science lead individuals to create, modify, and test codes; all while inventing and designing new approaches to computing technology and finding innovative uses for existing technology. Career area focus requires solving complex problems in computing for business, medicine, science, and other fields.</p> <p>To work as a computer programmer, one must have a bachelor's degree, generally in computer science, mathematics, or information systems. Some computer programmers take coursework in computer science while earning their degrees in accounting, finance and business. Some of those working as computer programmers earn an associate's degree or certificate.</p> <p>Programming skills and experience are highly valued in this field, particularly knowledge of object-oriented languages and tools. In addition, working computer programmers must constantly update their skills to keep up with changing technology. Specialized knowledge and experience with a language or operating system can lead to a computer programmer becoming a computer software engineer.</p> <p>Employment of computer programmers is expected to increase 12 percent from 2010 to 2020, about as fast as the average for all occupations. The advances in computer technology require programmers to constantly look for more effective and efficient processes to expedite their ability to spend more time writing new programs.</p>



## ***Fine Arts Pathways***

### Visual Arts Pathway (complete any 3 courses in Visual Arts)

1	50.0313004	Drawing/Painting I (prerequisite for all other studio art courses)
2/3	50.0314004 50.0321004 50.0322004 50.0431004 50.0411004 50.0412004	Drawing/Painting II Visual Arts / Painting I Visual Arts/ Painting II Applied Design Pottery I Pottery II
	50.0921004	AP Art History

### Theatre Pathway (complete any 3 courses in the area of Theatre)

52.0610004 52.0410004	Theatre Arts/Acting I Theatre Arts/Technical Theater I
52.0620004 52.0420004	Theatre Arts/Acting II Theatre Arts/Technical Theater II
52.0920004	Dramatic Writing (Film, Television, Theatre I)

### Band Pathway (complete any 3 courses in the area of Band)

53.0381004(Fall) 53.0382004 (Spring)	Symphonic Band (offered Fall and Spring)
53.0371004(Fall) 53.0372004 (Spring)	Concert Band (offered Fall and Spring)
53.0761004(Fall)	Advanced Instructional Ensemble
53.0741004 (Spring)	Applied Instrument

### Choral Pathway (complete any three courses in the area of Chorus)

54.0221004	Intermediate Chorus
54.0231004	Advanced Chorus
53.0841004	Beginning Guitar
53.0681004	History of Rock & Roll

## ***World Language Pathways***

### Spanish Pathway

1	60.0710014	Spanish I
2	60.0720014	Spanish II
3	60.0730014	Spanish III

### Latin Pathway

1	61.0410014	Latin I
2	61.0420014	Latin II
3	61.0430014	Latin III

# Get the jump on your with COLLEGE CAREER DUAL ENROLLMENT

## What is Dual Enrollment?

The Dual Enrollment Program provides qualified public high school students in Georgia with the opportunity to earn postsecondary institution credit and Carnegie unit credit while simultaneously enrolled in classes at a college, university, or technical college.

## Eligibility:

- Students must have at least a “B” average in academic classes (2.6 GPA for technical college)
- a 1040 or higher on the SAT or a 21 composite score on the ACT (N/A for technical college)
- Maintain a 2.0 while enrolled in the Dual Enrollment Program

## Cost:

The Dual Enrollment Program through the state of Georgia 100% of tuition, mandatory fee, and textbooks.

## Who can you do Dual Enrollment on the campus of HCHS?

We have classes offered on campus by Athens Technical College and Emmanuel College.

## What kind of classes have been offered on the campus of HCHS?

We have offered English 101, English 102, College Algebra, Pre-Calculus, US History, Sociology, Oral Communications, Psychology, World History, Art Appreciation, Industrial Systems, and Welding.

## Benefits of Dual Enrollment:

- Introduces college classes to students.
- Allows students to earn college credit while they are in high school.
- Helps students get used to certain aspects of college.
- Gives students the option to take classes that may not be offered at the high school level.
- Proves to colleges that a student is capable of successfully completing more difficult classes.
- Credit hours paid by the Dual Enrollment Program will not count towards the limit of postsecondary hours paid for by the HOPE Program.

Room 501



## GRADES

### Grading Scale

HCHS uses the following grading scale:

90 – 100	A
80 – 89	B
70 – 79	C
Below 70	F

### Credit Earned vs. Credit Lost

One unit of credit is earned for each high school course that a student passes with a grade of 70 or higher. A total of 28 units are required to graduate from HCHS.

When a student is in violation of the school attendance policy (any student who exceeds five unexcused days absence per semester in a course), he/she shall not receive credit for the course(s) affected by the excessive absenteeism even though the student may have a passing grade. Violation of the attendance policy will result in a semester grade of “AF” which counts as a 65 numerical grade for GPA calculations. Attendance in class is important!

*See the Student/Parent Handbook for additional information on attendance requirements.*

### Grade Point Averages (GPA)

**Cumulative average:** All grades earned in high school, regardless of credit earned or lost, will be averaged to determine a student’s overall cumulative grade point average (GPA). The GPA includes all courses taken in high school and any grades earned in middle school that count for high school credit.

**Academic average:** All grades earned in academic courses (English, math, science, social studies, and foreign language), regardless of credit earned or lost, will be averaged to determine a student’s academic average. The semester average is the grade that is used to calculate GPA. The academic average is used for Honor Graduates, Valedictorian, and Salutatorian. The academic GPA is also used to determine HOPE eligibility.

*Refer to HOPE SCHOLARSHIP & GRANT for information about the HOPE GPA. Colleges will calculate their own GPA using only academic courses.*

### Honor Graduates/Valedictorian and Salutatorian

Honor Graduates must have a minimum academic average of 95 in academic courses. The weighted GPA will be used for this calculation.

