

Forsyth County Schools

**COLLEGE**  
& *Career*  
DEVELOPMENT



*Explore* **CAREER**  
*and* **TECHNICAL**  
*Education* 2022-2023



# Find Your Passion!

## High School Career Pathway Options



Aerospace/Flight Operations  
Computer Science  
Criminal Investigations  
Cybersecurity  
Drone/Uhmanned Aircraft Systems  
Energy Systems  
Financial Technology (FinTech)  
Firefighting  
Game Design  
Graphic Design  
Healthcare - Emergency Medical Responder  
Healthcare - Emergency Medical Technician  
Hospitality, Recreation, & Tourism  
International Business  
Legal Services/ Application of Law  
Mechanics  
Public Management & Administration  
Teaching as a Profession



Companion Animal Systems  
Computer Science  
Culinary Arts  
Engineering & Technology  
Entrepreneurship  
Fashion Marketing  
Financial Services  
Marketing & Management  
Sports & Entertainment Marketing  
Teaching as a Profession  
Veterinary Science



A/V Technology & Film  
Architecture/Drafting & Design  
Computer Science  
Construction/Carpentry  
Culinary Arts  
Early Childhood Education  
Engineering & Technology  
Entrepreneurship  
Interiors, Fashion, & Textiles  
Marketing Communications & Promotions  
Marketing & Management  
Teaching as a Profession



A/V Technology & Film  
Automotive Technology  
Cloud Computing  
Computer Science  
Cosmetology  
Engineering & Technology  
Film Production  
Healthcare - Biotechnology  
Marketing & Management  
Marketing Communications & Promotions  
Nutrition & Food Science  
Sports & Entertainment Marketing  
Teaching as a Profession  
Veterinary Science  
Workforce Ready



A/V Technology & Film  
Business Accounting  
Cloud Computing  
Computer Science  
Culinary Arts  
Engineering & Technology  
Financial Services  
Healthcare - Biotechnology  
Healthcare - Phlebotomy  
Healthcare - Sports Medicine  
Marketing & Management  
Nutrition & Food Science  
Programming  
Sports & Entertainment Marketing  
Teaching as a Profession  
Workforce Ready



Animation & Digital Media  
A/V Technology & Film  
Computer Science  
Engineering & Technology  
Environmental Agriculture Systems  
Healthcare - Public Health  
Healthcare - Sports Medicine  
JROTC - Marines  
Marketing & Management  
Nutrition & Food Science  
Sports & Entertainment Marketing  
Teaching as a Profession  
Web Development



Advanced Accounting  
A/V Technology & Film  
Computer Science  
Culinary Arts  
Engineering & Technology  
Entrepreneurship  
Fashion Marketing  
Human Resources Management  
Landscape Management Systems  
Marketing Communications & Promotions  
Marketing & Management  
Programming  
Sports & Entertainment Marketing  
Teaching as a Profession



A/V Technology & Film  
Computer Science  
Cosmetology  
Culinary Arts  
Engineering & Technology  
Fashion Marketing  
Healthcare - Allied Health and Medicine  
Healthcare - Pharmacy  
Junior Achievement  
3DE Leadership Academy  
Marketing & Management  
Nutrition & Food Science  
Sports & Entertainment Marketing  
Teaching as a Profession  
Web Development



Business Accounting  
Computer Science  
Game Design  
Financial Services  
Marketing & Management  
Sports & Entertainment  
Web Development

All students enrolled in career and technical education have the opportunity to apply for Internship Forsyth (work-based learning) or Mentorship Forsyth (job shadowing) within their pathway. Visit [www.forsyth.k12.ga.us/ctae](http://www.forsyth.k12.ga.us/ctae) for more information or contact a Career Development Coordinator.



Preparing students for success after high school is an inherent component of Forsyth County Schools. Whether students plan to enter the workforce immediately or attend college after high school graduation, careful consideration of high school course options can impact their futures. To better prepare students for the demands of the 21st century economy and for post-secondary education, Forsyth County Schools has provided this planning guide for use by students and their parents.

Use this planning guide for the next four years, and use it to set career goals and plan for the world of future work. Go over the information in the guide together, and begin to have discussions concerning post high school plans and how you can reach the goals that you set. Bring this guide with you to each annual advisement appointment at your high school, and share with your advisor as you all work together to map out the next year's schedule of courses. Finally, mark your choices in the guide as you go through high school and as your career decisions possibly change and evolve.

This planning guide shows the clear connection between classwork and future success, pointing out the relevance of academic learning in the classroom. It also provides information on a variety of occupations that differ in the scope of education and training required to obtain future employment.

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FCS/College &  
Career Development on



*DISCLAIMER: The information contained within this book is as accurate as possible at the time of publication.*



#### FORSYTH COUNTY SCHOOLS

1160 Dahlonega Highway  
Cumming, GA 30040  
770-887-2461  
[www.forsyth.k12.ga.us](http://www.forsyth.k12.ga.us)

#### SUPERINTENDENT AND SCHOOL BOARD MEMBERS

Dr. Jeffrey Bearden, Superintendent  
Lindsey Adams  
Tom Cleveland  
Darla Light  
Wes McCall  
Kristin Morrissey

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#### ALLIANCE ACADEMY FOR INNOVATION

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Brandi Cannizzaro, Principal  
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#### DENMARK HIGH SCHOOL

645 Mullinax Road, Alpharetta, GA 30004  
Kim Oliver, Principal  
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#### EAST FORSYTH HIGH SCHOOL

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#### LAMBERT HIGH SCHOOL

805 Nichols Road, Suwanee, GA 30024  
Gary Davison, Principal  
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#### NORTH FORSYTH HIGH SCHOOL

3635 Coal Mountain Road, Cumming, GA 30028  
Bob Carnaroli, Principal  
770-781-6637, Fax: 770-888-0934

#### SOUTH FORSYTH HIGH SCHOOL

585 Peachtree Parkway, Cumming, GA 30041  
Laura Wilson, Principal  
770-781-2264, Fax: 770-888-1224

#### WEST FORSYTH HIGH SCHOOL

4155 Drew Road, Cumming, GA 30040  
Karl Mercer, Principal  
770-888-3470, Fax: 770-888-3471





## PUBLIC NOTICE FORSYTH COUNTY SCHOOL DISTRICT

The Forsyth County School District offers the following career and technical education programs for all students regardless of race, color, national origin, including those with limited English proficiency, sex or disability in grades 9-12.

- *Agriculture, Food, and Natural Resources*
- *Architecture and Construction*
- *Arts, Audio-Video Technology, and Communications*
- *Business, Management, and Administration*
- *Education and Training*
- *Energy*
- *Finance*
- *Government and Public Administration*
- *Health Science*
- *Hospitality and Tourism*
- *Human Services*
- *Information Technology*
- *Law, Public Safety, Corrections, and Security*
- *Manufacturing*
- *Marketing*
- *Science, Technology, Engineering, and Mathematics (STEM)*
- *Transportation, Distribution and Logistics*

Persons seeking further information concerning the career and technical education offerings and specific pre-requisite criteria should contact:



Dr. Valery Lowe  
*Director of College & Career Development*  
 1160 Dahlonega Highway  
 Cumming, GA 30040  
 vlowe@forsyth.k12.ga.us  
 770-887-2461 x 202247

# FORSYTH COUNTY SCHOOL DISTRICT

## NOTICE OF NON-DISCRIMINATION

The Forsyth County School District does not discriminate on the basis of race, color, religion, national origin, age, disability, or gender in employment decisions or educational programs and activities, including its athletic programs. Any student, employee, applicant for employment, parent or other individual who believes he or she has been subjected to harassment or discrimination by other students or employees of the school district based upon any of the factors listed above should promptly report the same to the principal of the school or the appropriate coordinator as listed below, who will implement the board's discriminatory complaints or harassment procedures. Students may also report harassment or discrimination to their school counselor. Equity coordinators for the school system are:

### TITLE VI

Mr. Nathan Turner *Students*  
 Dr. Cindy Salloum *Personnel*

### TITLE IX

Mr. Nathan Turner *Students*  
 Dr. Cindy Salloum *Personnel*

### ADA and 504

Ms Sarah Taylor *Students*  
 Dr. Cindy Salloum *Personnel*

### SPORTS EQUITY










Dr. Cindy Salloum *Personnel*

Equity coordinators may be contacted at the Forsyth County Board of Education and Professional Development Center, 1120 Dahlonega Highway, Cumming, Georgia 30040, (770) 887-2461. Students and employees will not be subjected to retaliation for reporting such harassment or discrimination. A copy of the discriminatory complaints procedure under Forsyth County School District Policy GAAA/JAA (Equal Opportunity/Discriminatory Complaints) or under Policy IDFA (Gender Equity in Sports) is located in the school district policy manual that is available on the school system web site.



**SCHOOL KEY SYSTEM**


Throughout this book, a school key system is used to indicate which programs, classes, and clubs are offered at each school.

 Alliance Academy for Innovation	 Lambert High School
 Denmark High School	 North Forsyth High School
 East Forsyth High School	 South Forsyth High School
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 Forsyth Virtual Academy	

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FCS College and Career Development seeks to provide an on-going partnership between education and business/industry to prepare the students of Forsyth County with the skills necessary to meet world-class standards, successfully continue life-long learning, and enter the marketplace as productive citizens. Career pathways provide “seamless” instruction in career and technical education that connects academic and technical skills to future educational and career opportunities. Options within the program offer curriculum and instruction linked to industry standards in labs featuring the latest technology and equipment replicating simulated work environments. Successful completion of a career pathway also allows students to industry credentialing required in today’s job market.

Career and technical education opportunities integrate with all of the secondary courses of study through various career pathways offered at middle and high schools, along with internship and job shadowing opportunities at the high school level. The commitment to complete a career pathway is never binding and can always be changed. The goal is not to require high school students to choose a major course of study as a college student would, but to begin to think, to study, to plan, and to set goals for the future and the career that awaits. It also allows students to:

- *blend rigorous academic/technical preparation*
- *discover their interests and passions, empowering them to choose the educational pathway that will lead to success in high school, college and career*
- *utilize career development services*
- *experience all aspects of a business or industry*
- *plan for transitions into post-secondary opportunities*

After graduating high school, students continue post-secondary education at specialty schools, technical colleges, community colleges, and major universities across the country. In addition, several of the career pathways are articulated for college credit. While pursuing additional education, students may use Hope and State Aid Programs (which include both the Zell Miller Scholarships and Zell Miller Grants), Federal Aid, and other scholarship opportunities posted at district high schools.

## COLLEGE AND CAREER DEVELOPMENT

Forsyth County Schools offers a variety of career pathways that meet the demands of the modern workplace by equipping students for college and career. Areas include:

- *Aerospace: Flight Operations*
- *Agriculture*
- *Architecture and Construction*
- *Arts, A/V Technology, and Communications*
- *Biotechnology Research and Development*
- *Business, Management, and Administration*
- *Computer Science*
- *Cosmetology*
- *Culinary Arts*
- *Cybersecurity*
- *Distribution and Logistics*
- *Drone/Unmanned Aircraft*
- *Education*
- *Engineering and Technology*
- *Energy Systems*
- *Entrepreneurship*
- *Fashion, Merchandising, and Retail Management*
- *Finance: Accounting and Financial Services*
- *Firefighting*
- *Food and Nutrition*
- *Government and Public Administration/JROTC*
- *Healthcare Science*
- *Hospitality and Tourism*
- *Human Resource Management*
- *Interior Design*
- *Law Enforcement: Criminal Investigations*
- *Legal Services*
- *Manufacturing*
- *Marketing and Management*
- *Mechatronics*
- *Programming*
- *Sports and Entertainment Marketing*
- *Sports Medicine*
- *Transportation/Automotive Service Technician*
- *Web Development*





A career pathway is a coherent, articulated sequence of rigorous academic and career-related courses starting in the ninth or tenth grade and lead to an industry-recognized certificate or licensure, possible post-secondary credit, and assist students in their transition to the workforce, military, or post-secondary education. It allows students an educational plan in high school that prepares students for future careers, jobs, or occupations. Career, Technical, and Agricultural Education (CTAE) provides students with the opportunity to select at least three sequenced courses in a career pathway. 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-wage occupations in all concentrations still require education beyond high school.

**CTAE PATHWAY COMPLETER:** A pathway completer is a student who earned 1 unit of credit per course for the following: an introductory course plus two sequential courses within a state recognized Georgia CTAE Pathway. The 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-wage occupations in all concentrations still require education beyond high school.

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

## WHAT ARE CAREER PATHWAYS?

### OVERVIEW OF CAREER CLUSTERS/PATHWAYS

- Georgia's 17 Career Cluster/Pathways provide a structure for organizing and delivering quality Career, Technical and Agricultural Education (CTAE) programs.
- Modeled after the National Career Clusters configuration utilized by most of the United States, Georgia's 17 Career Cluster/Pathways Model represents approximately 96 career pathways to help students navigate their way to greater success in college and career.
- As an organizing tool for curriculum design and instruction, the 17 Career Clusters provide essential knowledge and skills for the students' career pathways.
- This model functions as a:
  - Useful guide in developing programs of study that bridge secondary and postsecondary curriculum.*
  - Indicator of a range of career options for students' graduation plans of study.*
  - Method of allowing students to discover their interests and passions, empowering them to choose the educational pathway that may lead to success in high school, college and career.*
- The 17 Career Cluster/Pathways encompass both secondary and postsecondary education and will strengthen and improve student transition from secondary to postsecondary education.

# CAREER CLUSTERS

**AGRICULTURE, FOOD AND NATURAL RESOURCES**

Careers with common knowledge and skills related to production, processing, marketing, financing, distribution, and development of agricultural commodities and resources. These commodities include food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

**ARCHITECTURE AND CONSTRUCTION**

Careers with common knowledge and skills related to the designing, planning, managing, and building structures. Trade and Industrial Education programs equip students with the knowledge, skills, and attitudes necessary for successful employment in the trade and industrial field and for further education.

**ARTS, A/V TECHNOLOGY AND COMMUNICATIONS**

Careers with common knowledge and skills related to designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

**BUSINESS MANAGEMENT AND ADMINISTRATION**

Careers with common knowledge and skills related to the preparation of students with computer skills for future college and career plans. Cluster skills mastered include planning, organizing, directing, and evaluating as well as owning and operating a successful business.

**EDUCATION AND TRAINING**

Careers with common knowledge and skills related to planning, managing, and providing education and training services as well as related learning support services.

**ENERGY**

Careers with common knowledge and skills in the designing, planning, maintaining, generating, transmission, and distribution of traditional and alternative energy.

**FINANCE**

Careers with common knowledge and skills related to money management, including planning, investing, and spending. Students will gain career development skills for the finance world with opportunities that expand beyond basic business skills into financial literacy, banking, investing, insurance, and risk management.

**GOVERNMENT AND PUBLIC ADMINISTRATION**

Careers with common knowledge and skills related to planning and performing of government management and administrative functions at local, state, and federal levels. Careers are available in national security, foreign service, revenue, and regulations.

**HEALTH SCIENCE**

Careers with common knowledge and skills related to planning, managing, and providing services in therapeutics, diagnostics, health informatics, support areas, and biotechnology research and development.

**HOSPITALITY AND TOURISM**

Careers with common knowledge and skills related to the management, marketing, and operations of restaurants, and other food services, lodging, attractions, recreation events, and travel related services.

**HUMAN SERVICES**

Careers with common knowledge and skills related to family and human needs such as nutrition and food science, counseling and mental health services, family and community services, personal care, and consumer services.

**INFORMATION TECHNOLOGY**

Careers with common knowledge and skills related to the preparation for careers that create, use, modify, and engage technology skills. Graphics, multimedia animation, web design, game and application development, networking, and computer repair are all possibilities.

**LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY**

Careers with common knowledge and skills related to employment in emergency and fire services, legal services, protective services, and homeland security.

**MANUFACTURING**

Careers with common knowledge and skills related to processing of materials into intermediate or final products and related professional and technical support activities, such as production control, maintenance, and process engineering.

**MARKETING**

Careers with common knowledge and skills related to the process of anticipating, managing, and satisfying consumers' demand for products, services, and ideas. The Marketing career cluster generates the strategy that underlies advertising and promotional techniques, business communication, and business development.

**SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM)**

Careers with common knowledge and skills related to planning, managing, and providing scientific research and professional and technical services.

**TRANSPORTATION DISTRIBUTION AND LOGISTICS**

Careers with common knowledge and skills related to planning, managing, and moving people, materials, and goods by road, pipeline, air, rail, and water, and also includes other related professional and technical support services.





## APPROVED CAREER, TECHNICAL AND AGRICULTURAL EDUCATION EXPLORATORY PROGRAMS

### **Middle School Agriculture**

Exploring Agricultural Education (Grade 6)  
Exploring Agricultural Education (Grade 7)  
Exploring Agricultural Education (Grade 8)

### **Middle School Business Management and Finance**

Foundations of Business Administration (Grade 6)  
Foundations of Business Management (Grade 7)  
Foundations of Investing and Finance (Grade 8)

### **Middle School Career Development**

Career Awareness (Grade 6)  
Career Discovery (Grade 7)  
Career Management (Grade 8)

### **Middle School Computer Science**

Foundations of Secure Information Systems (Grade 6)  
Foundations of Computer Programming (Grade 7)  
Foundations of Interactive Design (Grade 8)

### **Middle School Engineering and Technology**

Exploring Engineering and Technology (Grade 6)  
Invention and Innovation (Grade 7)  
Technological Systems (Grade 8)

### **Middle School Family and Consumer Science**

Family and Consumer Science (Grade 6)  
Family and Consumer Science (Grade 7)  
Family and Consumer Science (Grade 8)

### **Middle School Healthcare Science**

Health Diagnostics and Support Services (Grade 6)  
Healthcare IT and Biotechnology (Grade 7)  
Therapeutic Services and Application of Anatomy (Grade 8)

### **Middle School Communications**

Broadcast and Graphic Communications (Grade 6)  
Introduction to Communications (Grade 7)  
Applications of Communications (Grade 8)

### **Middle School Marketing, Sales & Services**

Basic Skills of Marketing (Grade 6)  
Exploring Marketing Education (Grade 7)  
Pathways in Marketing (Grade 8)

# MIDDLE SCHOOL PERFORMANCE STANDARDS

Designed to meet the needs of young adolescents, middle schools bridge the gap between elementary and high school by providing students with an opportunity to learn in a safe, nurturing, and positive environment. According to the National Middle School Association (NMSA) characteristics of effective middle schools include courageous, collaborative leadership, a shared vision that guides decisions, high expectations for every member of the learning community, students and teachers engaged in active learning, and school community partnerships.

These characteristics are also found within the Career, Technical and Agricultural Education programs in Georgia. CTAE is making giant strides to bring middle school programs to new career readiness goals. The new curriculum includes national standards, CTAE standards and Georgia Performance Standards, in addition to career development activities allowing students to make the connection between class work and workforce.

Each Middle School CTAE Program area course includes essential and relevant performance standards for math, science, language arts, and social studies. Middle school CTAE courses also reinforce Reading Across the Content, Technical Writing standards, Entrepreneurship standards, and CTAE Foundation Skills. CTAE middle school courses feature rigorous performance standards that students master to help prepare them for choosing a high school career pathway that interests them.