### STAR Student

The school STAR student must be a legally enrolled senior in an accredited Georgia public or private high school. Seniors who are jointly enrolled in a high school and college are eligible for STAR honors if all other requirements are met and if they take the College Board Scholastic Assessment Test (SAT) on any national testing date through the November testing of the senior year. The STAR student must score the highest on one test date (scores may not be combined from two test dates) on the new SAT among qualified seniors in the school. Nominee’s SAT scores must be equal to or higher than the latest available national high school average on both the verbal and math sections.

In addition, the STAR student must be in the top 10 percent or be among the top ten students numerically. If the student with the highest SAT score does not meet the top 10 criterion, the student with the next highest SAT score who does meet the criterion becomes the nominee. Ties at the high school, system and district level are permitted. PAGE (Professional Association of Georgia Educators) sponsors the STAR student program and sets its guidelines.

### Promotion Requirements

A minimum number of credits are required for promotion to the next grade level. Students must earn at least six (6) credits to be in 10<sup>th</sup> grade, at least twelve (12) credits for 11<sup>th</sup> grade, and a minimum of twenty (20) credits is required to be in 12<sup>th</sup> grade.

**Students are only promoted at the end of each school year.** Credits earned in a summer school program count as 2<sup>nd</sup> semester units for promotion purposes. *(See also Promotion and Graduation Requirements in the Student/Parent Handbook)*

### Graduation Program Participation

**It is the policy of Hart County High School that only those seniors who have completed all requirements for graduation, have paid all debts owed to the school, and attend graduation practice are permitted to participate in the graduation ceremony.**

### More on Grading

Students receive progress reports in all classes every four and ½ weeks. Grades are cumulative throughout the semester. For courses that have an End-of-Course Assessment, the EOC will count 20% of the student’s semester grade. The semester grade

becomes part of the student's permanent record and transcript. A final report card is issued at the end of each semester. (*See Student/Parent Handbook for specific dates.*)

Honors classes receive 5 bonus point on their final average. AP classes receive 10 bonus points on their final average. A Dual Enrollment class receives 5 bonus points on their final average.

The semester grade determines whether credit is awarded or not. A final grade of 70% or better is required for passing and earning credit for a course.

If a student fails a required course, the student must repeat the class until it is passed. A failing grade remains on the transcript and is included in the student's GPA even though the student repeats the course.

HCHS has a credit recovery program through Odysseyware. This is available to students who fail a required course and can be taken during a class period, in Saturday School or Summer School.

Parents may access student grades by logging into Infinite Campus. Login information may be obtained by contacting Shelia Coile in the Guidance office.

## Honor Roll & Merit List

Merit List - All students with a semester cumulative average in all courses of 80 or higher.

Honor Roll - All students with a semester cumulative average in all courses of 90 or higher.

## Block Scheduling

HCHS uses what is known as a 4 x 4 Block Schedule. The school year is divided into two semesters of approximately 18 weeks each. Most courses will meet for 90 minutes each day for one semester. Each class is awarded one unit of credit if passed with a grade of 70 or higher and attendance requirements are met. Students take 4 classes each semester. Students should take at least 2 academic courses each semester (English, Math, Science, Social Studies, Foreign Language).

Example:

1<sup>st</sup> semester

**Math**

**English**

Health/PE

Elective (Career Tech/Fine Arts)

2<sup>nd</sup> semester

**Science**

**Social Studies**

Elective (Spanish II, Career Tech, Fine Arts)

Elective

A student can earn up to eight units per year for a total of thirty two units during the student's four years in high school.

Generally, a freshman takes four courses :( For example: 9<sup>th</sup> Grade Lit/Comp, Coordinate Algebra, Government, and Environmental Science), Health/PE, and one to three electives (fine arts, tech/career, physical education, etc.). Advanced freshmen may take upper level courses depending on high school credits completed at the middle school.

## Lifted-STEAM

STEAM education refers to the teaching of Science and Technology through the use of Engineering and Artistic processes, based on the principles of Mathematics. STEAM provides students with the overarching view of how standards (that are typically taught in only specific content areas) are interconnected with other content areas, which also provides eye opening views of how real world problems are solved. The goal of HCHS STEAM is to provide students with rigorous coursework that is focused on the development of solutions to real world problems through research, design, and problem solving. STEAM education helps to prepare students to become active and effective members in society through the development of business and industry partnerships, internships, and capstone projects. STEM principles are taught in many classes at HCHS to give all students access to it. HCHS also has a cohort for students that took Physical Science and Coordinate Algebra at HCMS.

## Graduation Requirements: Class of 2023

**To graduate from Hart County High School, a student must earn at least:**

**4 units of English**

**4 units of Math**

**4 units of Science**

**4 units of Social Studies**

**1 unit of Health/PE**

**A Pathway = 3 units in one of the following areas: Advanced Academic, CTAE, Foreign Language, or Fine Arts Pathway.**

**1 unit of a Technology Based course**

*Students planning to enter into a University System of Georgia Institution or other post-secondary institution must take two units of the same foreign language.*

**7 additional elective units (Extra Academic Courses, Fine Arts, Career Tech, Physical Education)**

**28 total**



## Required Curriculum Units

### 4 English units:

9<sup>th</sup> Grade Lit/Comp or Honors 9<sup>th</sup> Grade Lit/Comp  
10<sup>th</sup> Grade English Lit or Honors 10<sup>th</sup> Grade Lit/Comp  
American Lit/Comp or Honors American Lit/Comp *or* AP Lang/ American Lit  
English Lit/Comp, Honors English Lit/Comp, or Dual Enrollment (College) English

### 4 Math units:

Foundations of Algebra, Coordinate Algebra w/support, Coordinate Algebra, or Honors Coordinate Algebra  
Analytic Geometry w/support, Analytic Geometry, or Honors Analytic Geometry  
Advanced Algebra, Honors Advanced Algebra, Advanced Mathematical Decision Making,  
Choice of a 4<sup>th</sup> math course: Pre-calculus, Honors Pre-calculus, College Readiness Math, Advanced Mathematical  
Decision Making,  
or Dual Enrollment (College) Math course

### 4 Science units:

Environmental Science  
Biology or Honors Biology  
Chemistry, Honors Chemistry, Physics,  
Honors Anatomy & Physiology, AP Environmental Science, or Dual Enrollment (College) Science  
course

### 4 Social Studies units:

World History or Honors World History *or* AP World History  
US History or Honors US History *or* AP US History  
Government or Honors Government  
Economics or AP Economics or Dual Enrollment (College) Economics course

### 3 units from:

CTAE and/or Foreign Lang and/or Fine Arts, and/or Advanced Academic - ***All students must have a pathway in one of the following areas: Advanced Academic, CTAE, Foreign Language, or Fine Arts.***

***An Advanced Academic Pathway includes four units of credit in a specific academic area (English, Math, Science or Social Studies. One of the four units must be an Advanced Placement course or a college level Dual Enrollment course along with two units of sequential course credit in one world language.***

***Important Note: Students planning to enter or transfer into a University System of GA Institution or other post-secondary institution must take two units of the same foreign language.  
The following pages show typical courses that a student will take at each grade level.***

## HOPE Scholarship

The high school will electronically transmit to the Georgia Student Finance Commission (GSFC) a complete transcript and grading scale data for all seniors. The following outline summarizes the HOPE requirements.

All high school attempted grades for English, mathematics, science, social studies and foreign language will be used to determine GPA, whether or not credit was earned.

GSFC will calculate student eligibility for HOPE using un-weighted grades. GSFC will apply weighting using only Advanced Placement (AP) or International Baccalaureate (IB) courses since those are linked to national standards. Honors courses will not be weighted since colleges largely do not weight them.

Numeric grades will be converted to a true 4.0 scale.

<u>Hart County Scale</u>		<u>GPA</u>
A=90-100	=	4.0
B=80-89	=	3.0
C=70-79	=	2.0
F= 0-69	=	0

Students must have at least a 3.0 Academic GPA to qualify for HOPE and meet the rigor course requirements. GSFC does not round up” the GPA. A “2.99” GPA does not qualify. Students can qualify for the Zell Miller Scholarship by have a 3.7 Academic GPA and a 1200 on the SAT or 26 on the ACT. Courses taken in 8<sup>th</sup> grade do not count towards their HOPE GPA. At the present time, the HOPE Scholarship funds cover a percentage of tuition. Award amounts specific to a Georgia College or University can be found at GaFutures.org under HOPE and Zell Miller Award Amounts. At a Georgia private college or university, the Tuition Equalization Grant will pay a percentage of tuition per academic year. More information can be found at GaFutures.org under Tuition Equalization Grant. The HOPE scholarship certainly does not cover all the expenses incurred by

college students, but it does make college more affordable. Once a student earns a HOPE Scholarship, he/she must maintain a "B" average in college course work to remain eligible.

## HOPE Grant

Georgia residents who are attending a Georgia public technical college to earn a certificate or diploma only are eligible for HOPE assistance regardless of grade point average. The HOPE Grant will pay a percentage of tuition. More information and award amounts specific to a particular technical school can be found at [GaFutures.org](http://GaFutures.org) under the Hope Grant Award Amounts.

## College Admissions

There are many opportunities for education after high school. Parents and students are encouraged to obtain current information/requirements from the colleges they are considering. For the most up-to-date information on any college, go to the college's website. For information on Georgia Colleges go to [www.Gafutures.org](http://www.Gafutures.org).

## GAfutures.org (formerly known as GAcollge411)

[www.Gafutures.org](http://www.Gafutures.org) is Georgia's one-stop shopping for information on Georgia colleges. Students and parents are encouraged to visit this site for help with planning, applying, and paying for college. Students may create a free account to help them track their courses, extra curricular activities, test scores, etc. Students are encouraged to have a professional email account ([firstlastname@domain](mailto:firstlastname@domain)) for use with Gacollge411 and all college and scholarship applications.

Be aware that meeting the minimum requirements will NOT guarantee admission to any institution.

Competitive colleges look closely at the rigor of courses taken by prospective students. **Students who take more challenging courses will be more competitive in admissions and will certainly be better prepared for college work.**

*A complete listing of Georgia public and private colleges can be found on [www.Gafutures.org](http://www.Gafutures.org)*

## Course Registration

Registration for the next year takes place during spring semester. Students work with their advisors and counselors to select courses. Parent signatures are required on registration forms. **It is the responsibility of the student to have full knowledge of registration procedures and to properly schedule classes.** In order to avoid unnecessary schedule changes, students should make careful decisions before completing the registration process.

## Schedule Changes/Teacher Changes, Requests

During the first two days of the semester, counselors will resolve scheduling conflicts. Students may request changes during these two days but be aware that counselors will not guarantee changes to academic or elective course selections. **Select your courses carefully!**

No teacher changes will be permitted. To be fair to ALL students and teachers, we cannot accommodate teacher requests. Students who are repeating a failed course may contact their counselor to request a different teacher.

## Worked Based Learning

The Hart College and Career Academy at HCHS provides students with opportunities in our Work Based Learning (WBL) Program for students 16 years or older and that are on track for high school graduation. In our WBL program, we strive to connect students with job opportunities at local business and industry which line up directly with the students pathway. We also provide apprenticeship opportunities for students in local industry that often lead to the employer helping pay for post secondary education that tie directly back to the skills the students are performing while in high school. In the future, many students from the HCCA will have opportunities to sign on with local industries and travel to countries like Germany for hands on training before returning to the US. There are many opportunities for our students and I want to encourage our students to help us provide local business and industry with a homegrown workforce that is second to none!