# Find Your Passion!

## Middle School Career Pathway Options

 DESANA Middle School	Career Development Computer Science Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy Marketing
 HENDRICKS Middle School	A/V Computer Science Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy Marketing
 LAKESIDE Middle School	Computer Science Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy Marketing
 LIBERTY Middle School	Agriculture Computer Science Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy Marketing
 LITTLE MILL Middle School	Agriculture Business Management & Finance Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy
 NORTH FORSYTH Middle School	Agriculture Career Development Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy
 OTWELL Middle School	Agriculture Engineering & Technology Family & Consumer Science – Food and Nutrition Junior Achievement Entrepreneurship & Financial Literacy
 PINEY GROVE Middle School	Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy Marketing
 RIVERWATCH Middle School	A/V Business Management & Finance Career Development Computer Science Engineering & Technology Healthcare Junior Achievement Entrepreneurship & Financial Literacy Marketing
 SOUTH FORSYTH Middle School	Business Management & Finance Engineering & Technology Healthcare Junior Achievement Entrepreneurship & Financial Literacy Marketing
 VICKERY CREEK Middle School	A/V Business Management & Finance Engineering & Technology Junior Achievement Entrepreneurship & Financial Literacy





## NONTRADITIONAL OCCUPATIONS AND RESOURCES

### NONTRADITIONAL OCCUPATIONS

Nontraditional careers are those occupations or fields of work for which individuals from one gender comprise less than 25% of the individuals employed. Students are encouraged to enroll in courses that fit their career goals regardless of the gender make-up in the classroom. Some examples of nontraditional careers are:

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

### LOCAL EDUCATION AGENCY ACCOUNTABILITY

Two different methods of evaluation/review are used try the state to assist local systems in their compliance of federal legislation regarding Perkins funding and gender equity.

### CTAE PROGRAM REVIEWS

- *Required by Perkins*
- *Conducted with 1/5 of systems annually*
- *Serves as mechanism for evaluation both internally and externally*
- *Provides professional learning for review teams*

### METHODS OF ADMINISTRATION (MOA) COMPLIANCE REVIEWS

- *Required by Office for Civil Rights*
- *Conducted in 5 systems per year based on a federally approved targeting plan*
- *Serves as a mechanism for evaluation both internally and externally*
- *Provides professional learning for compliance review teams*

Keeping accurate documentation of non-traditional education progress made for each Georgia school system is critical to measure continuous improvement in program concentrations and pathways.

### CAREER PLANNING RESOURCES

#### [www.bls.gov/oco/](http://www.bls.gov/oco/)

The Occupational Outlook Handbook is a nationally recognized source of career information. It describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects. The handbook covers a wide range of occupations.

#### [www.caeeronestop.org](http://www.caeeronestop.org)

Sponsored by the U.S. Department of Labor, CareerOneStop is your source for career exploration, training, and jobs.

#### [www.ctaen.org](http://www.ctaen.org)

Georgia Career Resource Network is a web site designed to assist Georgia Career Resource Network is a web site designed to assist counselors, instructors, and administrators with career-related programs, initiatives, and information.

#### <https://dol.georgia.gov/get-occupational-trends>

Occupational information, including projected employment and wages, is vital in career exploration, education and training program development, and economic development. This site provides Occupational Outlook, Georgia job information, hot careers, and STEM careers!

#### <https://explorer.gdol.ga.gov/vosnet/Default.aspx>

Georgia LaborMarket Explorer is an online resource for your employment needs!

#### <http://gacareerpipeline.gadoe.org/>

Georgia's Career Pipeline is provided to assist Georgia businesses locate local young talent with the skills needed for the field or industry. Businesses can use this information to make decisions concerning growth, development, and workforce needs.

#### [www.gafutures.org](http://www.gafutures.org)

GAfutures is an internet site for planning, paying, and applying for college.

#### [www.onetonline.org/](http://www.onetonline.org/)

O\*NET OnLine is a tool for career exploration and job analysis and has detailed descriptions of the world of work use by job seekers, workforce development and HR professionals, students, researchers, and more!



# Georgia's HOT Careers to 2028

The careers in this chart have it all!

## Skills and Abilities

- advanced skills required
- moderate skills required

## Work Activities

- frequently found
- occasionally found

**HOT** jobs have faster than state annual average job growth, above the state annual average wage, and have at least 400 annual openings.

	Critical Thinking/Problem Solving	Judgment & Decision Making	Service Oriented/Instructing	Listening/Reading	Oral Expression/Comprehension	Deception/Arm-Hand Steadiness	Reasoning	Written Expression/Comprehension	Assisting & Caring for Others	Coaching/Training & Teaching Others	Communicating Outside Organization	Control Machines/Inspect Equipment	Interacting With Computers	Monitor Processes, Materials, Surroundings	Physical Acts/Handle-Move Objects	Process/Analyze Data or Information	Schedule/Organize, Plan, & Prioritize Work	Thinking Creatively	2019 Edition - Georgia Wage Estimates	2018-28 Annual Openings
<b>Doctoral or professional degree</b>																				
Health Specialties Teachers, Postsec	●	●	●	●	●	●	●	●	●	○	●	●	○	●	●	●	●	●	\$113,900	710
Pharmacists	●	●	●	●	○	●	●	●	●	○	●	●	●	○	●	●	●	●	\$113,200	630
Physical Therapists	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$82,300	440
Physicians & Surgeons, All Other	○	●	●	●	●	●	●	○	●	●	●	●	●	○	●	●	●	●	\$224,200	570
<b>Master's degree</b>																				
Education Administrators, Elem & Sec	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	\$91,200	810
Educational, Guidance, School, & Voc Counselors	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	\$53,900	1,430
Healthcare Social Workers	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	\$50,600	450
Instructional Coordinators	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	\$63,700	1,340
Nurse Practitioners	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	\$101,800	660
Physician Assistants	●	●	●	●	○	●	●	○	●	●	●	●	●	○	●	●	●	●	\$98,400	410
<b>Bachelor's degree</b>																				
Accountants & Auditors	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	\$71,900	4,890
Administrative Services Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$110,000	910
Architectural & Engineering Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$134,700	410
Business Operations Specialists, All Other	○	●	○	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	\$71,100	4,340
Civil Engineers	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	\$77,400	860
Clinical Lab Technologists & Technicians	●	●	○	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○	\$48,000	980
Computer & Information Systems Managers	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$136,300	1,310
Computer Occupations, All Other	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$86,000	1,930
Elementary School Teachers, Exc Spec Ed	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$53,800	5,060
Engineers, All Other	●	●	○	●	●	●	●	●	○	●	●	●	○	○	○	○	○	○	\$89,300	400
Financial Analysts	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	\$79,900	790
Financial Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$138,200	2,040
Financial Specialists, All Other	●	●	○	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	\$81,100	530
General & Operations Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$107,400	8,960
Human Resources Managers	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$120,000	570
Human Resources Specialists	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$57,100	2,450
Industrial Engineers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$82,200	680
Industrial Production Managers	●	●	○	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	\$98,600	440
Kindergarten Teachers, Exc Spec Ed	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$51,600	590
Loan Officers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$71,100	790
Logisticians	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$67,100	800
Management Analysts	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$88,600	2,980
Market Research Analysts & Marketing Spec	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$63,500	2,890

✓ Fast job growth ✓ Above average wages ✓ At least 400 expected annual job openings



# Georgia's HOT Careers to 2028

The careers in this chart have it all!

## Skills and Abilities

- advanced skills required
- moderate skills required

## Work Activities

- frequently found
- occasionally found

**HOT** jobs have faster than state annual average job growth, above the state annual average wage, and have at least 400 annual openings.

	Critical Thinking/Problem Solving	Judgment & Decision Making	Service-Oriented/Instructing	Listening/Reading	Oral Expression/Comprehension	Dexterity/Arm-Hand Steadiness	Reasoning	Written Expression/Comprehension	Assessing & Caring for Others	Coaching/Training & Teaching Others	Communicating Outside Organization	Control Machines/Inspect Equipment	Interacting With Computers	Monitor Processes, Materials, Surroundings	Physical Acts/Handle-Move Objects	Schedule/Analyze Data or Information	Thinking Creatively	2019 Edition - Georgia Wage Estimates	2018-28 Annual Openings
<b>Bachelor's degree or equivalent</b>																			
Marketing Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$136,100	850
Mechanical Engineers	●	●	○	●	●	●	●	●	○	○	●	●	●	●	○	●	●	\$81,000	400
Medical & Health Services Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$105,900	1,080
Meeting, Convention, & Event Planners	●	●	●	●	●	●	●	●	●	○	●	○	●	●	●	●	●	\$48,200	420
Middle Schl Teachers, Exc Spec & Career/Tech Ed	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$55,500	2,310
Personal Financial Advisors	○	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	\$115,000	610
Producers & Directors	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$80,700	700
Public Relations Specialists	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$59,200	660
Registered Nurses	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	\$65,800	6,340
Sales Managers	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$133,400	1,620
Secondary Schl Teachers, Exc Spec & Career/Tech Ed	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$55,400	2,500
Securities, Commodities, & Financial Svcs Sales Agents	●	●	○	●	●	●	●	●	○	●	●	●	●	●	●	●	●	\$72,300	1,080
Social & Community Service Managers	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$62,500	450
Software Developers, Applications	●	●	●	●	●	●	●	●	○	●	●	●	●	●	○	●	●	\$100,400	2,980
Training & Development Specialists	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$61,000	1,210
<b>Associate's degree</b>																			
Computer Network Support Specialists	●	●	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●	\$67,600	630
Dental Hygienists	○	●	●	●	●	●	●	●	○	●	●	●	●	●	○	●	●	\$62,600	590
Paralegals & Legal Assistants	○	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$51,600	1,230
Physical Therapist Assistants	○	●	●	○	●	●	●	●	●	○	●	●	○	●	○	●	●	\$49,800	440
Radiologic Technologists	●	●	○	●	●	●	●	●	●	○	●	○	●	○	●	○	●	\$54,100	480
Respiratory Therapists	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	\$54,900	430
<b>Postsecondary non-degree award</b>																			
Telecom Equip Installers & Repairers, Exc Line Installers	●	●	●	●	●	○	●	○	○	○	○	○	○	○	○	○	○	\$50,700	1,300
<b>Some college, no degree</b>																			
Computer User Support Specialists	●	●	●	●	○	●	●	○	○	○	○	○	○	○	○	○	○	\$50,600	2,200
<b>High school diploma or equivalent</b>																			
Food Service Managers	●	●	○	●	●	●	●	●	○	○	○	○	○	○	○	○	○	\$49,900	1,850
Industrial Machinery Mechanics	●	●	○	●	●	○	●	○	○	○	○	○	○	○	○	○	○	\$47,100	1,470
Insurance Sales Agents	●	●	○	●	●	●	●	○	○	○	○	○	○	○	○	○	○	\$56,300	1,500
Plumbers, Pipefitters, & Steamfitters	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	\$45,600	1,570
Production, Planning, & Expediting Clerks	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	\$46,100	1,110
Sales Reps, Services, All Other	●	●	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	\$58,400	5,260
Sales Reps, Wholesale & Mfg, Exc Tech & Scientific Products	○	●	○	●	●	○	○	○	○	○	○	○	○	○	○	○	○	\$60,600	5,750
Supvs of Transp & Material Mvg Wkrs, Exc Aircraft Cargo	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	\$50,000	2,100

**Note:** This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the Georgia Department of Labor and does not necessarily reflect the official position of the U.S. Department of Labor. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

For more information, please contact Workforce Statistics & Economic Research at (404) 232-3875 • Fax (404) 232-3888  
Email: [Workforce\\_Info@gdol.ga.gov](mailto:Workforce_Info@gdol.ga.gov)

Fast job growth ✓ Above average wages ✓ At least 400 expected annual job openings



# GEORGIA'S STEM Careers to 2028

## Science | Technology | Engineering | Mathematics

Knowledge Understanding of principles and facts of subject matter ● full knowledge required ○ some knowledge required  Education Typical education needed to enter an occupation  Jobs have faster than state annual average job growth, above the state annual average wage, and have at least 400 annual openings.	Knowledge																	Education		Occupational Characteristics				
	Administration and Management	Biology/Chemistry	Design/Build and Construction	Clerical/Customer and Personal Svc	Telecom/Communications and Media	Computers and Electronics	Economics and Accounting	Education and Training	Engineering and Technology	English Language	Law and Govt/Public Safety and Security	Mathematics	Mechanical/Production and Processing	Medicine and Dentistry	Personnel and Human Resources	Physics	Psychology/Sociology and Anthropology	Therapy/Counseling	Doctoral or Professional Degree	Master's Degree	Bachelor's Degree	HS Diploma/Assoc Degree/Some College	2019 Edition - Georgia Wage Estimates	2018-28 Annual Openings
Life and Physical Science, Engineering, Mathematics, and Information Technology Occupations																								
Aerospace Engineers			○						●	●		●	●				●				✓		\$108,900	210
Biological Science Teachers, Postsec		●			○			●		●	●			●					✓				\$92,400	90
Civil Engineers 1164	●		●	○		●	●		●	●	○	●			●	●					✓		\$77,400	860
Computer & Information Systems Managers 1164	●			○		●		●	●	●		●			●						✓		\$136,300	1,310
Computer Network Architects			○	○	○				●	●		●									✓		\$109,000	410
Computer Network Support Specialists 1164	●			○	●	●			●	●											✓		\$67,600	630
Computer Occupations, All Other 1164	●		○	○	●	●	●		●	●		●						○			✓		\$86,000	1,930
Computer Systems Analysts	●			○		●			●	●		●									✓		\$86,900	1,570
Computer User Support Specialists 1164				○	●	●				●		●									✓		\$50,600	2,200
Database Administrators				○	●	●				●		●									✓		\$87,800	380
Electrical & Electronics Engineering Techs			○	○		●			●	●		●	●			●					✓		\$63,100	360
Electrical Engineers			○			●		●	●	●		○				●					✓		\$83,800	350
Electronics Engineers, Exc Computer			○	○	○			●	●	●		●	●			●					✓		\$91,400	400
Engineers, All Other 1164	●	●	○	○	○	●		●	●	●	○	●	●			●					✓		\$89,300	400
Industrial Engineers 1164	●		○	○		●		●	●	●		●	●								✓		\$82,200	680
Information Security Analysts	●			○	●	●		●	●	●	○										✓		\$90,100	330
Life, Physical, & Social Science Technicians, All Other	●	●		○		●		●	●	●		●	○								✓		\$50,300	290
Mechanical Engineers 1164	●	○	○	●		●		●	●	●		●	●			●					✓		\$81,000	400
Medical Scientists, Exc Epidemiologists	●	●				●				●		●	●	●				✓					\$72,300	180
Network & Computer Systems Administrators	●					●				●		●									✓		\$82,900	770
Operations Research Analysts	●					●		●				●	○								✓		\$66,200	330
Sales Engineers				○		●		●	●			●									✓		\$94,400	270
Sales Reps, Wholesale & Mfg, Tech & Scientific Products	●			○								●	○								✓		\$72,600	1,050
Software Developers, Applications 1164			○	○		●		●	●			●									✓		\$100,400	2,980
Software Developers, Systems Software			○	○	○	●		●	●			●									✓		\$100,300	1,040
Statisticians						●				●		●							✓				\$88,500	130
Web Developers			○	○	○	●				●		●									✓		\$76,400	340
Health Occupations																								
Dental Hygienists 1164			○		○			●	●					●			○				✓		\$62,600	590
Diagnostic Medical Sonographers			○		●		●	●	●	●				●			○	○			✓		\$59,100	210
Dietitians & Nutritionists	●	●			●			●	●			●		●			○	●			✓		\$52,000	200
Emergency Medical Techs & Paramedics	●	●		●	○			●	●	●	●	●	●	●			○	●			✓		\$32,400	1,020
Health Specialties Teachers, Postsec 1164	●	●		●	○			●	●	●	●	●	●	●	●		○	●	✓				\$113,900	710
Health Technologists & Technicians, All Other	●	○		●		●		●	●	○	●			●	●		○				✓		\$44,800	330



# GEORGIA'S STEM Careers to 2028

## Science | Technology | Engineering | Mathematics

Knowledge Understanding of principles and facts of subject matter ● full knowledge required ○ some knowledge required  Education Typical education needed to enter an occupation  ††† jobs have faster than state annual average job growth, above the state annual average wage, and have at least 400 annual openings.	Knowledge																Education		Occupational Characteristics						
	Administration and Management	Biology/Chemistry	Design/Bldg and Construction	Clerical/Customer and Personal Svc	Telecom/Communications and Media	Computers and Electronics	Economics and Accounting	Education and Training	Engineering and Technology	English Language	Law and Govt/Public Safety and Security	Mathematics	Mechanical/Production and Processing	Medicine and Dentistry	Personnel and Human Resources	Physics	Psychology/Sociology and Anthropology	Therapy/Counseling	Doctoral or Professional Degree	Master's Degree	Bachelor's Degree	HS Diploma/Assoc Degree/Some College	2019 Edition - Georgia Wage Estimates	2018-28 Annual Openings	
Health Occupations Continued																									
Internists, General	●	●		●		●		●		●	●	●		●	●		●	●	✓					\$106,100	130
Licensed Practical & Licensed Vocational Nurses	●	○		●				●		●	●	●		●			●	●				✓		\$39,700	2,250
Medical & Health Services Managers †††	●			●		●	●	●		●	●	●		●	●						✓			\$105,900	1,080
Med Records & Health Information Techs				●		●				●												✓		\$37,300	520
Nurse Practitioners †††		●		●	○	●		●		●	●	●		●			●	●		✓				\$101,800	660
Nursing Instructors & Teachers, Postsec	●	●		●	○	●		●		●	○	●		●			●	●	✓					\$68,200	160
Occupational Therapists		○		○				●		●							●	●		✓				\$78,300	290
Ophthalmic Medical Technicians				●		●		●		●				●								✓		\$33,500	200
Opticians, Dispensing	●			●						●		●	○									✓		\$34,700	200
Pharmacists †††	●	●		●		●				●	○	●		●			○	●	✓					\$113,200	630
Pharmacy Technicians				●						●		●		●								✓		\$28,900	1,360
Physical Therapists †††	●			●				●		●				●			○	●	✓					\$82,300	440
Physician Assistants †††		●		○		●		●		●				●			●	●		✓				\$98,400	410
Physicians & Surgeons, All Other †††	●	●		○		●	●			●	●	●		●	●	●	○	●	✓					\$224,200	570
Radiologic Technologists †††		○		●		●		●		●	○	●	●	●	●	●	○					✓		\$54,100	480
Registered Nurses †††		○		○		●		●		●		●		●			○	●			✓			\$65,800	6,340
Respiratory Therapists †††		●		○		●		●		●		●					○				✓			\$54,900	430
Speech-Language Pathologists				○				●		●				●			○	●		✓				\$74,100	360
Surgical Technologists				○				●		●				●								✓		\$42,700	480
Veterinarians	●	●		○						●		●							✓					\$87,000	190
Veterinary Technologists & Technicians		○		●						●		●		●								✓		\$30,200	430
Architecture Occupations																									
Architects, Exc Landscape & Naval	●		●	○		●	●		●	●	●	●			●						✓			\$98,400	300
Architectural & Civil Drafters			●	○		●			●	●	○	●										✓		\$54,600	320
Architectural & Engineering Managers †††	●		○	○		●			●	●	●	●	●		●	●					✓			\$134,700	410
Landscape Architects	●	○	●	●	○	●	●		●	●	●	●										✓		\$65,100	70
Social Science Occupations																									
Clinical, Counseling, & School Psychologists	●			●		●		●		●	●	●					●	●	✓					\$85,100	320
Economics Teachers, Postsec							●	●		●		●							✓					\$96,900	30
Political Science Teachers, Postsec	●			○	○		●	●		●		○					●		✓					\$97,000	30
Psychology Teachers, Postsec						●		●		●		●					●	●	✓					\$72,300	50
Social Science Research Assistants	●			●		●		●		●		●					●				✓			\$50,400	350
Social Scientists & Related Workers, All Other	●		●	○					●	●		○									✓			\$82,800	300
Urban & Regional Planners	●		○	○	○			●		●	●	●			●		○			✓				\$57,500	80

††† Note: This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the Georgia Department of Labor and does not necessarily reflect the official position of the U.S. Department of Labor. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

<https://explorer.gdol.ga.gov/gsipub/index.asp?docid=356>

For more information, contact Workforce Statistics & Economic Research (WS&ER) at (404) 232-3875 or at [workforce\\_info@gdol.ga.gov](mailto:workforce_info@gdol.ga.gov)

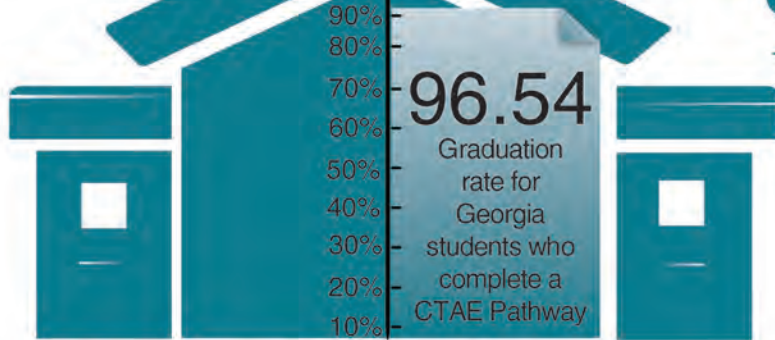


# What is Career, Technical and Agricultural Education?



Fulfills employer needs that are

**High-Skill**  
**High-Wage**  
**In-Demand**



Includes high schools, career academies, community and technical colleges, four-year universities and more.

**CTAE**  
**DELIVERS**



Real High School Experience with Added Value



Real Opportunities for College & Rewarding Careers



Real-World Workforce-Ready Skills

\*Adapted from the **ACTE** "What is Career and Technical Education?" Publication





## CTAE INDUSTRY CERTIFICATION

### CTAE INDUSTRY CERTIFICATION INITIATIVE

When a program became industry certified, it received 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.

The State Department of Education is committed to the industry certification process as a part of its effort to strengthen technical and academic standards for all Career, Technical and Agricultural Education (CTAE) programs.

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) instruction, including school-based enterprises and entrepreneurial ventures;
- Career and Technical Student Organizations (CTSOs) which offer co-curricular competitive events on the local, state and national level and provide leadership development skills for personal and professional growth; and,
- 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.

#### HOW DO STUDENTS BENEFIT?

- The student is ensured participation in a program that has been carefully interfaced with current industry standards thus helping to increase their qualifications toward successful employment.
- The curriculum and the delivery method for that curriculum taught to students are improved and updated enabling the student to receive high quality instruction.

#### HOW DOES THE COMMUNITY VIEW A SCHOOL WHERE PROGRAMS HAVE UNDERGONE THE INDUSTRY CERTIFICATION PROCESS?

- The school is viewed as having exceptional programs. Through the industry certification process, schools are better able to align curriculum with recognized standards to aid with providing better career opportunities for students.
- Communities understand that schools which pursue this distinction are committed to improving student preparation and ensuring that Georgia's workforce meets the demands of the 21st century.

#### WHAT DOES CERTIFICATION REPRESENT TO THE BUSINESS COMMUNITY/EMPLOYERS IN THE SCHOOL'S SERVICE AREA?

- It represents that they will receive qualified students who will make productive employees.
- It represents that they have had meaningful involvement in public education and have contributed to the development of a highly-skilled, future workforce for Georgia.



## CTAE INDUSTRY CERTIFICATION

### INDUSTRY CERTIFIED PROGRAMS IN FORSYTH COUNTY

**Automotive Service Technology (Certified by NATEF):**  
Forsyth Central High School

**A/V, Technology, and Film (Certified by MEFGA):**  
Forsyth Central High School  
Lambert High School  
North Forsyth High School  
West Forsyth High School

**Business and Computer Science (Certified by SHRM):**  
Lambert High School  
North Forsyth High School  
South Forsyth High School  
West Forsyth High School

**Culinary Arts (Certified by ACFEF):**  
Lambert High School  
South Forsyth High School  
West Forsyth High School

**Engineering (Certified by ITEGA):**  
Forsyth Central High School  
Lambert High School  
North Forsyth High School  
South Forsyth High School  
West Forsyth High School

**Healthcare Science (Certified by HomeTown Health):**  
Alliance Academy for Innovation  
Lambert High School  
North Forsyth High School

**Marketing (Certified by AMA):**  
Forsyth Central High School  
Lambert High School  
North Forsyth High School  
South Forsyth High School  
West Forsyth High School

#### FY22 INDUSTRY CERTIFICATION PROCESS:

**Business and Computer Science**  
Alliance Academy for Innovation  
Denmark High School  
Forsyth Central High School

**Culinary Arts**  
Denmark High School

**Food and Nutrition**  
Forsyth Central High School  
Lambert High School  
North Forsyth High School  
West Forsyth High School

**Marketing**  
Alliance Academy for Innovation  
Denmark High School  
*North Forsyth High School\**

#### FY23 INDUSTRY CERTIFICATION PROCESS:

**Agriculture**  
Denmark High School  
North Forsyth High School

**Business and Computer Science**  
*Lambert High School\**  
*North Forsyth High School\**  
*South Forsyth High School\**

**Engineering**  
Alliance Academy for Innovation  
Denmark High School  
*Lambert High School\**  
*South Forsyth High School\**  
*West Forsyth High School\**

**Marketing**  
*Forsyth Central High School\**  
*South Forsyth High School\**

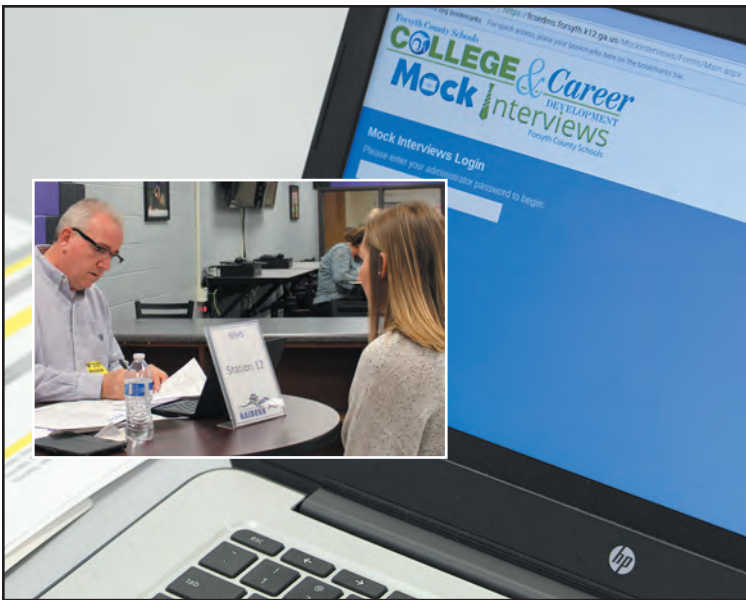
*\* 5-Year Re-Certification*



## CTAE FOURTH SCIENCE OPTIONS

The following courses count towards satisfying the fourth science requirement and a CTAE pathway completion requirement and have been approved by the Board of Regents as a fourth science.

COURSE NAME	CTAE PATHWAY
Appropriate and Alternative Energy Technologies	Energy
Energy and Power Technologies	Energy
Applications of Biotechnology	Health Science
Essentials of Biotechnology	Health Science
Essentials of Healthcare	Health Science
Sports Medicine	Health Science
Food for Life	Human Services
Food Science	Human Services
Forest Science	Agriculture, Food and Natural Resources
General Horticulture and Plant Science	Agriculture, Food and Natural Resources
Natural Resources Management	Agriculture, Food and Natural Resources
Animal Science Technology/Biotechnology	Agriculture, Food and Natural Resources
Plant Science and Biotechnology	Agriculture, Food and Natural Resources
Advanced AC and DC Circuits	Science, Technology, Engineering, & Mathematics
Advanced Placement Computer Science	Science, Technology, Engineering, & Mathematics
International Baccalaureate Computer Science, Year One	Information Technology
International Baccalaureate Computer Science, Year Two	Information Technology
Advanced Placement Computer Science Principles	Information Technology
Computer Science Principles	Information Technology
Programming, Games, Apps and Society	Information Technology
Web Development	Information Technology
Embedded Computing	Information Technology
Game Design: Animation and Simulation	Information Technology
Forensic Science and Criminal Investigations	Law, Public Safety, Corrections and Security
Aerospace Science: Flight Science	Government and Public Administration



## Mock Interviews

Forsyth County Schools

All CTAE students enrolled in a third-year career pathway course or Internship/Mentorship Forsyth during the school year will participate in organizational ethics and soft skills training. Through a sequence of activities during the school year, students will spend time developing personal philosophies around employability standards and the job-search process, with the Mock Interview Week as the culminating activity at their high school. Several thousand students will participate in this experience during the school year!

Mock interviews will expose each student to the interview portion of the job search process, as well as provide feedback on the development of resumes and other career-related documents. This event will be community-driven, as volunteers from across the county spend time creating an experience that will help students learn what is expected in a job interview, while also providing constructive feedback on all aspects on the interview process. A focus during the school year includes the following standards:

- *Discipline and Character*
- *Attendance and Punctuality*
- *Job Shadowing and Community Service Projects*
- *Productivity and Academic Performance*
- *Responsibility and Organization*
- *Attitude and Respect*
- *Teamwork and Work Habits*
- *Self-Management and Time Management*
- *Oral and Written Business Communication Skills*
- *Appearance and Professional Image*

# CTAE MOCK INTERVIEWS

## MOCK INTERVIEWS

### ALLIANCE ACADEMY FOR INNOVATION

March 14-18, 2022

### DENMARK HIGH SCHOOL

February 28 - March 4, 2022

### EAST FORSYTH HIGH SCHOOL

March 21-25, 2022

### FORSYTH CENTRAL HIGH SCHOOL

February 21-25, 2022

### LAMBERT HIGH SCHOOL

February 28 - March 4, 2022

### NORTH FORSYTH HIGH SCHOOL

March 7-11, 2022

### SOUTH FORSYTH HIGH SCHOOL

March 21-25, 2022

### WEST FORSYTH HIGH SCHOOL

February 21-25, 2022



All students in Forsyth County Schools are involved in the GeorgiaBEST® School program. GeorgiaBEST® School is designed for Pre-K through Post-Secondary teachers to facilitate discussion in their classrooms.

**GOAL:** at the earliest age – exposure to concepts; for all students – introduce components, model, teach, reinforce, acknowledge, and reward appropriate behavior and skills in order to prepare students for the workplace, for higher education, and for life. GeorgiaBEST® School utilizes a grading rubric/participant evaluation that more closely resembles how employees are evaluated in the workplace. Students who successfully complete the requirements of this intense focus will receive GeorgiaBEST (Business Ethics Student Training) certification awarded by the Georgia Department of Labor. Georgia businesses and hiring managers are recognizing the importance of GeorgiaBEST and understand that these students have gone above and beyond to prepare themselves for the workplace.



# GEORGIABEST AND CAREER RESEARCH

## CAREER PLANNING RESOURCES

**[www.bls.gov/oco/](http://www.bls.gov/oco/)**

The Occupational Outlook Handbook is a nationally recognized source of career information. It describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects. The handbook covers a wide range of occupations.

**[www.careeronestop.org](http://www.careeronestop.org)**

Sponsored by the U.S. Department of Labor, CareerOneStop is your source for career exploration, training, and jobs.

**[www.ctaen.org](http://www.ctaen.org)**

Georgia Career Resource Network is a web site designed to assist Georgia Career Resource Network is a web site designed to assist counselors, instructors, and administrators with career-related programs, initiatives, and information.

**<https://dol.georgia.gov/get-occupational-trends>**

Occupational information, including projected employment and wages, is vital in career exploration, education and training program development, and economic development. This site provides Occupational Outlook, Georgia job information, hot careers, and STEM careers!

**<https://explorer.gdol.ga.gov/vosnet/Default.aspx>**

Georgia LaborMarket Explorer is an online resource for your employment needs!

**<http://gacareerpipeline.gadoe.org/>**

Georgia's Career Pipeline is provided to assist Georgia businesses locate local young talent with the skills needed for the field or industry. Businesses can use this information to make decisions concerning growth, development, and workforce needs.

**[www.gafutures.org](http://www.gafutures.org)**

GAfutures is an internet site for planning, paying, and applying for college.

**[www.onetonline.org/](http://www.onetonline.org/)**

O\*NET OnLine is a tool for career exploration and job analysis and has detailed descriptions of the world of work use by job seekers, workforce development and HR professionals, students, researchers, and more!

# Life Skills Definitions/Descriptions

## 6th through 8th Grade



Compiled from: GeorgiaBEST; GaDOE; WorkEthic.org; Dictionary.com; Nevada DOE/CTAE; STEMNET; USDOL/Skills to Pay the Bills; O\*NET; Job Corps; SCANS; Arizona's Workplace Employability Skills Project; Connie Smith/Rose Procter/Cari Barrett

COMPETENCY	DEFINITION/DESCRIPTION
<b>PERSONAL CHARACTERISTICS</b>	
<b>Attitude</b>	The ability to: • demonstrate a positive, optimistic outlook • take responsibility for actions • use appropriate language • avoid gossip • show politeness • smile on a regular basis • be enthusiastic and self-confident • take direction • be eager and motivated to complete tasks.
<b>Initiative</b>	The ability to: • be productive and show ambition • go above and beyond the minimum job requirements • voluntarily start projects • attempt non-routine jobs and tasks • establish credibility • be able to work independently • complete assigned tasks efficiently, effectively and timely • work towards goals.
<b>Flexibility</b>	The ability to: • adapt to different situations and environments, especially when outside of a normal routine • display a teachable heart and willingness to change or compromise • be receptive to new information • learn from mistakes for the benefit of self and others involved.
<b>Organization</b>	The ability to: • manage both one's self and one's own time and the time of others • use resources effectively • plan and prioritize school and personal life to meet goals and deadlines • overcome procrastination.
<b>Discipline</b>	The ability to: • follow the chain of command • demonstrate good character • be even tempered • behave appropriately • accept unavoidable interruptions and pressure • pay attention to details • display a high level of concentration even when assigned an unpleasant task • demonstrate grit and resilience.
<b>Integrity</b>	The ability to: • demonstrate moral, ethical, loyal, trustworthy, and honest behavior • be accountable and dependable • play fair • maintain confidentiality • do the right thing even when no one is looking • produce quality work • work to fulfill the mission of the organization • define personal values versus what is valued.
<b>INTERACTIONS WITH OTHERS</b>	
<b>Respect</b>	The ability to: • acknowledge and appreciate the opinions, property, and rights of others • value diversity and cultural differences • respond appropriately to those in authority • respond to feedback unemotionally and nondefensively • negotiate diplomatic solutions to interpersonal and school issues • intervene when others demonstrate negative attitudes or disrespect and help them recognize the inappropriateness of their behavior.
<b>Effective Communication</b>	The ability to: • display appropriate listening, nonverbal, verbal, interpersonal, and written skills • send a consistent, clear, concise, and courteous message that is easily understood by the receiving party • ask questions, clarify or summarize, and provide feedback to ensure the message has been understood • read and interpret documents and writing clearly and correctly • give and receive information and convey our ideas and opinions with those around us.
<b>Teamwork</b>	The ability to: • work collaboratively and cooperatively with others toward a common goal or success of the team • participate appropriately as a team member by assisting others or requesting help when needed • handle criticism, conflicts, and complaints appropriately • demonstrate leadership • relate well to others • take an interest in what others say and do in order to build relationships • contribute to the group with ideas, suggestions, and effort • participate in group decision-making.
<b>EMPLOYER EXPECTATIONS</b>	
<b>Attendance and Punctuality</b>	The ability to: • come to school every day on time • notify teachers in advance of planned absences • make up work or assignments punctually • come to school prepared to work.
<b>Service to Others</b>	The ability to: • see other people's point of view • handle complaints correctly • interact appropriately with others • listen attentively and provide undivided attention • identify and anticipate needs • make others feel important and appreciated • convey sincerity • know how to apologize • give more than expected • follow through on promises • solicit regular feedback • encourage and welcome suggestions • show appreciation • demonstrate the power of "yes" • provide helpful, courteous and friendly service to teachers, administrators, parents, and others without being asked.
<b>Critical Thinking and Problem Solving</b>	The ability to: • analyze facts and use a logical approach to form an accurate, objective decision or plan of action • recognize and clearly define a problem, determine the cause, identify, prioritize, and select alternatives for a solution, then implement the solution even for difficult or complex issues • evaluate and monitor progress and revise the plan as needed • identify resources needed to solve a problem • generate new ideas • consider the relative costs and benefits of potential actions to choose the most appropriate one • "think on one's feet", assess problems, and find well-thought out solutions within a reasonable time frame • think critically and creatively, share thoughts and opinions • understand framework for sound ethical decisions.
<b>Technology Usage and Social Media Ethics</b>	The ability to: • follow policy regarding use of personal technology while at school • demonstrate proper use of technology • understand how one's online actions and behavior can have far-reaching and long-lasting effects.
<b>Professionalism</b>	The ability to: • act appropriately and display the character, conduct, standards, and behavior expected from a professional person • display appropriate language, dress, grooming and hygiene • acknowledge that appearance reflects on the image of the student, family, and school • display proper etiquette in classroom, lunch room, or at school-related functions.
<b>Following the Rules</b>	The ability to: • follow rules, regulations, procedures, and directions especially those related to safety • display good habits • keep classroom neat and orderly • maintain school equipment to ensure longevity and efficiency • take proactive measures to address unsafe practices or behaviors.