Claudette Gillespie  
WBL Coordinator

Brooks Mewborn  
CEO of the HCCA



## NOTICE TO ATHLETES AND PARENTS OF ATHLETES

### High School Eligibility

Eligibility refers to a student's good standing so that he/she may participate in high school athletics and other competitive activities. The Georgia High School Association (GHS) governs eligibility rules. Currently, all first time 9<sup>th</sup> graders are eligible to participate for the first semester. To maintain eligibility for the second semester a 9<sup>th</sup> grader must pass 3 out of 4 of his or her classes. **Throughout high school, a student must pass 3 of 4 classes to be eligible the following semester.**

Students gain or lose eligibility on the first day of the next semester.

According to GHS rules, students must reside in the local school's attendance area as established by the Board of Education. Students attending a school outside their home school's attendance zone are not eligible for varsity competition for one calendar year after enrolling.

To be eligible, students must be making progress toward graduation as follows: Minimum Total Units

Beginning 2nd year	5
Beginning 3rd year	11
Beginning 4 <sup>th</sup> year	17

Students who lose eligibility by not meeting the "on track" requirements at the beginning of the year may regain eligibility during the school year by accumulating the units required at the end of the semester and passing the required subjects the previous semester. A student is ineligible for the next school year if he/she turns 19 years old before May 1<sup>st</sup>.

### NCAA Clearinghouse Initial Eligibility

The NCAA Initial-Eligibility Clearinghouse must certify students planning to enroll in college and wishing to participate in NCAA Division I or Division II athletics. To be certified by the Clearinghouse, you must:

- Graduate from high school.
- For Division I, students must earn a minimum required GPA in a core curriculum of at least 16 college prep courses.
- Send your SAT or ACT score directly from the testing agency to the NCAA Clearinghouse.
- Earn an SAT or ACT score that matches your core-course GPA on the NCAA Sliding Scale
- Apply to the NCAA Clearinghouse after completion of the junior year of high school on the website:

[www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net)

*For more information, see your coach, counselor, or visit [www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net).*

## GUIDANCE OFFICE & CAREER CENTER INFORMATION

The counselors are available to assist students with their problems and concerns of an academic, vocational, or personal nature. Parents are encouraged to make an appointment to discuss their child's problems or progress with a counselor and/or teachers. Students and their parents are encouraged to visit the Guidance Office between the hours of 8:00 a.m. – 3:30 p.m. Parents are requested to phone ahead for an appointment to ensure the appropriate counselor is available. Students with last names beginning with A-J are assigned to Paul Griffith. Students with last names beginning with K-Z are assigned to Susan Carman. Claudette Gillespie is available for career counseling as well as any dual enrollment questions.

HCHS has an open-door policy. Parents are welcome in the building. Be sure, however, to sign in and get a visitor's pass from the front office.

### Parent/Teacher Conferences

Parents may call Hart County High School at 706-376-5461 to schedule a conference with the principal, assistant principal, counselor, or teacher(s). Teacher conferences are generally held after school or during a teacher's planning period.

### Transcripts

A transcript is a written record of a student's academic progress toward a diploma. Students will need to complete a transcript request form to have a transcript sent to a college. Written authorization is required before an official transcript can be sent to a third party or institution.

## STANDARDIZED TESTING

### PSAT/NMSQT

The Preliminary SAT is a practice test for the SAT. It identifies a range of scores the student is expected to score on the SAT. It also is a great resource for preparing for the SAT because it supplies the test booklet, the answers given by the student, the correct answer, and the level of difficulty. It is also known as the NMSQ Test (National Merit Scholarship Qualifying Test),

which identifies juniors for scholarships. To qualify for National Merit Scholarships students MUST take the PSAT as JUNIOR. The test is given free to all 10<sup>th</sup> graders. 11<sup>th</sup> graders must register in the guidance office and pay a small fee. It is offered only one time per year in October.

## SAT/ACT

SAT or ACT scores are a good predictor of academic success at least for the first year of college. Colleges look at these scores, grade point average in academic courses, and the actual high school courses taken in their admissions selections. The best SAT/ACT preparation is through rigorous and challenging classes in which the student puts forth maximum effort. Students are encouraged to do their best in all courses and examine closely their selection of courses. We encourage college-bound students to take the SAT or ACT at least once during the junior year and once during the 1<sup>st</sup> semester of the student's senior year. Students should request that their scores are sent to colleges when they take the tests.

## End-of-Course Assessments

At this time, there are End-of-Course Assessments for the following core courses: 9<sup>th</sup> Grade English, American Literature, US History, Economics, Biology, Physical Science, Coordinate Algebra, and Analytic Geometry. Students in these classes must take the EOC to receive credit for the course. The End-of-Course Assessment grade will count 20% of the semester grade. Courses with a mandatory EOC are identified in the course descriptions in this handbook.

## AP Exams

The AP Examinations are administered each year in May and represent the culmination of college-level work in AP courses. Rigorously developed by committees of college and AP high school faculty, the AP Exams test students' ability to perform at a college level. HCHS offers a variety of AP courses for students who desire to participate in advanced level classes. Currently, the cost of each exam is \$83.00. HCHS will reimburse all fees for any exam where a student scores a 3 or higher on the AP test.

## Course Descriptions

### English

**Course Title:** Ninth Grade Literature and Composition and Honors Ninth Grade Lit/Comp.

**Course Description:**

This course focuses on a study of literary genres; the students develop initial understanding of both the structure and the meaning of a literary work. The students explore the effect of the literary form in regards to interpretation. The students will read across the curriculum to develop academic and personal interests in different subjects. While the focus is technical writing in ninth grade literature, the student will also demonstrate competency in a variety of writing genres: narrative, expository, persuasive, and technical. The students will engage in research, timed writings, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes.

An EOC is mandatory and will be 20% of the grade.

The honors class is weighted 5 bonus points for additional rigor.

**Course Title:** Tenth Grade Literature and Composition and Honors Tenth Grade Lit/Comp

**Course Description:**

This course focuses on a study of literary genres; the student develops understanding that theme is what relates literature to life and that themes are recurring in the literary world. The students explore the effect of themes in regard to interpretation. The students will read across the curriculum to develop academic and personal interests in different subjects. While the focus is persuasive writing in tenth grade literature, the student will also demonstrate competency in a variety of writing genres: narrative, expository, and technical. The student will engage in research, timed writings, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes. The Honors class is weighted 5 bonus points for additional rigor.