# Life Skills Definitions/Descriptions

## 9th through 12th Grade

Compiled from: GeorgiaBEST; GaDOE; WorkEthic.org; Dictionary.com; Nevada DOE/CTAE; STEMNET; USDOL/Skills to Pay the Bills; O\*NET; Job Corps; SCANS; Arizona's Workplace Employability Skills Project; Connie Smith/Rose Procter



COMPETENCY	DEFINITION/DESCRIPTION
<b>PERSONAL CHARACTERISTICS</b>	
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<b>Initiative</b>	The ability to: • be productive and show ambition • go above and beyond the minimum job requirements • voluntarily start projects • attempt non-routine jobs and tasks • establish credibility • to be able to work independently • complete assigned tasks efficiently, effectively and timely • work towards goals.
<b>Flexibility</b>	The ability to: • adapt • display a teachable heart and willingness to change or compromise • receptive to new information • learn from mistakes for the benefit of self and the employer.
<b>Organization</b>	The ability to: • manage both one's self and one's own time and the time of others • use resources effectively; plan and prioritize work and personal life to meet goals and deadlines • overcome procrastination.
<b>Discipline</b>	The ability to: • follow the chain of command • demonstrate good character • to be even tempered; behave appropriately • accept unavoidable interruptions and pressure • the ability to pay attention to details • display a high level of concentration even when assigned an unpleasant task • demonstrate grit and resilience.
<b>Integrity</b>	The ability to: • demonstrate moral, ethical, loyal, trustworthy, and honest behavior • accountable and dependable • play fair • maintain confidentiality • do the right thing even when no one is looking • produce quality work • fulfill the mission of the organization • define personal values versus what is valued.
<b>INTERACTIONS WITH OTHERS</b>	
<b>Respect</b>	The ability to: • acknowledge and appreciate the opinions, property, and rights of others • value diversity and cultural differences • respond appropriately to those in authority • respond to feedback unemotionally and nondefensively • negotiate diplomatic solutions to interpersonal and workplace issues • acknowledge the economic, political, and social relationships that impact multiple levels of an organization • intervene when others demonstrate negative attitudes or disrespect and help them recognize the inappropriateness of their behavior.
<b>Effective Communication</b>	The ability to: • display appropriate listening, nonverbal, verbal, interpersonal, and written skills • send a consistent, clear, concise, and courteous message that is easily understood by the receiving party • ask questions, clarify or summarize, and provide feedback to ensure the message has been understood • read and interpret workplace documents and writing clearly and correctly • give and receive information and convey our ideas and opinions with those around us.
<b>Teamwork</b>	The ability to: • work collaboratively and cooperatively with others toward a common goal or success of the team; participate appropriately as a team member by assisting others or requesting help when needed • handle criticism, conflicts, and complaints appropriately • demonstrate leadership • relate well to others • take an interest in what others say and do in order to build relationships • contribute to the group with ideas, suggestions, and effort • participate in group decision-making.
<b>EMPLOYER EXPECTATIONS</b>	
<b>Attendance and Punctuality</b>	The ability to: • come to work/school every day on time • leave and return for meals and breaks on time • notify supervisor/instructor in advance of planned absences • make up work or assignments punctually • come to work/school prepared to work.
<b>Customer Service</b>	The ability to: • see the customer's point of view • handle customer complaints correctly • interact appropriately with customers • sell the company as well as the product by demonstrating exceptional service • listen attentively and provide undivided attention • identify and anticipate needs • make customers feel important and appreciated • convey sincerity • know how to apologize • give more than expected • follow through on promises • solicit regular feedback and encourage and welcome suggestions • treat internal customers well • show appreciation • communicate regularly with customers • demonstrate the power of "yes" • provide helpful, courteous and knowledgeable service.
<b>Critical Thinking and Problem Solving</b>	The ability to: • analyze facts and use a logical approach to form an accurate, objective decision or plan of action • recognize and clearly define a problem, determine the cause, identify, prioritize, and select alternatives for a solution, then implement the solution even for difficult or complex issues • evaluate and monitor progress and revise the plan as needed • the ability to identify resources needed to solve a problem • generate new ideas • consider the relative costs and benefits of potential actions to choose the most appropriate one • discover a rule or principle underlying the relationship between two or more objects and apply it to a new situation or when solving a problem • "think on one's feet", assess problems, and find well-thought out solutions within a reasonable time frame • think critically and creatively, share thoughts and opinions • understand framework for sound ethical decisions.
<b>Technology Usage and Social Media Ethics</b>	The ability to: • follow policy regarding use of personal technology while at work/school • demonstrate proper use of company technology • understand how one's online actions and behavior can have far-reaching and long-lasting effects • understand the need for accurate online company information.
<b>Professionalism</b>	The ability to: • act appropriately and display the character, conduct, standards, and behavior expected from a professional person • display appropriate language, dress, grooming and hygiene • acknowledge that appearance reflects on the image of the employer • display proper etiquette in meetings or at work-related functions.
<b>Adherence to Policy</b>	The ability to: • follow company rules, regulations, procedures, and directions especially those related to safety • display good workplace habits • keep assigned area neat and orderly • maintain equipment to ensure longevity and efficiency • determine causes of operating errors or equipment issues and decide what to do about it • take proactive measures to address unsafe practices or behaviors.

A student job board seeks to list job opportunities specifically available to high school students in the surrounding area which are listed by employment category. FCS job posting services are available to local employers, business, industry, government, and non-profit organizations for assistance in seeking qualified employees or interns. To place a listing as an employer or search jobs available as a student, visit [www.forsyth.k12.ga.us/jobboard](http://www.forsyth.k12.ga.us/jobboard). The FCS Job Posting Board acts only as a posting service and makes no particular recommendations regarding employers or students applying for jobs.

## FINDING A JOB THROUGH JOB BOARD

### Need help finding a job or internship?

Search for many available positions available in our community on the



Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

[www.forsyth.k12.ga.us/jobboard](http://www.forsyth.k12.ga.us/jobboard)

**DISCLAIMER:** FCS Job Posting Board acts only as a posting service and makes no particular recommendations regarding employers or students applying for jobs. We make no representations or guarantees about positions listed by the employer, not do we make guarantees about students applying for these positions. FCS is not responsible for safety, wages, working conditions, or other aspects of off-campus employment. Due to the volume of jobs received by our office, we are unable to research each organization or person that lists a job with us, not are we able to research each student who applies for these positions. Administrators review all positions that are submitted for posting, and reserves the right to reject positions.



The Dual Enrollment (DE) program provides district students the opportunity to be “dual credit enrolled”. This means a DE student is enrolled at both the high school and college or technical college. In this program a student may be part time or full time at the postsecondary school. The student receives credit for approved courses on the high school transcript as well as their college or technical college transcript. Thus, DE students take postsecondary coursework for credit towards both high school graduation and postsecondary requirements. Beginning with Fall term 2015 (FY 2016) the program is offered during all terms of the school year: fall, spring and summer semesters.

#### TO BE ELIGIBLE FOR THE DE PROGRAM, A STUDENT MUST:

##### Student Eligibility

- A student must be enrolled in and physically attending a participating eligible public or private high school in Georgia or an eligible participating home study program in Georgia.
- A student must be approved, by the participating high school or home study program at which he or she is enrolled, to participate in dual enrollment.
- Prior to participating in Dual Enrollment, as part of the application process, the student and student's parent/guardian must complete the Student Participation Agreement (SPA).
- A student must have completed the admission process and been accepted and approved by the participating postsecondary institution.
- All postsecondary coursework must be completed prior to high school graduation or home study completion in order to receive Dual Enrollment credit and funding.

#### GRADE LEVEL ELIGIBILITY

##### 11th & 12th Graders

- Eligible students may take any approved Dual Enrollment courses listed on the Course Directory, at an eligible participating postsecondary institution (USG, TCSG or private).

## DUAL ENROLLMENT



### INFORMATION NIGHTS FOR 2022-23 ENROLLMENT



#### UNIVERSITY OF NORTH GEORGIA

**November 29, 2022 at 6PM**

**December 6, 2022 at 6PM**

Cumming Campus  
300 Aquatic Circle, Cumming, GA 30040  
470-239-3100



#### LANIER TECHNICAL COLLEGE

**November 30, 2022 at 6PM**

Forsyth Campus  
3410 Ronald Reagan Blvd  
Cumming, GA 30041  
678-341-6633





## DUAL ENROLLMENT



### 10th Graders

- Eligible students may enroll in approved Career, Technical and Agricultural Education (CTAE) courses listed on the Course Directory at a participating TCSG institution only.
- Eligible students who have a minimum SAT score of 1200 or minimum ACT composite score of 26 in a single national test administration, may enroll in any approved courses listed on the Course Directory at a TCSG, USG or private eligible participating postsecondary institution.

Note: GSFC must have the required test score(s) on file prior to the student completing the Dual Enrollment funding Application and the high school or home study approving courses.

- Students that were 9th graders during the 2019-2020 school year and participated in Dual Enrollment during the 2019-2020 (FY 2020) year may enroll as 10th graders in any approved Dual Enrollment courses listed on the Course Directory at an eligible participating postsecondary institution (USG, TCSG or private) for the 2020-2021 year.

### 9th Graders

- Students in the 9th grade are not eligible to participate in the Dual Enrollment funding Program.

### Public High School Students pursuing High School Graduation with Option B

- Public high school students, designated by their high school, pursuing High School Graduation Option B (SB2) as of Spring term 2020, may enroll in any approved Dual Enrollment courses at a TCSG, USG or private eligible participating postsecondary institution.
- Public high school students, designated by their high school, as pursuing High School Graduation Option B (SB2) starting Summer term 2020 or after are subject to the Funding Cap.

### Course Retake & Withdrawals

- A student may not receive funding to repeat or retake a course.
- A student is no longer eligible to continue to receive program funding after withdrawing from Dual Enrollment course(s) two (2) times.

### Funding Cap Eligibility

- The Dual Enrollment Funding Cap is 30 semester or 45 quarter hours.
- The Funding Cap is a hard cap based on hours paid by the Dual Enrollment funding program for terms of enrollment (as invoiced by the postsecondary institutions).
- The Funding Cap does not include dual credit coursework attempted and paid by other sources.
- The Dual Enrollment Funding Cap is 30 semester or 45 quarter hours for students who received Dual Enrollment funding for 18 semester or 27 quarter or less hours, through Spring term 2020.
- The Dual Enrollment Funding Cap for students who received Dual Enrollment funding for 19 semester or 29 quarter or more hours, through Spring term 2020, is extended for an additional 12 semester hours or 18 quarter hours of funding.
- Public high school students, designated by their high school, as pursuing High School Graduation Option B (SB2) starting Summer term 2020 or after are subject to the Funding Cap.
- Public high school students designated by their high school, as pursuing High School Graduation Option B (SB2) as of Spring term 2020, may continue to complete their pathway while participating in the Dual Enrollment funding program and are not subject to the Funding Cap.
- Dual Enrollment funding per term is a maximum of 15 semester or 12 quarter hours and a maximum of three semesters or four quarters per award year based on approved enrollment and available Funding Cap hours.

Upon reaching the 30 semester or 45 quarter hours program Funding Cap, a student may qualify for HOPE Grant Bridge and HOPE Career Grant funding or may choose to self-pay. For more information, visit:

<https://www.gafutures.org/hope-state-aid-programs/scholarships-grants/dual-enrollment/>



## WORKFORCE FORSYTH



**WORKFORCE | CAREER | FORSYTH**  
Propelling the Career Pipeline for Forsyth County

In 2014, Forsyth County Schools (FCS), in partnership with the Forsyth County Chamber, Lanier Technical College, and the University of North Georgia, launched Workforce Forsyth, a community initiative focused on developing strategies to support Career, Technical, and Agricultural Education (CTAE) in the district. Key next steps for the partnership focused on aligning career education efforts, guiding pathway creation, expanding classroom participation, and enriching curricula.

Building on the initial efforts, FCS is working to create a community workforce development plan. This effort builds on the initial Workforce Forsyth plan and has led to the creation of this roadmap to guide CTAE programming within the school district over the next three school years (2018–2021). This plan presents priorities to guide investments in and strategies for workforce development.

### THE PROCESS

This inclusive planning process involved key business, community, and education stakeholders. Over 70 steering committee member from across Forsyth County provided unique perspectives on FCS CTAE.

The development of this three-year Workforce Forsyth 2.0 plan began with a needs assessment designed to allow business partners, students, school leaders, and CTAE teachers to discuss their perspectives on the current state of FCS CTAE. These groups provided input relating to current programming, skills gaps, skills needs, and opportunities for growth.

To reflect upon the findings from the needs assessment and to prepare for priority planning, steering committee members conducted an environmental scan. This exercise challenged members to identify specific strengths, opportunities, aspirations, and risks (SOAR) of and to FCS CTAE. Through this SOAR analysis, the committee members gained a more thorough understanding of the environment in which CTAE programs are administered. This session built on information gathered during the needs assessment and provided a more holistic understanding of how CTAE should move forward in the coming years. Four questions guided committee members through this portion of the process:

1. What are the greatest strengths of CTAE in Forsyth County?
2. What are the best opportunities for CTAE in Forsyth County?
3. What do we want CTAE in Forsyth County to be known for?
4. What are the greatest risks/barriers to achieving our aspirations for the program?

In the final stage of the development process, committee members identified four priorities that will guide FCS CTAE over the next three years. The committee considered the information gathered during the needs assessment and environmental scan to articulate the priorities and values discussed below. Additionally, the steering committee developed a set of values to guide future investments and decisions.

FCS has also implemented a Career, Technical, and Agriculture Education Excellence Model. The model identifies best practices, metrics, and aspirational goals for every CTAE program in the district. Teachers and administrators use the model as a program planning and improvement tool.

## Workforce Forsyth 2.0 Priorities

### Short-Term Strategies

### Long-Term Strategies

<b>Priority 1</b> Marketing & Outreach Plan	<ul style="list-style-type: none"> <li>Engage with current and potential stakeholders</li> <li>Host a stakeholder showcase</li> </ul>	Vertical Alignment between elementary, middle, and high school
<b>Priority 2</b> Build & Evaluate a Soft Skills Program	<ul style="list-style-type: none"> <li>Establish a district-wide Soft Skills Committee</li> <li>Explore introducing soft-skills in earlier grades</li> </ul>	Evaluate programs to ensure they are meeting student needs and industry needs
<b>Priority 3</b> Build Leadership Capacity for All Students	<ul style="list-style-type: none"> <li>Engage more students in CTSOs</li> <li>Redefine the role of the counseling staff</li> </ul>	Each school in the district should be offering at least one leadership development program
<b>Priority 4</b> Grow Partnerships	<ul style="list-style-type: none"> <li>Update and evaluate existing business partnerships</li> <li>Leverage business partnerships to increase teacher externship opportunities</li> </ul>	Develop deeper relationships with business partners



# 2022-2023

## Forsyth County Schools

# HIGH SCHOOL

# CAREER

# PATHWAYS



### AGRICULTURE CLUSTER

- ✓ **Companion Animal Systems Pathway (D)**
  - Basic Agriculture Science
  - Animal Science and Biotechnology
  - Small Animal Care\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Environmental Agriculture Systems Pathway (N)**
  - Basic Agriculture Science
  - Environmental Science and Stewardship
  - Sustainable Agriculture\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Landscape Management Systems Pathway (S)**
  - Basic Agriculture Science
  - General Horticulture and Plant Science
  - Turf Production and Management\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Veterinary Science Pathway (C, D)**
  - Basic Agriculture Science
  - Animal Science and Biotechnology
  - Veterinary Science\*
  - Internship Forsyth or Mentorship Forsyth

### ARCHITECTURE AND CONSTRUCTION CLUSTER

- ✓ **Architectural Drawing and Design Pathway (E)**
  - Introduction to Drafting and Design
  - Architectural Drawing and Design I
  - Architectural Drawing and Design II\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Carpentry/Construction Pathway (E)**
  - Industry Fundamentals and Occupational Safety
  - Introduction to Construction
  - Carpentry I \*
  - Internship Forsyth or Mentorship Forsyth

### ARTS, A/V TECHNOLOGY, AND COMMUNICATIONS CLUSTER

- ✓ **Audio-Video Technology and Film Pathway (C, E, L, N, S, W)**
  - Audio & Video Technology & Film
  - Audio & Video Technology & Film II
  - Audio & Video Technology & Film III\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Animation and Digital Media Pathway (N)**
  - Introduction to Digital Media
  - Principles and Concepts of Animation
  - Advanced Animation, Game, and app Design\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Film Production Pathway (C)**
  - Audio & Video Technology & Film
  - Introduction to Film Production
  - Film Production Applications\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Graphic Design Pathway (A)**
  - Introduction to Graphics and Design
  - Graphic Design and Production
  - Advanced Graphic Design\*
  - Internship Forsyth or Mentorship Forsyth

### BUSINESS, MANAGEMENT, & ADMINISTRATION CLUSTER

- ✓ **Entrepreneurship Pathway (D, E, S)**
  - Introduction to Business and Technology
  - Legal Environment of Business
  - Entrepreneurship\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Human Resources Management Pathway (S)**
  - Introduction to Business and Technology
  - Legal Environment of Business
  - Human Resources Principles\*
  - Internship Forsyth or Mentorship Forsyth



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**C** Forsyth Central HS  
**D** Denmark HS  
**E** East Forsyth HS  
**F** Forsyth Virtual  
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Forsyth County Schools

**COLLEGE & Career**  
 DEVELOPMENT

*Explore*



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# 2022-2023

## Forsyth County Schools

# HIGH SCHOOL CAREER PATHWAYS



- ✓ **International Business Pathway (A)**  
Introduction to International Business  
Global Awareness and Cultural Competency  
International Business Concepts\*  
Internship Forsyth or Mentorship Forsyth

### **EDUCATION AND TRAINING CLUSTER**

- ✓ **Early Childhood Education Pathway (E)**  
Early Childhood Education I  
Early Childhood Education II  
Early Childhood Education Practicum\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Teaching as a Profession Pathway (A, C, D, E, L, N, S, W)**  
Examining the Teaching Profession  
Contemporary Issues in Education  
Teaching as a Profession Practicum\*  
Internship Forsyth or Mentorship Forsyth

### **ENERGY CLUSTER**

- ✓ **Energy Systems Pathway (A)**  
Foundations of Energy Technologies  
Energy and Power Technology  
Appropriate and Alternative Energy Technologies\*  
Internship Forsyth or Mentorship Forsyth

### **FINANCE CLUSTER**

- ✓ **Advanced Accounting Pathway (S)**  
Introduction to Business and Technology  
Principles of Accounting I  
Principles of Accounting II\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Business Accounting Pathway (F, L)**  
Introduction to Business and Technology  
Financial Literacy  
Principles of Accounting I\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Financial Services Pathway (D, F, L)**  
Introduction to Business and Technology  
Financial Literacy  
Banking, Investing and Insurance\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Financial Technology (FinTech) Pathway (A)**  
Introduction to Financial Technology  
Financial Technologies and Services  
Coding for FinTech\*  
Internship Forsyth or Mentorship Forsyth

### **GOVT & PUBLIC ADMIN CLUSTER**

- ✓ **JROTC Pathway - Marines (N)**  
MCJROTC Leadership Education I/II  
MCJROTC Leadership Education III/IV  
MCJROTC Leadership Education V/VI  
MCJROTC Leadership Education VII/VIII
- ✓ **Public Management and Administration (A)**  
Introduction to Government and Public Administration  
Government Public Administration: State and Federal Issues  
Government Public Administration: Local and State Issues\*  
Internship Forsyth or Mentorship Forsyth

### **HEALTH SCIENCE CLUSTER**

- ✓ **Allied Healthcare Pathway (W)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Allied Health and Medicine\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Biotechnology Research & Development Pathway (C, L)**  
Introduction to Healthcare Science  
Essentials of Biotechnology  
Applications of Biotechnology\*  
Internship Forsyth or Mentorship Forsyth



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Forsyth County Schools

**COLLEGE & Career**  
DEVELOPMENT

*Explore*



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# 2022-2023

## Forsyth County Schools

# HIGH SCHOOL

# CAREER

# PATHWAYS



- ✓ **Emergency Medical Responder Pathway (A)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Emergency Medical Responder\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Emergency Medical Technician Pathway (A)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Emergency Medical Technician\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Public Health Pathway (N)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Applications of Public Health\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Pharmacy Pathway (W)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Pharmacy Operations and Fundamentals\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Phlebotomy Pathway (L)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Diagnostics Phlebotomy\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Sports Medicine Pathway (L, N)**  
Introduction to Healthcare Science  
Essentials of Healthcare  
Sports Medicine\*  
Internship Forsyth or Mentorship Forsyth

### HOSPITALITY AND TOURISM CLUSTER

- ✓ **Culinary Arts Pathway (D, E, L, S, W)**  
Introduction to Culinary Arts  
Culinary Arts I  
Culinary Arts II\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Hospitality, Recreation and Tourism Pathway (A)**  
Marketing Principles  
Hospitality, Recreation and Tourism Essentials  
Hospitality, Recreation and Tourism Management\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Sports and Entertainment Marketing Pathway (C, D, F, L, N, S, W)**  
Marketing Principles  
Introduction to Sports & Entertainment Marketing  
Advanced Sports & Entertainment Marketing\*  
Internship Forsyth or Mentorship Forsyth

### HUMAN SERVICES CLUSTER

- ✓ **Cosmetology Pathway (C, W)**  
Introduction to Personal Care Services  
Cosmetology Services II  
Cosmetology Services III\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Nutrition and Food Science Pathway (C, L, N, W)**  
Food, Nutrition & Wellness  
Food for Life  
Food Science\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Interiors, Fashion, and Textiles Pathway (E)**  
Foundations of Interior Design  
Fundamentals of Fashion  
Textile Science\*  
Internship Forsyth or Mentorship Forsyth

### INFORMATION TECHNOLOGY CLUSTER

- ✓ **Cloud Computing Pathway (C, L)**  
Introduction to Software Technology  
Computer Science Principles or AP Computer Science Principles  
Cloud Computing\*  
Internship Forsyth or Mentorship Forsyth



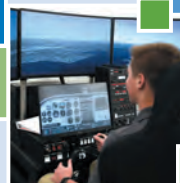
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Forsyth County Schools

**COLLEGE & Career**  
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# 2022-2023

## Forsyth County Schools

# HIGH SCHOOL CAREER PATHWAYS



- ✓ **Computer Science Pathway (A, C, D, E, F, L, N, S, W)**  
Introduction to Software Technology  
Computer Science Principles or AP Computer Science Principles  
AP Computer Science\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Cybersecurity Pathway (A)**  
Introduction to Hardware Technology  
Introduction to Cybersecurity  
Advanced Cybersecurity\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Game Design Pathway (A, F)**  
Introduction to Software Technology  
Computer Science Principles or AP Computer Science Principles  
Game Design: Animation and Simulation\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Programming Pathway (L, S)**  
Introduction to Software Technology  
Computer Science Principles  
Programming, Games, Apps, and Society\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Web Development Pathway (N, W)**  
Introduction to Digital Technology  
Computer Science Principles or AP Computer Science Principles  
Web Development\*  
Internship Forsyth or Mentorship Forsyth

### LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY CLUSTER

- ✓ **Firefighting Pathway (A)**  
Introduction to Law, Public Safety, Corrections and Security  
Essentials of Fire and Emergency Services  
Applications of Firefighting\*  
Internship Forsyth or Mentorship Forsyth

- ✓ **Law Enforcement/Criminal Investigations Pathway (A)**  
Introduction to Law, Public Safety, Corrections and Security  
Criminal Justice Essentials  
Criminal Investigations\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Legal Services/Applications of Law Pathway (A)**  
Introduction to Law, Public Safety, Corrections and Security  
Essentials of Legal Services  
Applications of Law\*  
Internship Forsyth or Mentorship Forsyth

### MANUFACTURING CLUSTER

- ✓ **Mechatronics Pathway (A)**  
Introduction to Mechatronics  
AC Theory, Electric Motors, and Hydraulic Systems  
Semiconductors, Mechanical Systems, and Pump and Piping Systems\*  
Internship Forsyth or Mentorship Forsyth

### MARKETING CLUSTER

- ✓ **Fashion, Merchandising and Retail Management Pathway (D, S, W)**  
Marketing Principles  
Fashion, Merchandising, and Retailing Essentials  
Advanced Fashion, Merchandising, and Retailing\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Marketing Communications and Promotions Pathway (C, E, S)**  
Marketing Principles  
Promotion and Digital Sales  
Integrated Marketing Communications\*  
Internship Forsyth or Mentorship Forsyth
- ✓ **Marketing & Management Pathway (C, D, E, F, L, N, S, W)**  
Marketing Principles  
Marketing and Entrepreneurship  
Marketing Management\*  
Internship Forsyth or Mentorship Forsyth



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Forsyth County Schools

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# 2022-2023

## Forsyth County Schools

# HIGH SCHOOL CAREER PATHWAYS



### **STEM – SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS CLUSTER**

- ✓ **Engineering and Technology Pathway (C, D, E, L, N, S, W)**
  - Foundations of Engineering and Technology
  - Engineering Concepts
  - Engineering Applications\*
  - Internship Forsyth or Mentorship Forsyth

### **TRANSPORTATION, DISTRIBUTION, & LOGISTICS CLUSTER**

- ✓ **Aerospace – Flight Operations (A)**
  - Fundamentals of Aerospace
  - Flight Operations I
  - Flight Operations II\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Drone/Unmanned Aircraft Systems (A)**
  - Fundamentals of Aerospace
  - Flight Operations I
  - Unmanned Aircraft Systems\*
  - Internship Forsyth or Mentorship Forsyth
- ✓ **Automotive Service Technology Pathway (C)**
  - General Automotive Technology 1
  - General Automotive Technology 2
  - General Automotive Technology 3\*
  - Advanced Automotive Technology 4
  - Advanced Automotive Technology 5
  - Advanced Automotive Technology 6\*
  - Automotive Service Technology Internship 1
  - Automotive Service Technology Internship 2
  - Automotive Service Technology Internship 3

### **WORKFORCE READY CLUSTER**

- ✓ **Workforce Ready Pathway (C, L)**
  - Introduction to Career Competencies
  - Career Competencies
  - Advanced Career Competencies\*
  - Internship Forsyth or Mentorship Forsyth

### **CAREER-RELATED DUAL ENROLLMENT OPTIONS at Lanier Technical College:**

Accounting  
Air Conditioning Technology  
Automotive Collision Repair  
Automotive Technology  
Building Automation Systems  
Business Management/Technology  
Construction Management/Carpentry  
Cosmetology  
Criminal Justice Technology  
Culinary Arts  
Design and Media Production Technology  
Diesel Equipment Technology  
Drafting Technology  
Early Childhood Care and Education  
Electrical Systems Technology  
Engineering Technology  
Horticulture  
Industrial Systems Technology  
Interiors  
Machine Tool Technology  
Marine Engine Technology  
Mechatronics Technology  
Medical Assisting  
Motorsports Vehicle Technology  
Nurse Aide  
Paramedicine  
Pharmacy Technology  
Phlebotomy  
Precision Machining and Manufacturing  
Welding and Joining Technology  
Wireless Engineering Technology

**MANY OTHER PROGRAM AREAS AVAILABLE!**

**LANIER**  
Technical College

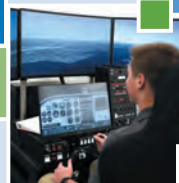


**A** Alliance Academy for Innovation  
**C** Forsyth Central HS  
**D** Denmark HS  
**E** East Forsyth HS  
**F** Forsyth Virtual  
**L** Lambert HS  
**N** North Forsyth HS  
**S** South Forsyth HS  
**W** West Forsyth HS

Forsyth County Schools

**COLLEGE & Career**  
DEVELOPMENT

*Explore*



To fulfill state pathway requirements, students must complete the sequences of courses shown and take an end-of-pathway assessment when available. Internship Forsyth (Work-Based Learning) and Mentorship Forsyth (Job Shadowing) opportunities are available in each career pathway. See a Career Development Coordinator or your school counselor for additional information!





**PROFESSIONAL CAREERS**

- Zoologist
- Arborist
- Golf Course Superintendent
- Veterinarian
- Wildlife Biologist
- Marine Biologist
- Plant Biologist
- Crew Chief for Groundskeeping
- Animal Nutritionist
- Ag Teacher
- Environmental Engineer
- Hydrologist
- Animal Behaviorist
- Aquarist
- DNR Officer
- EPA/CDC Researcher

**TECHNICAL CAREERS**

- Vet Tech
- Farrier
- Greenhouse Supervisor
- Asst Supt of Golf Course
- Turf Management Tech
- Wildlife Tech
- Zoo Keeper Assistant
- Game Warden
- Pet Counselor
- Artificial Insemination Tech
- Zoo Director
- Animal Trainer
- Animal Feed or Drug Reps

**ENTRY LEVEL CAREERS**

- Landscape Worker
- Animal Handler
- Vet Assistant
- Greenhouse Worker
- Pet Store Employee
- Farmhand
- Groomer
- Groundskeeper
- Companion Animal Keeper
- Pet Adoption Center Employee
- Zoo Volunteer
- Zoo Keeper

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# AGRICULTURE



**Find Your Passion!**

**Community Hero**

**DR. RANDALL ESBECK**  
 Lead Veterinarian at Sawnee Animal Clinic

**Job Description**  
 Wellness and illness medicine and surgery for dogs, cats and exotics

**High School**  
 Exira High School

**Career Training and Certificates**

- Iowa State University and Iowa State Veterinary College
- Seminars and classes covering generalized veterinary medicine
- Fifteen hours of training yearly
- Member of Avian Veterinarians
- Member of Association of Sheep and Goat Veterinarians
- Member of Association of Reptile and Amphibian Veterinarians

**First Job**  
 Victor Veterinary Clinic treating daily beef cows, pigs, horses, dogs and cats

Roots: Employment, Target, Interview, Resumé, Trade Information, Leadership, Job Experience, Contacts, Skills, Knowledge

## AGRICULTURE, FOOD AND NATURAL RESOURCES

# COMPANION ANIMAL SYSTEMS PATHWAY



Companion animals are a large part of the animal care industry. Veterinarians 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 feed, water, groom, bathe, and exercise pets and other non-farm animals. 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.

## PATHWAY COURSES

- Basic Agriculture Science
- Animal Science and Biotechnology
- Small Animal Care

## RECOMMENDED COURSES

- Biology
- Business Management
- Computer Applications
- Economics
- Environmental Science

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Associates in Science

### COLLEGES/UNIVERSITIES

- Bachelor of Science, Agricultural Business
- Bachelor of Science, Agricultural Education
- Bachelor of Science, Animal Science
- Master and PHD in all areas

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Nonfarm Animal Caretakers

High School Diploma  
\$19,100 annual salary  
160 annual average openings in Georgia

### Veterinarians

Professional Degree  
\$76,600 annual salary  
10 annual average openings in Georgia

### Veterinary Assistants

High School Diploma  
\$21,700 annual salary

## ADDITIONAL CAREER CHOICES

Agricultural Animals

Agricultural Inspectors

Agriculture Teachers

Animal Breeders

Animal Care and Service Workers

Animal Scientists

Biological Technicians

Nonfarm Animal Caretakers

Ranch Managers

Veterinarians

Veterinary Assistants

Veterinary Technicians



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



## AGRICULTURE, FOOD AND NATURAL RESOURCES

# ENVIRONMENTAL AGRICULTURE SYSTEMS PATHWAY



*Environmental engineers research, design, plan, or perform engineering duties in the prevention, control, and remediation of environmental hazards using various engineering disciplines. Work may include agricultural waste treatment, site remediation, or pollution control technology. They use the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems.*

## PATHWAY COURSES

- Basic Agriculture Science
- Environmental Science and Stewardship
- Sustainable Agriculture

## RECOMMENDED COURSES

- Biology
- Chemistry
- Economics
- Environmental Science
- Foundations of Engineering and Technology
- Intro to Business and Technology
- Social Studies
- Work-Based Learning

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Agriculture Chemicals
- Crop Science
- Horticulture
- Landscape Specialist
- Marketing in Agriculture
- Plant Production
- Soil Management
- Sustainable Urban Agriculture

### COLLEGES/UNIVERSITIES

- Agroecology
- Agronomy
- Environmental Studies
- Horticulture
- Natural Resources Management
- Plant Science
- Soil and Land Resources
- Sustainable Agriculture and Farming Systems
- Sustainable Food and Bioenergy Systems
- Water, Wetlands, and Marine Resources Management

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Agricultural Science Professor

\$69,300 annual salary  
Bachelor's Degree  
450 annual average openings in Georgia

### Agricultural Science Professor

\$96,000 average annual salary  
Advanced Degree

### Conservation Scientist

\$65,130 average annual salary  
BS Degree

### Environmental Engineer

\$86,000 average annual salary  
BS Degree

### Farmers/Ranchers/Agricultural Managers

\$67,000 average annual salary  
Associate Degree or Higher

### Park Naturalist

\$50,000-\$65,000 annual salary  
Associate Degree

## ADDITIONAL CAREER CHOICES

Agricultural Chemist

Agriculture Policymaker

Agriculture Technician

Environmental Economist

Food Scientist

Greenhouse Technician

Natural Resource Manager



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

## AGRICULTURE, FOOD AND NATURAL RESOURCES

# LANDSCAPE MANAGEMENT SYSTEMS PATHWAY



A career in landscape management offers a variety of job opportunities in the fields of education, research, golf and sports turf, landscape design, parks and gardens, public service, production management, and sales and marketing. Some jobs available include landscape designer, greenhouse manager, golf course superintendent, plant breeder, florist, agricultural chemical researcher and garden center owner. Those who are interested in this field should be able to carry out projects and work independently, have a commitment to quality and customer service, and have an appreciation of our natural environment and have good interpersonal skills.

## PATHWAY COURSES

- Basic Agriculture Science
- General Horticulture and Plant Science
- Turf Production and Management

## RECOMMENDED COURSES

- Chemistry
- Economics
- Environmental Science
- Foundations of Engineering and Technology
- Intro to Business and Technology
- Social Studies
- Work-Based Learning

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Arboriculture
- Greenhouse Operation
- Horticulture
- Landscape Equipment Operation
- Landscape Specialist
- Lawn and Landscape Maintenance
- Marketing in Agriculture
- Plant Production
- Soil Management
- Sustainable Urban Agriculture
- Turf Grass Maintenance

### COLLEGES/UNIVERSITIES

- Agricultural Engineering
- Arboriculture
- Environmental Studies
- Golf Course Management
- Horticulture
- Landscape Design
- Natural Resources Management
- Plant Science
- Soil and Land Resources
- Turf Grass Science

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Agricultural Science Professor

\$96,000 average annual salary  
Advanced Degree

### Arborist

\$40,000 - \$60,000 annual salary  
Associate Degree or Higher

### Forest Nursery Supervisor

\$57,000 average annual salary  
Bachelor's Degree

### Golf Course Management

\$45,000 - \$90,000 annual salary  
Bachelor's Degree

### Landscape Architect

\$63,000 average annual salary  
Bachelor's Degree

### Landscape and Nursery Worker

\$30,000 average annual salary  
High School Diploma

## ADDITIONAL CAREER CHOICES

Agriculture Policymaker

Agriculture Technician

Construction Manager

Environmental Compliance Inspector

Estate Caretaker

Greenhouse Technician

Master Gardener

Natural Resource Manager

Pesticide Handler



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

## AGRICULTURE, FOOD AND NATURAL RESOURCES

# VETERINARY SCIENCE PATHWAY



The agriculture education courses in veterinary science covers the basics of animal care. Topics covered include disease, parasites, feeding, shelter, grooming, and general animal care. College preparatory students benefit from the course as an elective if they plan to enter college and pursue a degree in the veterinary profession. This course allows students entering the workforce after graduating high school to develop entry-level skills to become employed and to continue their education on the job.

## PATHWAY COURSES

- Basic Agricultural Science
- Animal Science and Biotechnology
- Veterinary Science

## RECOMMENDED COURSES

- Biology
- Business Management
- Computer Applications
- Economics
- Environmental Science

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Associates in Science

### COLLEGES/UNIVERSITIES

- Bachelor of Science, Agricultural Education
- Bachelor of Science, Agricultural Science
- Bachelor of Science, Animal Science
- Master and PhD in all areas

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Animal Physical Therapist

Associates Degree or higher  
\$28,000-\$30,000 annual salary

### Veterinarian

Doctoral or Professional Degree  
\$82,040 per year starting salary

### Veterinary Tech

Doctoral or Professional Degree  
\$82,040 per year starting salary

## ADDITIONAL CAREER CHOICES

Animal Welfare Specialist

Animal Care Specialist

Animal Sales

Artificial Insemination Technician

Breed Analyst

Breed Association Sales/Promotion

Cell Culture Specialist

Companion Animal Breeder

Companion Animal Nutrition Specialist

Companion Animal Store Manager

Companion Animal Therapy Specialist

Communication and Media Specialist

Dairy Unit Herdsman/Manager

Embryo Transfer Technician

Equipment Sales Representative

Equitation Instructor

Extension Educator



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

- Construction Scheduler
- Construction Project Manager
- Construction Inspector
- Construction Engineer
- Civil Engineer
- Safety Director
- Building Services Director
- Architect

**TECHNICAL CAREERS**

- Construction Manager
- Construction Foreman
- Construction Superintendent
- Plumber
- Electrician
- Building Inspector
- Home Improvement Associate
- Welder
- Surveyor
- Purchasing Coordinator
- Site Manager

**ENTRY LEVEL CAREERS**

- Mason
- Drywall Installer
- Carpenter
- Painter
- Home Improvement Associate
- Movie Set Construction
- Sheet Metal Worker
- Equipment Operator
- Inspector
- Joiner
- Laborer
- Roofers

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# CONSTRUCTION

Employment  
 Target  
 Interview  
 Skills  
 Resumé  
 Trade Information  
 Leadership  
 Job Experience  
 Contacts  
 Knowledge

*Community Hero*

**SHERRY WERNER**  
 Senior Project Manager at  
 Carroll Daniel Construction

**Job Description**  
 Provide team leadership and oversight of project management during design, preconstruction, and construction. Deliver projects with exceptional client service, on-time schedule and financial management.