**Course Title:** American Literature and Composition and Honors American Lit/Comp

**Course Description:** This course focuses on the study of American literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The student develops an understanding of chronological



context and the relevance of period structures in American literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students read a variety of informational and literary texts in all genres and modes of discourse. Reading across the curriculum develops students' academic and personal interests in different subjects. While expository writing is the focus in American literature, the students will also demonstrate competency in a variety of writing genres: narrative, persuasive, and technical. The student will engage in research, timed writing, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking. The students demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes. An EOC is mandatory and will be 20% of the grade. The Honors class is weighted 5 bonus points for additional rigor.

**Course Title:** AP Language and Composition (American Literature)

**Course Description:** This course focuses on the study of American literature, embracing its rhetorical nature and recognizing the literature as a platform for argument. It also emphasizes a variety of writing modes and genres and the essential conventions of reading, writing, and speaking. The students will develop an understanding of how historical context in American literature affect its structure, meaning, and rhetorical stance. The course will enable students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. The students will encounter a variety of informational, literary, and non-print texts from across the curriculum and read texts in all genres and modes of discourse, as well as visual and graphic images. Instruction in language conventions and essential vocabulary will occur within the context of reading, writing, speaking, and listening. The students will demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes. This course will focus on the consideration of subject, occasion, audience, purpose, speaker, and tone as the guide for effective writing, as well as the way generic conventions and resources of language contribute to writing effectiveness. The students will compose a variety of writing, including expository, analytical, and argumentative writings which support the academic and professional communication required by colleges; and personal and reflective writings which support the development of writing facility in any context. The students will produce responses to timed writing assignments, as well as writing that proceeds through several stages or drafts, which include opportunities for revision guided by feedback from teacher and peers. Students will analyze primary and secondary sources and develop the research skills needed to effectively synthesize these sources for their writing. An AP syllabus must be submitted and approved by the College Board. An EOC is mandatory and will be 20% of the grade.

**Course Title:** English Literature and Composition and Honors English Lit/Comp

**Course Description:** This course focuses on the study of British literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The students develop an understanding of chronological context and the relevance of period structures in British literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students encounter a variety of informational and literary texts and read texts in all genres and modes of discourse. Reading across the curriculum develops the students' academic and personal interests in different subjects. While the continued focus is expository writing in British literature, the student will also demonstrate competency in a variety of writing genres: narrative, persuasive, and technical. The students will engage in research, the impact that technology has on writing, timed writing, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of listening, speaking, and viewing skills for a variety of purposes. The Honors class is weighted 5 bonus points for additional rigor.

**Course Title:** AP English Literature and Composition

**Course Description:** The course focuses on an intensive study of representative works from various literary genres and periods. The focus is on the complexity and thorough analysis of literary works. The students will explore the social and historical values that works reflect and embody. The textual detail and historical context provide the foundation for interpretation: the experience of literature, the interpretation of literature, and the evaluation of literature. Writing to evaluate a literary work involves making and explaining judgments about its artistry and exploring its underlying social and cultural values through analysis, interpretation, and argument (e.g. expository, analytical, and argumentative essays). The writers will develop stylistic maturity: strong vocabulary, sentence variety, and effective use of rhetoric to maintain voice. An AP syllabus will be submitted and approved by College Board.

**Course Title:** College English 101 and 102

**Prerequisites:** Students must have qualifying SAT or ACT scores to participate in the MOWR program and these vary for each college. Hart County also has a minimum two part SAT of 1050 or a 21 ACT composite. (Each 3-hour semester course is the equivalent of 1 unit at the high school.)

**Course Description:** These will vary for each college; a description is available in the college catalogue.

## Course Descriptions

### Math

The standards in the three-course high school sequence specify the mathematics that all students should study in order to be college and career ready. Additional mathematics content is provided in fourth credit courses and advanced courses including pre-calculus, calculus, advanced statistics, discrete mathematics, and mathematics of finance courses. High school course content standards are listed by conceptual categories including Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus. Standards for Mathematical Practice provide the foundation for instruction and assessment.

**Course Title:** Foundations of Algebra and Study Skills

**Course Description:** Foundations of Algebra will provide many opportunities to revisit and expand the understanding of foundational algebra concepts, will employ diagnostic means to offer focused interventions, and will incorporate varied instructional strategies to prepare students for required high school courses. The course will emphasize both algebra and numeracy in a variety of contexts including number sense, proportional reasoning, quantitative reasoning with functions, and solving equations and inequalities. This course is accompanied with a study skills calls and stretches out over the entire year and allows an additional unit of study skills to be earned (one math credit and one elective credit).

**Course Title:** Coordinate Algebra with Support

**Course Description:** Coordinate Algebra is the first in a sequence of three high school courses designed to ensure career and college readiness. Coordinate Algebra with support covers the same curriculum as Coordinate Algebra but stretches the course over the entire year and allows an additional unit of math support to be earned (one math and one elective credit). The course represents a discrete study of algebra with correlated statistics applications and a bridge to the second course through coordinate geometric topics. An EOC is mandatory and will be 20% of the final grade.

**Course Title:** Coordinate Algebra and Honors Coordinate Algebra

**Course Description:** Coordinate Algebra is the first in a sequence of three high school courses designed to ensure career and college readiness. The course represents a discrete study of algebra with correlated statistics applications and a bridge to the second course through coordinate geometric topics. The Honors class is weighted 5 bonus points for additional rigor. An EOC is mandatory and is 20% of the final grade.