**High School**  
 Arlington High School

**Career Training and Certificates**

- Emory University - Business Intelligence Certification
- Everglades University - Bachelor of Science in Construction Management
- OSHA 10 Hour Certification for general safety and health during construction
- Certified General Contractor License (CGC) - State of Georgia

**First Job**  
 Service Crew at Wendy's

*Find Your Passion!*



*People with careers in engineering, drawing, and design are people who solve problems and focus on making things work more efficiently and effectively. Engineers apply the theories and principles of science and mathematics to research and develop economical solutions to technical problems. Their work is the link between perceived social needs and commercial applications.*

#### PATHWAY COURSES

- Introduction to Drafting and Design
- Architectural Drawing and Design I
- Architectural Drawing and Design II

#### RECOMMENDED COURSES

- Advanced Algebra/Trigonometry
- Calculus
- Computer Applications
- Entrepreneurship
- Introduction to Animation and 3D Design
- Physics
- Work-Based Learning
- World Language

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- CAD Operator
- Land Development
- Project Management
- Specialty Construction

##### COLLEGES/UNIVERSITIES

- Architecture
- Civil Engineering Technology
- Construction Engineering
- Construction Management
- Surveying and Mapping

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### ARCHITECTURE AND CONSTRUCTION

## ARCHITECTURAL DRAWING AND DESIGN PATHWAY

#### TOP CAREER CHOICES

##### Architect

Moderate-Term On-the-Job Training needed  
\$53,000 annual salary  
110 annual average openings in Georgia

##### Architectural and Civil Drafter

Post-Secondary Vocational Training needed  
\$42,078 annual salary  
80 annual average openings in Georgia

##### Mechanical Drafter

Post-Secondary Vocational Training needed  
\$42,141 annual salary  
40 annual average openings in Georgia

##### Surveying and Mapping Technician

Moderate-Term On-the-Job Training needed  
\$43,540 annual salary  
110 annual average openings in Georgia

##### Surveyor

Bachelor Degree needed  
\$59,000 annual salary  
110 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Architectural Detailer  
Architectural Engineer  
Building Inspector  
Civil Engineer  
Designer  
Drafter  
Electrical Engineer  
Environmental Engineer  
Interior Designer  
Landscape Designer  
Structural Detailer  
Structural Engineer  
Technician  
Urban Planner



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





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.

#### **PATHWAY COURSES**

- Industry Fundamentals and Occupational Safety
- Introduction to Construction
- Carpentry I

#### **RECOMMENDED COURSES**

- Calculus
- Current Issues
- Literary Types/Composition
- Macroeconomics
- Microeconomics
- Oral/Written Communication
- Sociology
- Statistics

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- On-the-Job Training
- Military
- Special Purpose Schools
- State Registered Apprenticeships

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



## **ARCHITECTURE AND CONSTRUCTION**

# **CARPENTRY/ CONSTRUCTION PATHWAY**

### **TOP CAREER CHOICES**

#### **Construction Carpenters**

Postsecondary Certificate  
\$39,700 annual salary  
499 annual average openings in Georgia

#### **Construction Manager**

Bachelor Degree  
\$99,756 annual salary  
136 annual average openings in Georgia

#### **Construction and Building Inspectors**

Bachelor's Degree  
\$53,108 annual salary  
87 annual average openings in Georgia

### **ADDITIONAL CAREER CHOICES**

Carpenters  
Construction Craft Laborers  
Construction Engineers  
Construction Foremen  
Construction Inspectors  
Construction Managers  
Drywall Installers  
Electrician  
Floor Layers  
Home Improvement Associate  
Mason  
Painters  
Paperhangers  
Project Inspectors  
Project Managers  
Plumber and Pipefitter  
Roofers  
Sheet Metal Worker



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

- Director
- Producer
- News Director
- Studio Manager
- Key Grip
- Gaffer
- Casting Director
- Prop Master
- Editor
- Production Coordinator
- Script Supervisor

**TECHNICAL CAREERS**

- Screen Writer
- 1st Assistant Editor
- 1st Assistant Director
- 2nd Assistant Director
- 2nd Director
- Camera Op
- 1st Assistant Camera
- Audio and Foley
- Armourer
- Set Designer

**ENTRY LEVEL CAREERS**

- Production Assistant
- Editing Assistant
- Grip
- Electrician
- Set Construction
- Craft Services
- Extra
- Hair Assistant
- Makeup Assistant
- 2nd Assistant Camera

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

# A/V TECHNOLOGY & FILM



**Community Hero**

**MAXWELL Z. BENTLEY**

**Founder and Executive Producer at Bentley Media Group**

**Job Description**  
Produces commercials and promotional films for a national clientele with a focus on authentic storytelling. Advises production and marketing strategies that are financially feasible and logistically sound

**High School**  
Forsyth Central High School

**Career Training and Certificates**  
UNG Bachelor of Science of Film & Digital Media  
Licensed Drone Pilot

**First Job**  
Content Creator for Roblox

**Find Your Passion!**



*The Animation and Digital Media Pathway is a series of courses that teach all aspects of 2D and 3D animation and digital design. Students will gain knowledge in animation history, basic modeling, and fundamentals of motion while working to incorporate effective sound and lighting techniques, as well as 3-D space morphing into their animated projects. Working independently, as well as on small production teams, students will learn to manage the entire production pipeline for 3-D projects. Students in the Animation and Digital Media Pathway will have the opportunity become effective and efficient multi-skilled animators as they develop a thorough working knowledge of the animation opportunities available in a rapidly growing career field.*

#### PATHWAY COURSES

- Introduction to Digital Media
- Principles and Concepts of Animation
- Advanced Animation, Game, and App Design

#### RECOMMENDED COURSES

- Business Communications
- Computer Applications
- Intro to Animation and 3D Design
- Marketing Principles
- Web Page Design
- Work-Based Learning
- World Language
- Yearbook/Journalism

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### BACHELOR'S DEGREE

- Animation School - Varying Certificates available
- Intern experience

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS

## ANIMATION AND DIGITAL MEDIA PATHWAY

#### TOP CAREER CHOICES

**Camera Operators**  
(Television, Video, Motion Picture)  
2015 Wage: \$59,600

**Composing Artist**  
2015 Wage: \$65,000

**Multimedia Artist and Animators**  
2014 Wage: \$51,800

**Forensic Animator**  
2015 Wage: \$20-\$100 per hour  
depending on experience

**Mathematical Modeler**  
2015 Wage: \$80,000

**Storyboard Artist**  
2015 Wage: \$55,000

**3D Medical Animator**  
2015 Wage: \$60,000

**3D Modeler**  
2015 Wage: \$75,000

#### ADDITIONAL CAREER CHOICES

Animation Producers

Artistic Director

Graphic Designer

Film and Video Editors

3D Animator

TV Director

TV Producer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





## ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS

# AUDIO/VIDEO TECHNOLOGY AND FILM PATHWAY



*Audio and Video Technology and Film is a pathway that teaches all aspects of video production from pre-production, production, and post-production, including theory and practical application. Students will have the opportunity to participate in various types of broadcast/video production from events and commercials to mini-movies and documentaries.*

### PATHWAY COURSES

- Audio and Video Technology and Film I
- Audio and Video Technology and Film II
- Audio and Video Technology and Film III

### RECOMMENDED COURSES

- Business Communications
- Computer Applications
- Intro to Animation and 3D Design
- Marketing Principles
- Web Page Design
- Work-Based Learning
- World Language
- Yearbook/Journalism

### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

#### TECHNICAL COLLEGES

- Technical Studies
- Telecommunications Arts
- Georgia Film Academy

#### COLLEGES/UNIVERSITIES

- Broadcast Design
- Journalism and Broadcasting
- Mass Communications
- Mass Media/Arts
- Public Relations
- Video/Digital

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



### TOP CAREER CHOICES

#### Audio and Video Equipment Technician

Long-Term On-the-Job Training needed  
\$40,498 annual salary  
80 annual average openings in Georgia

#### Broadcast News Analyst

Bachelor Degree needed  
\$57,845 annual salary  
20 annual average openings in Georgia

#### Broadcast Technician

Associate Degree needed  
\$35,443 annual salary  
50 annual average openings in Georgia

#### Radio and Television Announcer

Long-Term On-the-Job Training needed  
\$34,445 annual salary  
50 annual average openings in Georgia

### ADDITIONAL CAREER CHOICES

Audio-Video Operator  
Broadcast Field Supervisor  
Broadcast Technician  
Camera Operator  
Chief Engineer  
Control Room Technician  
Editor  
Journalist  
Radio and TV Announcer  
Reporter  
Sound Technician  
Station Manager  
Transmission Engineer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



The Film Production pathway prepares students with introductory technical skill and employment needs for an entry level film production worker or to enter postsecondary education program in the audio and video technology career field. The pathway will also prepare students to participate in multiple class-created film production team simulations and film projects to develop a professional film portfolio. This portfolio may include documents, projects, documented work activities in various simulated film production departments and film clips and related projects showcasing student activities. Topics covered may include terminology, safety on a set, production teams, equipment, script writing, production, editing, post-production, and professional ethics.

#### **PATHWAY COURSES**

- Audio and Video Technology and Film
- Introduction to Film Production
- Film Production Applications

#### **RECOMMENDED COURSES**

- Computer Science Principles
- Graphic Design
- Business Communications
- Intro to Animation and 3D Design
- Technical Writing
- Marketing Principles

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Broadcast Design
- Mass Communications
- Public Relations
- Digital Photography
- Animation
- Video Production

##### **COLLEGES/UNIVERSITIES**

- Film/Cinema/Media Studies
- Film Production and Show Production
- Digital Filmmaking and Design
- Promotion and Video Content
- Documentary Production
- Arts & Media Management
- Visual & Performing Arts

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



## **ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS**

# **FILM PRODUCTION PATHWAY**

### **TOP CAREERS CHOICES**

**Audio and Video Equipment Technician**  
\$45,320 annual salary

**Camera Operators, Television, Video and  
Motion Picture Graphic Designers**  
\$59,630 annual salary

**Film and Video Editors**  
\$65,050 annual salary

### **ADDITIONAL CAREER CHOICES**

Animator  
Artist and Related Workers  
Assistant Director  
Audio and Video Equipment Techs  
Background Artist  
Broadcast Technician  
Camera and Photographic Equipment  
Repairers  
Cinematographer  
Computer Programmers  
Costume Designer/Tailor  
Director of Photography  
Graphic Designers  
Grip  
Lighting Technician  
Photographers  
Reporter  
Script Supervisor  
Set and Exhibit Designers  
Sound Engineering Technician  
Station Manager  
Technical Directors/Managers



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

- Web Designer
- Art Director
- Multimedia Artist
- Graphic Designer
- Graphic Artist
- Assistant Manager
- Senior Graphic Designer
- Freelance Designer
- Illustrator
- Industrial Designer
- Game Design
- Animator
- Technical Designer

**TECHNICAL CAREERS**

- Designer
- Production Assistant
- Production Designer
- Interactive Designer
- Production Manager

**ENTRY LEVEL CAREERS**

- Revit Designer
- Motion Media Design
- Field Marketing
- Marketing Designer
- Production Artist
- Graphic Designer
- Print Designer
- Photography Designer

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# GRAPHIC DESIGN

**Find Your Passion!**

*Community Hero*

**DEREK BROOKS**  
 Owner/Operator at Brandywine Printing

**Job Description**  
 Making sure that we are profitable Developing and implementing our internal systems I am also responsible for our external relationships with customers and vendors.

**High School**  
 South Forsyth High School

**Career Training and Certificates**  
 Courses in Graphic Design  
 Equipment Training  
 Trade Show Education

**First Job**  
 Brandywine Printing  
 part time in 1986

Employment  
 Target  
 Interview  
 Skills  
 Resumé  
 Trade Information  
 Leadership  
 Job Experience  
 Contacts  
 Knowledge



*Graphic Design is communication through visual means. This can be achieved either by Artistic or Printing means. The Graphic Design pathway starts with an introduction to the graphic design principals while exploring the techniques of creative problem solving. Graphic Design and Production explores the various printing techniques including screen-printing and offset printing. The third and final class Advance Graphic Design or Production the student will choose a to specialize in either Graphic Design or Graphic Production focusing on the demand and real world techniques of the specialty.*

#### **PATHWAY COURSES**

- Introduction to Graphics and Design
- Graphic Design and Production
- Advanced Graphic Design

#### **RECOMMENDED COURSES**

- Computer Applications
- Fine Arts
- Marketing
- World Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Graphic Design
- Prepress and Production

##### **COLLEGES/UNIVERSITIES**

- Graphic Design
- Industrial Design
- Printmaking
- Product Design

See [www.GAfutures.org](http://www.GAfutures.org) for additional information.

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



## **ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS**

# **GRAPHIC DESIGN PATHWAY**

### **TOP CAREER CHOICES**

#### **Art Director**

College Degree needed plus  
5-7 years experience  
\$57,000 annual salary

#### **Commercial and Industrial Designers**

Bachelor's Degree  
\$54,900 annual salary  
30 annual average openings in Georgia

#### **Creative Designer**

College Degree needed plus  
10+ years experience  
\$87,000 annual salary

#### **Graphic Designer**

Bachelor's Degree  
\$49,900 annual salary  
390 annual average openings in Georgia

### **ADDITIONAL CAREER CHOICES**

Advertising and Promotions Managers

Art Directors

Fashion Design

Film and Video Editors

Illustration

Interior Designers

Multimedia Artist and Animators

Photography

3D Animation



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

Accountant	Sales Manager
Financial Analyst	CPA
Actuary	CFO
Entrepreneur	Stock Broker
CEO	Lawyer
Auditor	Corporate Attorney
Bank Examiner	Human Resources Specialist
Banker	Financial Advisor

**TECHNICAL CAREERS**

- Customer Service Associate
- Assistant Store Manager
- Bank Teller
- Data Analyst
- Executive Assistant
- Real Estate Agent
- Bookkeeper
- Paralegal
- Insurance Agent
- Sales Consultant

**ENTRY LEVEL CAREERS**

- Customer Service Representative
- Secretary
- Data Entry Clerk
- Administrative Assistant
- Bank Teller
- Accounting Clerk
- Mail Clerk
- Human Resources Assistant
- Branding Assistant
- Sales Representative

**BUSINESS & FINANCE**

*Community Hero*

**RUSTY SMITH**  
Agency Owner at The Rusty Smith State Farm Agency

**Job Description**  
Develop insurance and investment solutions for individuals and businesses through a needs based conversation approach. Risk Management and Retirement Solutions, Auto, Home, Life, Health, and Business Insurance.

**High School**  
Forsyth Central High School

**Career Training and Certificates**

- Property & Casualty Agent
- Life, Accident & Sickness Agent
- Variable Product Agent
- Registered Representative (Series 6, 63, 65)

**First Job**  
Account Representative at Cbeyond Communications selling telecommunications service to small businesses.

*Find Your Passion!*



*Entrepreneurs, innovators, and small businesses play a key role in Georgia's economy. Business professionals may be managers, owners, accountants, economists, administrators, or analysts. These individuals must possess excellent communication skills and be able to establish working relationships with many different people.*

#### PATHWAY COURSES

- Introduction to Business and Technology
- Legal Environment of Business
- Entrepreneurship

#### RECOMMENDED COURSES

- Any Business and Computer Science Course
- Marketing Principles
- Work-Based Learning
- World Language
- Yearbook/Journalism

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Business Management
- Business Office Technology
- Entrepreneurship
- Hospitality Industry
- Human Resources Associate
- Management and Supervisory Development
- Office Administration

##### COLLEGES/UNIVERSITIES

- Business
- Business Administration

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## BUSINESS MANAGEMENT AND ADMINISTRATION

# ENTREPRENEURSHIP PATHWAY

#### TOP CAREER CHOICES

##### Advertising and Promotion Manager

Bachelor Degree needed  
\$76,898 annual salary  
60 annual average openings in Georgia

##### Chief Executive

Bachelor Degree plus work experience needed  
\$155,168 annual salary  
850 annual average openings in Georgia

##### Employment, Recruitment, and Placement Specialist

Bachelor Degree needed  
\$50,877 annual salary  
440 annual average openings in Georgia

##### Social and Community Service Manager

Bachelor Degree needed  
\$59,904 annual salary  
100 annual average openings in Georgia

##### Training and Development Manager

Bachelor Degree needed  
\$79,498 annual salary  
60 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Appraiser and Assessor of Real Estate  
Accountant and Auditor  
Administrator  
Bank Teller  
Business Educator  
Chief Executive Officer  
Claims Adjuster  
Claims Examiner  
Computer Support Specialist  
Computer Systems Analyst  
Cost Estimator  
Database Administrator  
Entrepreneur  
Financial Analyst  
Financial Manager  
Investigator  
Network and Computer System  
Paralegal and Legal Assistant  
Personal Financial Advisor  
Sales Manager  
Tax Prepare



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



BUSINESS MANAGEMENT  
AND ADMINISTRATIONHUMAN RESOURCES  
MANAGEMENT  
PATHWAY

Students will analyze the primary functions of human resources management which include recruitment, selection, training, development, compensation, and evaluation. The pathway is designed to equip students with operational knowledge of hiring, managing, and terminating employees. Throughout the third course, students will be introduced to the Human Resource Management role by following the life cycle of an employee from organizational entry to exit. Upon mastery of the standards in this pathway, students should be prepared to pass an End of Pathway assessment in this career area.

**PATHWAY COURSES**

- Introduction to Business and Technology
- Legal Environment of Business
- Human Resources Principles

**RECOMMENDED COURSES**

- Economics
- Entrepreneurship
- Human Resource Principles
- Intro to Business and Technology and Legal Environment of Business as Prerequisite

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

Business Management degree at most colleges and universities

- Associate degree
- Bachelor's degree
- Certificate program
- Doctoral degree
- Master's degree
- Professional Certifications
  - GPHR (Global Professional in HR)
  - PRH (Professional in HR)
  - SPHR (Senior Professional in HR)
- Professional Membership in Society for Human Resource Management encouraged

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS****TOP CAREER CHOICES****Human Resources Managers**

2012 Median Pay \$99,720 per year  
Entry-Level Education Bachelor's degree  
Work Experience in a Related Occupation 5+ years  
Job Outlook 2012-22, 13% growth

**ADDITIONAL CAREER CHOICES**

Compensation and Benefits Manager

Employee Training Specialist

Human Resources Assistant

Human Resources Manager

Human Resources Specialist

Job Analysis Specialist

Training and Development Manager



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



The International Business pathway provides students with a foundation of core concepts required to succeed in an international business environment. Students will learn essentials for working in an international business environment, managing a business, and owning a business. Key concepts emphasized include global awareness, spirit of entrepreneurship, and cultural competency. Students will also study real, specific, historical cases from international businesses over the years and analyze how those businesses have handled certain situations in foreign markets. Consequently, the use of case studies will allow students to use the knowledge gained to analyze and evaluate decisions made by real international businesses. At the end of this pathway, students will have developed the project management and business management skills that are the basis for developing and managing a business in an international market.

#### **PATHWAY COURSES**

- Introduction to International Business
- Global Awareness and Cultural Competency
- International Business Concepts

#### **RECOMMENDED COURSES**

- Accounting
- Business Law
- IB Business and Management
- Principles of Marketing
- Entrepreneurship
- Foreign Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Business Administration
- Management
- Marketing
- Accounting
- Banking and Finance
- Paralegal Studies

##### **COLLEGES/UNIVERSITIES**

- International Business and Studies
- Global Marketing Management
- Entrepreneurial Studies

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **BUSINESS MANAGEMENT AND ADMINISTRATION**

## **INTERNATIONAL BUSINESS PATHWAY**

#### **TOP CAREERS CHOICES**

**International Marketing Manager**  
\$142,170 Annual Salary

**Economist**  
\$107,196 Annual Salary

**Foreign Exchange Trader**  
\$102,164 Annual Salary

**Supply Chain Manager**  
\$88,227 Annual Salary

**International Foreign Policy Advisor**  
\$69,826 Annual Salary

#### **ADDITIONAL CAREER CHOICES**

Logistics Manager

International Trade and Customs Manager

Foreign Service Officer

Trade Specialist

Import/Export Coordinator

Sales Executive

International Accountant



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

Elementary School Teacher	School Psychologist
Middle and High School Teacher	College Professors
Private School Teacher	School Librarian
Special Education Teacher	Counselor
Speech Language Pathologist	Social Worker
Post-Secondary Educator	Principal

**TECHNICAL CAREERS**

- Paraprofessional
- Daycare Worker
- Pre-K Teacher
- After School Program Coordinator
- Community Educator
- Field Trip Coordinators
- Children's Book Authors
- Private Music Teacher
- International Teacher
- Montessori Teacher

**ENTRY LEVEL CAREERS**

- Childcare Worker
- Tutor
- Nanny
- Coach
- Youth Group Leader
- YMCA
- Summer Camp Leader
- After School Worker
- Library Volunteer
- Dance/Martial Arts Trainer

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# EDUCATION

Employment  
 Target  
 Interview  
 Skills  
 Resumé  
 Trade Information  
 Leadership  
 Job Experience  
 Contacts  
 Knowledge

*Find Your Passion!*

**Community Hero**

**RICHARD W. GILL**  
 Retired High School Principal at Forsyth County Schools

**Job Description**  
 Developing and maintaining a strong school culture that is focused on achievement in academics and extra-curricular activities while establishing positive links to business and community.

**High School**  
 Montezuma High School

**Career Training and Certificates**

- B.S. in Physical Education and Health from Indiana State University
- M.S. in Guidance & Counseling from Iowa State University
- Leadership Certification from Georgia State University

**First Job**  
 Funk Brothers Seed Company and Substitute Newspaper Carrier



*Educational services is the second largest industry which includes a variety of institutions that offer academic education or career and technical instruction. This includes elementary, middle and secondary schools, universities, colleges, professional schools, community or junior colleges and career and technical institutes. The overall demand for educational services will increase as growing emphasis on improving education along with retirements will create large numbers of job openings.*

#### **PATHWAY COURSES**

- Early Childhood Education I
- Early Childhood Education II
- Early Childhood Education Practicum

#### **RECOMMENDED COURSES**

- Any Education Course
- Psychology
- Work-Based Learning
- World Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Child Care Assistant
- Child Care Manager
- Child Development Associate I and II
- Child Development Specialist
- Early Childhood Care and Education (Associate Degree)
- Early Childhood Care and Education Assistant
- Early Childhood Program Administration
- Infant-Toddler Childcare Specialist

##### **COLLEGES/UNIVERSITIES**

- Art Teacher
- Elementary Teacher
- Music Teacher
- Physical Education Teacher

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **EDUCATION AND TRAINING**

## **EARLY CHILDHOOD EDUCATION PATHWAY**

#### **TOP CAREER CHOICES**

##### **Elementary School Teacher**

Bachelor Degree needed  
\$46,888 annual salary  
2,590 annual average openings in Georgia

##### **Kindergarten Teacher**

Bachelor Degree needed  
\$45,969 annual salary  
330 annual average openings in Georgia

##### **Preschool Teacher**

Post-Secondary Vocational Training needed  
\$24,419 annual salary  
500 annual average openings in Georgia

##### **Special Education Teacher Preschool, Kindergarten or Elementary**

Bachelor Degree needed  
\$46,358 annual salary  
450 annual average openings in Georgia

#### **ADDITIONAL CAREER CHOICES**

After-School Program Supervisor  
Child Care Administrator  
Child Care Director and Owner  
Child Care Supervisor  
Child Life Specialist  
Education Administrator  
Educational and Teacher Aide  
Elementary School Teacher  
High School Early Childhood Ed. Teacher  
Recreation Attendant  
Special Education Teacher  
Preschool Teacher  
University Instructor and Professor



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





*Educational services is the second largest industry which includes a variety of institutions that offer academic education or career and technical instruction. This includes elementary, middle and secondary schools, universities, colleges, professional schools, community or junior colleges and career and technical institutes. The overall demand for educational services will increase as growing emphasis on improving education along with retirements will create large numbers of job openings.*

#### **PATHWAY COURSES**

- Examining the Teaching Profession
- Contemporary Issues in Education
- Teaching as a Profession Practicum

#### **RECOMMENDED COURSES**

- Any Education Course
- World Language
- Human Growth and Development
- Psychology
- Work-Based Learning

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- CDA Prep
- Child Care Assistant and/or Child Care Manager
- Child Development Associate I and/or II
- Child Development Specialist
- Early Childhood Care and Education Basics
- Early Childhood Care and Education Program Administration
- Early Childhood Education or Exceptionalities
- Education of the Gifted
- Infant-Toddler Care Specialist

##### **COLLEGES/UNIVERSITIES**

- Adult, Art, Music or Special Education
- Career and Technical Education
- Early Childhood Education
- Education of the Gifted
- English, Math, Science or Social Studies Education
- Family and Consumer Sciences Education
- Health and Physical Education
- Human Resource and Organizational Development
- Middle School Education
- Professional School Counseling
- School Psychology
- Speech Communication
- World Language Education

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **EDUCATION AND TRAINING**

## **TEACHING AS A PROFESSION PATHWAY**

#### **TOP CAREER CHOICES**

##### **Middle School Special Education Teacher**

Bachelor Degree needed  
\$46,891 annual salary  
230 annual average openings in Georgia

##### **Post-Secondary Education Administrator**

Bachelor Degree plus work experience needed  
\$81,328 annual salary  
160 annual average openings in Georgia

##### **Post-Secondary Vocational Education Teacher**

Bachelor Degree plus work experience needed  
\$45,386 annual salary  
370 annual average openings in Georgia

##### **Secondary School Teacher**

Bachelor Degree needed  
\$49,956 annual salary  
1,360 annual average openings in Georgia

#### **ADDITIONAL CAREER CHOICES**

Administration  
Adult Educator  
After-School Program Supervisor  
Associate Teacher  
Coach  
County Extension Agent  
Education Evaluator  
Educational and Teacher Aide  
Elementary School Teacher  
High School Teacher  
Media Specialist  
Middle School Teacher  
Post-Secondary Vocational Education  
Recreation Attendant  
School Administration  
Social Services Aide  
Special Education Teacher  
Teacher



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



# ENERGY







*Energy is a diverse field with many job opportunities. There are many people who help generate energy, transport it and connect energy to the things we use every day. There are also individuals creating new methods of energy generation. Working in energy can mean working for utilities, for gas and oil companies, for government and research groups, for energy education or environmental regulation agencies, for nonprofit energy awareness and conservation organizations or for many other energy related agencies.*

#### **PATHWAY COURSES**

- Foundations of Energy Technologies
- Energy and Power: Technology
- Appropriate and Alternative Energy Technologies

#### **RECOMMENDED COURSES**

- Advanced Math
- Chemistry
- Introduction to Digital Technology
- Introduction to Engineering and Technology
- Introduction to Mechatronics
- Physics

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

- 4-Year Universities/Colleges
- 2-Year Colleges
- Military
- On-the-Job Training
- Special Purpose Schools
- State Registered Apprenticeships
- Technical Colleges

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



## **ENERGY**

# **ENERGY SYSTEMS PATHWAY**

### **TOP CAREER CHOICES**

#### **Electrical Engineer**

Bachelor's Degree  
\$90,445 annual salary

#### **Electrical Power-Life Installers and Repairs**

Some post-secondary, no degree required  
\$48,355 annual salary

#### **Industrial Production Manager**

Bachelor's Degree  
\$96,979 annual salary

### **ADDITIONAL CAREER CHOICES**

Electricians

Electronics Technicians

Engineering Technicians

Equipment, Cable, Line Repairers/Installers

Geologists

Hazardous Waste Technicians

Meteorologists

Mining Engineers

Petroleum Engineers

Pipefitters/ Pipe Layers

Power Plant Operators

Telecommunication Technicians

Value/Regulator Repairers



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

**PROFESSIONAL CAREERS**

Accountant	Sales Manager
Financial Analyst	CPA
Actuary	CFO
Entrepreneur	Stock Broker
CEO	Lawyer
Auditor	Corporate Attorney
Bank Examiner	Human Resources Specialist
Banker	Financial Advisor

**TECHNICAL CAREERS**

- Customer Service Associate
- Assistant Store Manager
- Bank Teller
- Data Analyst
- Executive Assistant
- Real Estate Agent
- Bookkeeper
- Paralegal
- Insurance Agent
- Sales Consultant

**ENTRY LEVEL CAREERS**

- Customer Service Representative
- Secretary
- Data Entry Clerk
- Administrative Assistant
- Bank Teller
- Accounting Clerk
- Mail Clerk
- Human Resources Assistant
- Branding Assistant
- Sales Representative

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

# BUSINESS & FINANCE

**Find Your Passion!**

**Community Hero**

**RUSTY SMITH**  
Agency Owner at The Rusty Smith State Farm Agency

**Job Description**  
Develop insurance and investment solutions for individuals and businesses through a needs based conversation approach. Risk Management and Retirement Solutions, Auto, Home, Life, Health, and Business Insurance.

**High School**  
Forsyth Central High School

**Career Training and Certificates**

- Property & Casualty Agent
- Life, Accident & Sickness Agent
- Variable Product Agent
- Registered Representative (Series 6, 63, 65)

**First Job**  
Account Representative at Cbeeyond Communications selling telecommunications service to small businesses.

**Skills**

- Employment
- Target
- Resumé
- Interview
- Trade Information
- Leadership
- Job Experience
- Contacts
- Knowledge





The Financial Management Services pathway courses are designed to provide students with knowledge that can be applied in secondary education, the work place, and in their personal lives. During times of financial crisis it is imperative that students learn the importance of sound financial decision-making.

#### PATHWAY COURSES

- Introduction to Business and Technology
- Principles of Accounting I
- Principles of Accounting II

#### RECOMMENDED COURSES

- Any Business and Computer Science Course
- Marketing Principles
- Work-Based Learning
- World Language

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Accounting
- Banking and Finance
- Business Administration Technology
- Business Logistics
- Business Studies
- Business Technology
- Office Accounting Specialist

##### COLLEGES/UNIVERSITIES

- Accounting
- Actuarial Sciences
- Business Administration
- Economics
- Finance
- Insurance

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### FINANCE

## ADVANCED ACCOUNTING PATHWAY

#### TOP CAREER CHOICES

##### Actuary

Bachelor Degree needed  
\$84,822 annual salary  
30 annual average openings in Georgia

##### Brokerage Clerk

Moderate-Term On-the-Job Training needed  
\$30,597 annual salary  
30 annual average openings in Georgia

##### Financial Analyst

Bachelor Degree needed  
\$80,787 annual salary  
210 annual average openings in Georgia

##### Real Estate Sales Agent

Post-Secondary Vocational Award needed  
\$38,334 annual salary  
500 annual average openings in Georgia

##### Securities/Commodities Sales

Bachelor Degree needed  
\$81,536 annual salary  
100 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Bank Teller and Manager  
Cash Manager  
Chief Financial Officer  
Controller  
Corporate Finance Professional  
Credit Analyst  
Financial Counselor  
Financial Manager  
Insurance Agent and Broker  
Insurance Manager  
Investment Banker  
Loan Officer  
Personal Financial Advisor  
Personal Wealth Manager  
Real Estate Agents and Broker  
Stock Broker



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



*Strong growth in accounting jobs throughout the next decade is expected to occur due to the increased growth in the number of new businesses and stricter accounting and auditing regulations.*

#### PATHWAY COURSES

- Introduction to Business and Technology
- Financial Literacy
- Principles of Accounting I

#### RECOMMENDED COURSES

- Any business and computer science course
- Marketing Principles
- Work-Based Learning
- World Language

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Accounting
- Business Technology
- Medical Administrative Assistant
- Office Accounting Specialist

##### COLLEGES/UNIVERSITIES

- Accounting
- Business Education
- Business Management
- Economics
- Finance
- Marketing and Real Estate

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### FINANCE

## BUSINESS ACCOUNTING PATHWAY

#### TOP CAREER CHOICES

##### Accountants and Auditors

Bachelor Degree needed  
\$54,330 annual salary  
1,090 annual average openings in Georgia

##### Bookkeeping/Accounting/Auditing Clerks

Moderate-Term On-the-Job Training needed  
\$29,619 annual salary  
1,490 annual average openings in Georgia

##### Budget Analysts

Bachelor Degree needed  
\$58,698 annual salary  
30 annual average openings in Georgia

##### Tax Examiner, Collector and Revenue Agent

Bachelor Degree needed  
\$43,909 annual salary  
70 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Auditing Clerk  
Auditor  
Bookkeeper  
Budget Analyst  
Certified Public Accountant  
Corporate Accountant  
Entrepreneur  
FBI Agent  
Financial Advisor  
Financial Analyst  
Forensic Accountant  
Government Accountant  
Income Tax Professional  
Managerial Accountant  
Non-Profit Accountant  
Teacher



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





## FINANCE

# FINANCIAL SERVICES PATHWAY



*The Financial Service Pathway uses project based instruction to introduce students to the basics of the banking system, bank operating procedures, negotiable instruments, and the deposit and credit functions of banks. Methods used for measuring the financial performance of banks are analyzed. Current issues and future trends in banking are examined. Students explore the major functions of bank employees by completing a flow-of-work simulation. Students formulate business and individual investment decisions by comparing and contrasting a variety of investment options.*

## PATHWAY COURSES

- Introduction to Business and Technology
- Financial Literacy
- Banking, Investing and Insurance

## RECOMMENDED COURSES

- Accounting 1 and 2
- Business Foundation and Business Management
- Desktop Publishing
- Financial Management
- Marketing 1 and 2
- Personal Financial Literacy
- Personal and Business Law 1 and 2
- Web Design

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES, COLLEGES/UNIVERSITIES

- Accounting
- Business Administration-Financial Analysis
- Business Technology
- Consumer and Family Financial Services
- Disaster Relief Insurance Claim Adjuster
- Financial Planning
- Office Accounting Specialist

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Auditor

Bachelor Degree needed  
\$73,910 annual salary

### Insurance Sales Agent

1-2 years Post-Secondary training needed  
\$62,790 annual salary

### Claims Adjuster

Post-Secondary training plus  
on-the-job training needed  
\$63,220 annual salary

### Accountant

Bachelor Degree needed  
\$73,910 annual salary

## ADDITIONAL CAREER CHOICES

Business Teacher

Financial Project Specialist

Financial Planner

Research

Sales and Service



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



The pathway explores what new financial technologies are emerging and how technological advances in data analytics are enabling innovation in the financial industry. Through this pathway students examine new services and business models in various areas of banking, insurance, and financial asset management. Students will not only understand the concepts but will apply their knowledge to situations and defend their actions, decisions, and choices through the knowledge and skills acquired in this course. Various forms of technologies and internet research will be highlighted to expose students to the resources available within financial technology. The pathway focuses heavily on the usage of technology that powers financial ecosystems, digital finance platforms, mobile payments, and digital asset management. Students will explore the characteristics and functions of electronic and mobile payment systems and the design and development of dynamic, data-driven financial applications using client- and server-side architecture.

#### PATHWAY COURSES

- Introduction to Financial Technology
- Financial Technologies and Services
- Coding for FinTech

#### RECOMMENDED COURSES

- Introduction to Business and Technology
- Introduction to Digital Technology
- Financial Literacy
- Principles of Accounting I
- Computer Science Principles or AP Computer Science Principles
- Digital Design
- Embedded Computing

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES, COLLEGES/UNIVERSITIES

- Associates of Science
- Bachelor of Business

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### FINANCE

## FINANCIAL TECHNOLOGY (FINTECH) PATHWAY

#### TOP CAREER CHOICES

##### Account Manager

\$62,832 annual salary

##### Analytics Specialist

\$33,000 - \$60,000 annual salary

##### Salesforce Administrator

\$88,344 annual salary

#### ADDITIONAL CAREER CHOICES

Art Director

Business Development Manager

Business Systems Analyst

Customer Service Rep

Data Scientist

Database Administrator

Email Marketing Specialist

Product Manager

Senior NET Developer


Software Engineer/Developer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

- Military Lawyer
- Jet Pilot
- Battalion Commander (CEO)
- Intelligence Officer (FBI)
- Combat Engineer (Architect)
- Satellite Communications (CIA)
- Counterintelligence Officer (CIA)
- Cargo Pilot (FedEx)
- Weather Officer (Meteorologist)
- Substance Abuse Officer (Drug Counselor)

**TECHNICAL CAREERS**

- Air Traffic Controller
- Russian Linguist
- Arabic Interpreter
- Paralegal
- Jet Engine Mechanic
- Weather Specialist
- Instructor/Teacher
- Drone Pilot
- Communications
- Electrician

**ENTRY LEVEL CAREERS**

- Auto Mechanic
- Police Officer
- Firefighter
- Supply Management
- Truck Driver
- Custodial Services
- Administrative Assistant
- Data Systems Operator
- Cook
- Armorer

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# MILITARY



**Community Hero**

**CWO3  
CK VILLAROUÉL**

**Retired US Marine Corps**

**Job Description**  
 CWO3 (Ret) Villarouel currently works at North Forsyth High School as the Senior Marine Instructor. He has been an instructor at the school for 6 months now and started in his new role after working in management in a corporate environment. He retired from the Marine Corps in 2017 having served honorably for almost 23 years and during that time he held a variety of positions such as Transportation Operator, Licensing Officer, Martial Arts Instructor, Marksmanship Instructor, and Maintenance Officer.

**First Job**  
 Brick Layer

Find Your Passion!



*This pathway lays the foundations for subsequent Leadership Education courses by teaching the basics of leadership, citizenship, personal growth, appearance and responsibility, general Marine Corps knowledge, drill, and physical training. Leadership Education courses at this level provide elevated instruction in the basics of leadership, citizenship, personal growth, appearance and responsibility, and additional instruction and practical application general military subjects. An introduction to career awareness is also introduced, along with an emphasis placed on development of leadership skills, citizenship, physical training and drill. Minimum performance requirements for each course are based on successful completion of competencies according to the national Marine Corps JROTC curriculum.*

#### PATHWAY COURSES

- MCJROTC Leadership Education I/II
- MCJROTC Leadership Education III/IV
- MCJROTC Leadership Education V/VI
- MCJROTC Leadership Education VII/VIII

#### RECOMMENDED COURSES

- Any CTAE Course
- Modern US Military History
- World Language

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

- Academy Appointments
- Active Reserve and National Guard options available
- Armed Forces (Advanced Placement Enlistment Opportunities) Army, Air Force, Marines, Navy, Coast Guard
- ROTC (Scholarships Available)

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- Academic Team
- Color Guard
- Drill Team
- Raiders
- Rifle Team



## GOVERNMENT AND PUBLIC ADMINISTRATION

# JROTC MARINES PATHWAY

### TOP CAREER CHOICES

Students enrolled in JROTC programs may find high-demand, high-wage, and high-skilled occupations in the public sector at [www.occsupplydemand.org](http://www.occsupplydemand.org) or if they plan on a career in the military they will find "Military Occupations" listed on [www.gafutures.org](http://www.gafutures.org) under the Career Planning Tab.