**Course Titles:** Analytic Geometry with support

**Description of Courses:** As with Coordinate Algebra with support, Analytic Geometry with support covers the same curriculum as Analytic Geometry, but stretches the course over an entire year and allows an additional unit of credit in math support to be earned (one math credit and one elective credit). Analytic Geometry is the second course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of geometry with correlated statistics applications. An EOC is mandatory and is 20% of the final grade.

**Course Titles:** Analytic Geometry and Honors Analytic Geometry

**Course Description:** Analytic Geometry is the second course in a sequence of three required high school courses designed to ensure career and college readiness. The course represents a discrete study of geometry with correlated statistics applications. The Honors class is weighted five bonus points for additional rigor. An EOC is mandatory and is 20% of the final grade.



**Course Titles:** Technical College Readiness Mathematics

**Course Description:** Technical College Readiness Math is designed to meet the needs of students who have passed Coordinate Algebra, have passed or concurrently enrolled in Analytic Geometry while taking this course, and intend to enroll in a technical college program. The course is aimed at students who have experienced difficulty in passing middle school End of Grade assessments, have struggled significantly in the first two high school core math courses, and scored less than 34 on the Arithmetic part of the ACCUPLACER. The ACCUPLACER will also serve as the post-test. The course will examine numeracy, algebra, and geometry in a variety of contexts, including number sense, linear and non-linear relationships, functions and their graphs, and measurement and geometry. The course will provide an opportunity for students to review math skills needed for success in Technical College.

**Course Titles:** Advanced Algebra and Honors Advanced Algebra

**Description of Courses:** It is in Advanced Algebra that students pull together and apply the accumulation of learning that they have from their previous courses, with content grouped into six critical areas, organized into units. They apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include quadratic (with complex solutions), polynomial, rational, and radical functions. And, finally, students bring together all of their experience with functions to create models and solve contextual problems. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. The Honors class is weighted five bonus points for additional rigor.

**Course Titles:** Pre-Calculus and Honors Pre-Calculus

**Description of Courses:** Pre-Calculus focuses on standards to prepare students for a more intense study of mathematics. The critical areas organized in eight units delve deeper into content from previous courses. The study of circles and parabolas is extended to include other conics such as ellipses and hyperbolas. Trigonometric functions are introduced and developed to include inverses, general triangles and identities. Matrices provide an organizational structure in which to represent and solve complex problems. Students expand the concepts of complex numbers and the coordinate plane to represent and operate upon vectors. Probability rounds out the course using counting methods, including their use in making and evaluating decisions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**Course Titles:** Honors Calculus

**Description of Courses:** Calculus is a fourth mathematics course option for students who have completed Pre-Calculus or Accelerated Pre-Calculus. It includes problem solving, reasoning and estimation, functions, derivatives, application of the derivative, integrals, and application of the integral.

**Course Title:** Advanced Mathematical Decision Making

**Prerequisite:** Advanced algebra

**Available to Grade:** 12

**Description of Course:** This is a course designed to follow the completion of Coordinate Algebra, Analytic Geometry, and Advanced Algebra. The course will give students further experiences with statistical information and summaries, methods of designing and conducting statistical studies, an opportunity to analyze various voting processes, modeling of data, basic financial decisions, and use network models for making informed decisions.

## Course Descriptions

### Science

**Course Title:** Environmental Science

**Course Description:** The Environmental Science curriculum is designed to extend student investigations that began in grades K-8. This curriculum is extensively performance, lab and field based. It integrates the study of many components of our environment, including the human impact on our planet. Instruction should focus on student data collection and analysis. Some concepts are global; in those cases, interpretation of global data sets

from scientific sources is strongly recommended. It would be appropriate to utilize resources on the Internet for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts should be integrated throughout the course. Whenever possible, careers related to environmental science should be emphasized.

**Course Title:** Biology and Honors Biology

**Course Description:** The Biology curriculum is designed to continue student investigations of the life sciences that began in grades K-8 and provide students the necessary skills to be proficient in biology. This curriculum includes more abstract concepts such as the interdependence of organisms, the relationship of matter, energy, and organization in living systems, the behavior of organisms, and biological evolution. Students will investigate biological concepts through experience in laboratories and field work using the processes of inquiry. An EOC is mandatory and will be 15% of the grade. The Honors class is weighted 5 bonus points for additional rigor.

**Course Title:** Chemistry and Honors Chemistry

**Course description:** The Chemistry curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in chemistry. This curriculum includes more abstract concepts such as the structure of atoms, structure and properties of matter, characterization of the properties that describe solutions and the nature of acids and bases, and the conservation and interaction of energy and matter. Students investigate chemistry concepts through experience in laboratories and field work using the processes of inquiry. The honors class is weighted 5 bonus points for additional rigor.

**Course Title:** Environmental Science

**Course Description:** The Environmental Science curriculum is designed to extend student investigations that began in grades K-8. This curriculum is extensively performance, lab and field based. It integrates the study of many components of our environment, including the human impact on our planet. Instruction should focus on student data collection and analysis. Some concepts are global; in those cases, interpretation of global data sets from scientific sources is strongly recommended. It would be appropriate to utilize resources on the Internet for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts should be integrated throughout the course. Whenever possible, careers related to environmental science should be emphasized.

**Course Title:** AP Environmental Science

**Course Description:** AP Environmental Science is designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The following themes provide a foundation for the structure of the AP Environmental Science course: (1) Science is a process, (2) Energy conversions underlie all ecological processes, (3) The Earth itself is one interconnected system, (4) Humans alter natural systems, (5) Environmental problems have a cultural and social context, and (6) Human survival depends on developing practices that will achieve sustainable systems.

**Course Title:** Anatomy and Physiology

**Course Description:** The human anatomy and physiology curriculum is designed to continue student investigations that began in grades K-8 and high school biology. This curriculum is extensively performance and laboratory based. It integrates the study of the structures and functions of the human body, however rather than focusing on distinct anatomical and physiological systems (respiratory, nervous, etc.) instruction should focus on the essential requirements for life. Areas of study include organization of the body; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth and development. Chemistry should be integrated throughout anatomy and not necessarily taught as a standalone unit. Whenever possible, careers related to medicine, research, health-care and modern medical technology should be emphasized throughout the curriculum. Case studies concerning diseases, disorders and ailments (i.e. real-life applications) should be emphasized.

**Course Title:** AP Physics

**Course Description:** The Physics curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in physics. This curriculum includes more abstract concepts such as interactions of matter and energy,



velocity, acceleration, force, energy, momentum, and charge. This course introduces the students to the study of the correction to Newtonian physics given by quantum mechanics and relativity. Students investigate physics concepts through experience in laboratories and field work using the processes of inquiry.

**Course Title:** AP Biology

**Course Description:** This course is designed to be the equivalent of a two semester college introductory biology course usually taken by biology majors during their first year. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and on in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The topics covered on the course are molecules and cells, heredity and evolution, and organisms and populations.

**Course Title:** AP Chemistry

**Course Description:** This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. Students should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. AP chemistry students should study topics related to the structure and states of matter (atomic theory, atomic structure, chemical bonding, nuclear chemistry, gases laws, kinetic molecular theory, liquids and solids and solutions), chemical reactions (reaction types, stoichiometry, equilibrium, kinetics, and thermodynamics), and descriptive chemistry (chemical reactivity, products of chemical **reactions**, relationships in the periodic table, and organic chemistry). To develop the requisite intellectual and laboratory skills, AP Chemistry students need adequate classroom and laboratory time. It is expected that a minimum of 290 minutes per week will be allotted for an AP Chemistry course. Of that time, a minimum of 90 minutes per week, preferably in one session, should be spent in the lab. The AP Chemistry course is designed to be taken after the completion of a first course in high school chemistry. In addition, the recommended mathematics prerequisite for an AP Chemistry class is the successful completion of a second-year algebra course. It is highly desirable that a student have a course in secondary school physics and a four-year college preparatory program in mathematics

## Course Descriptions

### Social Studies

**Course Title:** American Government/Civics and Honors American Government/Civics

**Course Description:**

An in-depth study of the American political system. This course focuses on the foundation, principles and structure of the American system of government, examines the role of political parties, social factors as they relate to the role of the citizen, and analyzes the decision-making process that are a part of the system of American political behavior. This course meets the state's Citizenship requirement for graduation. The Honors class is weighted 5 bonus points for additional rigor.

**Course Title:** World History and Honors World History

**Course description:** A survey course beginning with the earliest civilizations and highlighting important developments throughout the world until the early 21st century. The course includes topics related to Early Civilizations and Classical Empires; Growth, Expansion, and the Emergence of the Modern World; Global Interaction and Conflict; and the Contemporary World. The Honors class is weighted 5 bonus points for additional rigor.

**Course title:** AP World History

**Course Description:** The purpose of AP World History is to develop greater understanding of the evolution of global processes and contracts, in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes factual knowledge used in conjunction with leading interpretive

issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human state.

**Course Title:** United States History and Honors United States History

**Course Description:** Examines the history of the United States beginning with the British settlement of North America. The course's main focus is the development of the United States in the 20th and 21st centuries. The course includes topics related to Colonization through the Constitution; New Republic to Reconstruction; Industrialization, Reform, and Imperialism; Establishment as a World Power; and the Modern Era. An EOC is mandatory and will be 20% of the grade. The Honors course is weighted an additional five bonus points for rigor.

**Course title:** AP United States History

**Course Description:** This course is designed to provide students with the analytic skills and factual knowledge to deal critically with the problems and materials in United States History from the 1870's to current history. By making demands on students that are equivalent to those of a freshman college-level course, students are prepared for intermediate and advanced college courses. Students will learn to assess historical materials and evaluate the evidence and interpretations presented in historical scholarship. Students will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay and research paper format. An EOC is mandatory and will be 20% of the grade. This course will help students develop an understanding of the role of the citizen in our government. It will analyze the Constitution and the Bill of Rights, the election process, the law-making process, the judicial process, and state and local government issues. Through activities that center around current events and research, the relationship between the various levels of government will be examined. Research and essays will be emphasized.

**Course Title:** Economics.

An introductory course into the principles of economics. The course includes topics related to Fundamental Economic Concepts, Microeconomics Concepts, Macroeconomics Concepts, International Economics, and Personal Finance Economics. An EOC is mandatory and will be 20% of the grade.

**Course Title:** AP Macroeconomics

**Course Description:** Conforms to College Board topics for the Advanced Placement Macroeconomics Examination. Covers basic economic concepts, measurement of economic performance, national income and price determination and international economics and growth. An EOC is mandatory and will be 20% of the grade.



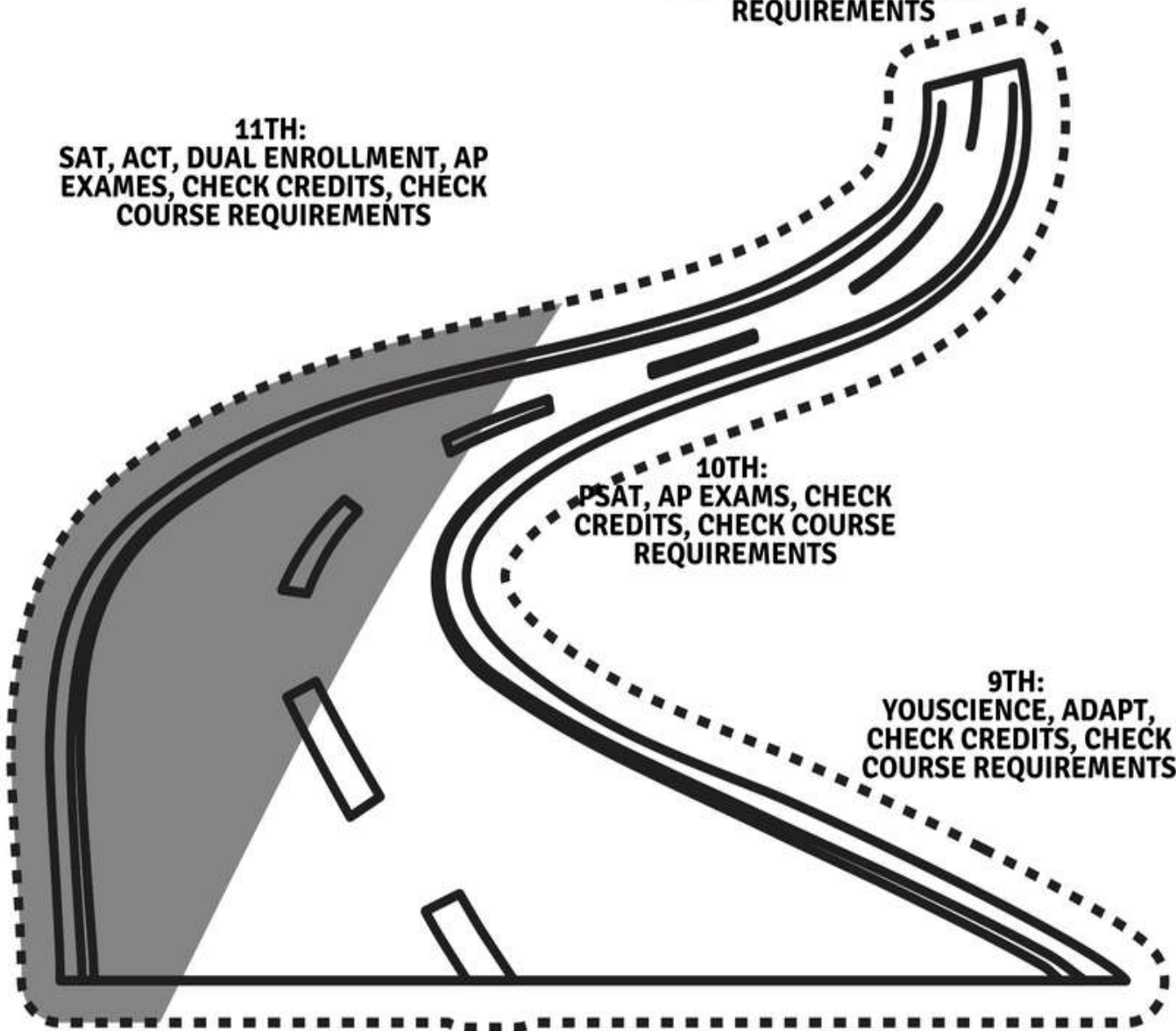
# Bulldog's Road to Success

**12TH:**  
ASVAB, AP EXAMS, FAFSA,  
INTERNSHIP, COLLEGE  
APPLICATIONS, CHECK  
CREDITS, CHECK COURSE  
REQUIREMENTS

**11TH:**  
SAT, ACT, DUAL ENROLLMENT, AP  
EXAMS, CHECK CREDITS, CHECK  
COURSE REQUIREMENTS

**10TH:**  
PSAT, AP EXAMS, CHECK  
CREDITS, CHECK COURSE  
REQUIREMENTS

**9TH:**  
YOUSCIENCE, ADAPT,  
CHECK CREDITS, CHECK  
COURSE REQUIREMENTS





Student: _____	Pathway: _____
Teacher/Advisor: _____	Date Plan Completed: _____
Student Signature: _____	

## Graduation Requirements

Students are required to earn 28 Carnegie units in order to receive a high school diploma

Subject	English Language Arts	Math	Science	Social Studies	Health and PE	CTAE, Fine Arts, Modern Language	Technology Course	Electives	Total
	ELA	MA	SC	SS	HPE		TECH		
	4 Units - must have 9th Lit and American Literature	4 Units - must include Coordinate Algebra, Analytic Geometry, Advanced Algebra or Career Technical Math, and One GS/AP/DUAL Course	4 Units - must include Physical Science, Biology, Environmental Science	4 Units - must Include Government, US History, and Economics	1 Unit - must be Health/Physical Education  *requirement can also be met by 3 units of JROTC	3 Units of a Pathway	1 Unit, must include 1 Technology Course	7 Units-Extra Academic Courses, Fine Arts, Career Tech, Physical Education	28 Units

<b><u>8th Grade</u></b>	<b><u>9th Grade</u></b> For promotion to 10th grade: 6 Credits	<b><u>10th Grade</u></b> For promotion to 11th grade: 12 Credits* *Core English, Math, Science plus 1 Core SS	<b><u>11th Grade</u></b> For promotion to 12th grade: 20 Credits** **2 Core English, Science, SS, plus 3 Core math and a planned program	<b><u>12th Grade</u></b> 28 Carnegie units required in order to receive high school diploma	<b><u>Post-Secondary</u></b> Record course taken and earned through Dual Enrollment
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Course/ Grade	Course/ Grade	Course/ Grade	Course/ Grade	Course/ Grade	Course/ Grade
ELA _____/____	ELA _____/____	ELA _____/____	ELA _____/____	ELA _____/____	ELA _____/____
MA _____/____	MA _____/____	MA _____/____	MA _____/____	MA _____/____	MA _____/____
SC _____/____	SC _____/____	SC _____/____	SC _____/____	SC _____/____	SC _____/____
SS _____/____	SS _____/____	SS _____/____	SS _____/____	SS _____/____	SS _____/____
HPE _____/____	HPE _____/____	HPE _____/____	HPE _____/____	HPE _____/____	HPE _____/____
CTAE _____/____	CTAE _____/____	CTAE _____/____	CTAE _____/____	CTAE _____/____	CTAE _____/____
FA/ML _____/____	FA/ML _____/____	FA/ML _____/____	FA/ML _____/____	FA/ML _____/____	FA/ML _____/____