### ADDITIONAL CAREER CHOICES

Administration  
Air Traffic Controller  
Aviation Ordnance  
Broadcast Specialist  
Computer  
Construction Equipment Repairer  
Criminal Investigation  
Equipment Repair  
Finance  
Flight Crew  
Human Resource  
Information Technology  
Intelligence  
Lawyer  
Military Police  
Missile Fire Control Operator  
Multi Media Illustrator  
Naval Aviation (Pilot)  
Photographer  
Supply Logistic  
Transportation Management



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>







**PROFESSIONAL CAREERS**

- Registered Nurse
- Dentist
- Physician's Assistant
- Paramedic
- Urologist
- Chiropractor
- Veterinarian
- Pharmacist
- Medical Doctor
- Orthodontist

**TECHNICAL CAREERS**

- Pharmacy Technician
- X-Ray Technician
- Coroner
- Licensed Practical Nurse
- Massage Therapist
- CNA
- Dental Assistant
- OR Assistant
- Ultrasound Technician
- Vet Technician

**ENTRY LEVEL CAREERS**

- Vet Technician
- Medical Records/Coding/Billing
- CNA
- Medical Assistant
- Patient Care Technician
- Phlebotomist
- Lifeguard
- Physical Therapy Technician
- EMT
- Home Health Aide

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# HEALTHCARE SCIENCE



**Community Hero**

**DR. CAROLYN BOOKER**  
 Chief Nursing Officer at Northside Hospital Forsyth

**Job Description**  
 Responsible for overseeing and coordinating the organization's nursing department and its daily operations.

**High School**  
 Murphy High School, Mobile, AL

**Career Training and Certificates**

- Diploma of Nursing from Providence Hospital School of Nursing
- BSN from Clayton State University
- MSN from University of South Alabama
- DNP Executive Nursing Administration from University of South Alabama
- Board Certified Nurse Executive-Advanced

**First Job**  
 Receptionist at the Tag Office

**Roots (Preparation):** Employment, Interview, Trade Information, Contacts, Leadership, Job Experience, Knowledge, Skills, Target, Resumé

*Find Your Passion!*





*The healthcare industry offers jobs in a variety of establishments: hospitals, nursing and residential care facilities, physicians, dental, and other health practitioners offices, home health care services, outpatient care centers, ambulatory health care services and medical and diagnostic laboratories.*

#### PATHWAY COURSES

- Introduction to Healthcare Science
- Essentials of Healthcare
- Allied Health and Medicine

#### RECOMMENDED COURSES

- World Language
- Human Anatomy/Physiology
- Psychology
- Work-Based Learning

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Clinical Lab Technology
- Dental Assisting or Hygiene
- Medical Assisting
- Nurse Aid
- Pharmacy Technology
- Practical Nursing
- Radiologic Technology
- Registered Nursing
- Surgical Technology

##### COLLEGES/UNIVERSITIES

- Doctor
- Dentist
- Nurse Practitioner
- Physical Therapist
- Registered Nurse
- Surgeon

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### HEALTH SCIENCE

## ALLIED HEALTH AND MEDICINE PATHWAY

#### TOP CAREERS CHOICES

##### Dental Hygienist

\$65,590 annual salary

##### Medical and Clinical Laboratory Technician

\$51,450 annual salary

##### Pediatrician

\$156,320 annual salary

##### Physical Therapist

\$87,590 annual salary

##### Surgical Technologist

\$46,690 annual salary

#### ADDITIONAL CAREER CHOICES

Clinical Laboratory Technician

Dental Hygienist

EMT

Medical Doctor

Medical Laboratory Technician

Orthopedic Technologist

Paramedic

Pharmacist

Physical Therapist

Radiologic Technologist

Surgical Technologist

Veterinarian



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



## HEALTH SCIENCE

# BIOTECHNOLOGY RESEARCH AND DEVELOPMENT PATHWAY



The Biomedical Research and Development pathway provides an understanding of human medicine through topics such as physiology, genetics, microbiology and public health. Courses will provide an introduction to teamwork and communication practices, organizational, critical-thinking and problem-solving skills. Areas of instruction include an understanding of the processes, structures and interactions of the human body, as well as the prevention, diagnosis and treatment of disease.

**PATHWAY COURSES**

- Introduction to Healthcare Science
- Essentials of Biotechnology
- Applications of Biotechnology

**RECOMMENDED COURSES**

- AP Chemistry or AP Biology
- AP Statistics
- Computer Science Courses
- Honors or Pre-AP Biology

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES****TECHNICAL COLLEGES**

- Associates of Science in Nursing
- Biochemistry
- Biomedical Sciences
- Biotechnology
- Dental Hygiene
- Epidemiology
- Health and Administration
- Healthcare fields (Pre-nursing, pre-vet, pre-med)
- Physical Therapy Assistant
- Public Health
- Radiologic Technology
- Surgical Technology

**COLLEGES/UNIVERSITIES**

- See [www.GAcollege411.org](http://www.GAcollege411.org) for additional information.

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS****TOP CAREER CHOICES**

Biological Consultant  
Biological or Medical Illustrator  
Biological Photographer  
Conservation Warden  
Crime Lab Technician  
Dental Hygienist  
Dietician Nurse  
Emergency Medical Technician  
Farm Manager  
Field Biologist or Ecologist  
Food and Drug Inspector  
Forensic Service Technician  
Forest Ranger  
Game Manager  
Human Resources Staff  
Industrial Hygienist or Process Manager  
Laboratory Technician  
Licensed Practical Nurse  
Meat and Poultry Food Inspector  
Medical Assistant or Records Administrator  
Medical Technologist  
Medical Writer  
Mortician  
Museum Educational Staff Member  
Museum Exhibit Designer  
National or State Park Ranger  
Nurse Anesthetist  
Nutritionist  
Pediatric Nurse  
Pest Control Specialist  
Pet Shop Owner  
Phlebotomist  
Primary or Secondary Teacher  
Prosthesis-Maker  
Public Relations  
Radiology Technician  
Sales Representative  
Science Journalism or Librarian  
University Research Assistant  
Veterinary Technician  
Waste Disposal Engineer  
Water Quality Controller  
Wildlife Management Specialist  
Zoo Assistant  
Zoologist



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





*Employment of EMTs and paramedics is expected to grow much faster than average through 2014. Demand for emergency services will increase as a large segment of the population ages and becomes more likely to have medical emergencies. Those certified in EMT-Intermediate and EMT-Paramedic fields will have favorable job prospects. There will also be a demand for part-time, volunteer EMTs and paramedics in rural areas.*

#### **PATHWAY COURSES**

- Introduction to Healthcare Science
- Essentials of Healthcare Science
- Emergency Medical Responder

#### **RECOMMENDED COURSES**

- World Language
- Human Anatomy/Physiology
- Physics
- Psychology
- Work-Based Learning

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Fire Science
- Firefighter EMT

##### **COLLEGES/UNIVERSITIES**

- See [www.GAfuture.org](http://www.GAfuture.org) for additional information.

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **HEALTH SCIENCE**

## **EMERGENCY MEDICAL RESPONDER PATHWAY**

#### **TOP CAREER CHOICES**

##### **EMT/Paramedic**

Post-Secondary Vocational Training needed  
\$29,328 annual salary  
290 annual average openings in Georgia

##### **Fire Fighter**

Long-Term On-the-Job Training needed  
\$33,030 annual salary  
500 annual average openings in Georgia

##### **Licensed Practical Nurse**

Post-Secondary Vocational Training needed  
\$33,030 annual salary  
960 annual average openings in Georgia

##### **Registered Nurse**

Associate Degree needed  
\$54,787 annual salary  
3,340 annual average openings in Georgia

#### **ADDITIONAL CAREER CHOICES**

Emergency Nurse

EMT and Paramedic

Firefighter

Paramedic Technologist



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

## HEALTH SCIENCE

# EMERGENCY MEDICAL TECHNICIAN PATHWAY



The U.S. Bureau of Labor Statistics (BLS) predicts that employment of emergency medical technicians (EMTs) and paramedics will grow 7% between 2018 and 2028, which is faster than the average for all U.S. occupations ([www.bls.gov](http://www.bls.gov)). A growing aging population is expected to increase the likelihood of medical emergencies, thus increasing the need for EMTs and paramedics. Plus, emergency rooms are frequently overcrowded, which increases the amount of time that EMTs and paramedics must spend with each patient. This is also likely to increase the number of job positions.

## PATHWAY COURSES

- Introduction to Healthcare Science
- Essentials of Healthcare Science
- Emergency Medical Technician

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Required state licensure from the Georgia Department of Public Health Office of Emergency Medical Services ([dph.georgia.gov/EMS](http://dph.georgia.gov/EMS))

Required national certification from the National Registry of Emergency Medical Technicians ([www.nremt.org](http://www.nremt.org))

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

Average annual salary for paramedics and EMTs was about \$37,760 in May 2018. During the same month, the highest-paying states were Washington (average \$67,600), the District of Columbia (average \$57,270) and Hawaii (average \$54,370), while the top-paying employers were state governments, with an average of \$61,580.

## ADDITIONAL CAREER CHOICES

Air Ambulances  
Clinics  
Colleges and Universities  
Critical Care Transport Units  
Fire Departments  
Hospital Ambulance Services  
Hospital Emergency Departments  
Law Enforcement Agencies  
Physician Practices  
Public and Private Ambulance Services  
Surgery Centers



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





*This pathway is an introduction to pharmacy technology professions, employment opportunities, and basic pre-pharmacy technician skills which may be utilized in either clinical or community settings such as retail, home health care, and ambulatory care pharmacies. Intensive pharmacy specific safety and security training are provided including potential drug addiction and abuse issues relative to pharmaceutical care such as robberies and identification of forgeries. Students are required to adhere to Federal Regulatory Agencies and Acts guidelines including Food, Drug, and Cosmetic Act, Controlled Substances Act (CSA), Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Drug Enforcement Administration (DEA) in addition to the pharmacy regulatory agencies within the state of Georgia. This pathway is recommended for students planning on pursuing careers in the healthcare industry, which may require basic pharmaceutical knowledge, common healthcare mathematical applications, and/or technical proficiency in the administration medications.*

#### PATHWAY COURSES

- Healthcare Science
- Essentials of Healthcare
- Pharmacy Operations and Fundamentals

#### RECOMMENDED COURSES

- Any Computer Science Course
- Any Healthcare Science Course
- Any World Language
- Human Anatomy/Physiology

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Pharmacy Technician Certificates
- Pharmacy Technician Degrees
- Pharmacy Technology
- Medical Assisting
- Nurse Aide
- Patient Care Assistant

##### COLLEGES/UNIVERSITIES

- Bachelor of Pharmacy
- Doctor of Pharmacy
- Pharmaceutical Sciences
- Pharmaceutical Evaluation and Policy

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### HEALTH SCIENCE

## PHARMACY PATHWAY

#### TOP CAREERS CHOICES

##### Pharmacy Technician

\$35,100 Average Annual Salary

##### Ambulatory Pharmacist

\$137,820 Average Annual Salary

##### Hospital Pharmacist

\$131,290 Average Annual Salary

##### Private/Drug Store Pharmacist

\$125,740 Average Annual Salary

#### ADDITIONAL CAREER CHOICES

- Psychiatric Pharmacy
- Pediatric Pharmacy
- Pharmaceutical Industry
- Pharmacy Academia
- Pharmacologist
- Pharmaceutical Sales
- Nuclear Medicine
- Biochemist and Biophysicists
- Medical Scientists
- Physicians and Surgeons
- Registered Nurses



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



*A phlebotomist draws blood for testing, verifies the patient's identity, and enters patient information into a database. Persons going into phlebotomy must be comfortable with blood, needles, and test tubes. Work location typically is a hospital, lab, or blood bank setting.*

#### PATHWAY COURSES

- Introduction to Healthcare Science
- Essentials of Healthcare
- Diagnostics Phlebotomy

#### RECOMMENDED COURSES

- Any Business and Computer Science Course
- Any Science Elective
- Any World Language
- Work-Based Learning

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

Training programs are often available at community colleges/technical schools coupled with clinical experience. Students must pass a certification exam

##### TECHNICAL COLLEGES

- Phlebotomy Technician

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### HEALTH SCIENCE

## PHLEBOTOMY PATHWAY

#### TOP CAREER CHOICES

##### Phlebotomists

Bachelor Degree needed  
\$46,891 annual salary  
230 annual average openings in Georgia

##### Cardiovascular Technologist and Technicians

Associate's Degree  
\$51,600 annual salary

##### Medical Lab Assistants

Associate's Degree  
\$36,500 annual salary

##### Skills

Good eye/ hand coordination, pleasant bedside manner, attention to detail  
Growth rate projected to be 27%, much faster than the average.

#### ADDITIONAL CAREER CHOICES

Information Nurse Specialists  
Medical Lab Assistants  
Nuclear Techs  
Patient Service Techs (PST)  
Physicians  
Phlebotomists  
Phlebotomy Supervisors  
Radiologic Technologists  
Registered Nurses  
Respiratory Technicians  
Other Related Health Science Occupations



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





*Public Health is a branch of Health Science devoted to providing students fundamental healthcare skills and knowledge, communication skills, and technology skills needed in the healthcare industry. Courses allow students to explore occupations and skill sets in environmental health, community health, epidemiology, disaster management, and geriatrics. Specifically, students will gain skills, knowledge, and exposure to human growth and development, patient and family health, medical terminology, wellness, and preventative care. In addition, students will also learn about the physiology of each body system, understanding of common diseases, disorders and emerging diseases (prevention, diagnosis and treatment), and the pathophysiology of diseases and disorders.*

#### PATHWAY COURSES

- Introduction to Healthcare Science
- Essentials of Healthcare
- Applications of Public Health

#### RECOMMENDED COURSES

- Biology II
- Business
- Chemistry
- Psychology/AP Psychology
- World Language

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Associate of Science Degree in Nursing
- Medical Assisting
- Nurse Aide
- Patient Care Assistant
- Practical Nursing

##### COLLEGES/UNIVERSITIES

- Emergency Management
- Environmental Health
- Epidemiology
- Healthcare Management
- Healthcare Administration
- Medical Degree (MD)
- Nursing
- Public Health

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### HEALTH SCIENCE

## PUBLIC HEALTH PATHWAY

#### TOP CAREERS CHOICES

##### Environmentalist

\$73,230 Average Annual Salary

##### Epidemiologist

\$74,560 Average Annual Salary

##### Medical/Health Services Manager

104,000 Average Annual Salary

##### Nursing- Registered Nurse

\$75,330 Average Annual Salary

##### Physician

\$208,000 Average Annual Salary

#### ADDITIONAL CAREER CHOICES

Community Health Worker

Emergency Management

Environmentalist

Epidemiologist

Health Educator

Nursing

Physician



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



*Sports Medicine is a branch of Health Science devoted to muscu-loskeletal disorders that alter the functional ability of the patient. Careers in this industry focus on improvement of ability to perform life tasks through the combined use of physical training (exercise, movement, and modification of activities), medications, adaptive equipment, orthotics (braces), and prosthesis devices. Careers in rehabilitation focus on helping people return to independence and self-reliance.*

#### **PATHWAY COURSES**

- Introduction to Healthcare Science
- Essentials of Healthcare
- Sports Medicine

#### **RECOMMENDED COURSES**

- Human Anatomy/Physiology
- Internships
- Physics
- Psychology
- Work-based Learning
- World Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Associates of Science in Nursing
- Dental Hygiene
- Orthopedic Technology
- Physical Therapist Assistant
- Radiologic Technology
- Surgical Technology

##### **COLLEGES/UNIVERSITIES**

- Dentist
- Doctor
- Nurse Practitioner
- Physical Therapist
- Registered Nurse
- Surgeon

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **HEALTH SCIENCE**

## **SPORTS MEDICINE PATHWAY**

#### **TOP CAREER CHOICES**

##### **Athletic Trainer**

Bachelor Degree needed  
\$35,917 annual salary  
20 annual average openings in Georgia

##### **Occupational Therapist Aide**

Short-Term On-the-Job Training needed  
\$20,259 annual salary  
10 annual average openings in Georgia

##### **Orthotist and Prosthetist**

Bachelor Degree needed  
\$35,464 annual salary  
10 annual average openings in Georgia

##### **Physical Therapist**

Master Degree needed  
\$65,042 annual salary  
120 annual average openings in Georgia

##### **Physical Therapist Assistant**

Associate Degree needed  
\$40,830 annual salary  
90 annual average openings in Georgia

#### **ADDITIONAL CAREER CHOICES**

Chiropractor  
Doctor of Osteopathic Medicine  
Doctor of Podiatric Medicine  
Massage Therapist  
Occupational Therapist  
Orthopedic Doctor  
Physical Therapy Assistant  
Physician's Assistant  
Radiologist  
Radiologist Technician



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

- Sous/Executive Chef
- Kitchen Manager
- Food Lawyer
- Restaurant Design
- Private Chef
- Catering Coordinator
- Entrepreneur/Restaurateur
- Secondary/Post-Secondary Educator
- Dietitian
- Research and Development Chef

**TECHNICAL CAREERS**

- Food Critic
- Food Service Delivery
- Food Stylist
- Food Sales Representative
- Food Blogger

**ENTRY LEVEL CAREERS**

- Cook/Prep Cook
- Hostess
- Waiter/Server
- Production Line Worker
- Agriculture Assistant
- Food Stylist Assistant
- Food Beverage Staff Worker
- Event Planning

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# CULINARY ARTS

**Find Your Passion!**

**Community Hero**

**MICHAEL CLARK**

**Local Owner**  
at Jim 'N Nick's

**Job Description**  
Oversight of Jim 'N Nick's Restaurants in North Atlanta including Cumming, Snellville, Suwanee, and East Cobb. Management of day to day operations, inside sales, and catering operations throughout Atlanta. Consistently serving the best Bar-B-Q this side of Birmingham.

**High School**  
Westwood High School  
Austin, Texas

**Career Training and Certificates**  
University of Texas at Austin

**First Job**  
Cook

Employment  
 Target  
 Skills  
 Knowledge  
 Job Experience  
 Leadership  
 Contacts  
 Trade Information  
 Interview  
 Résumé



## HOSPITALITY AND TOURISM

# CULINARY ARTS PATHWAY



The Culinary Arts pathway introduces 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. Courses also provide an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway in culinary arts.

## PATHWAY COURSES

- Introduction to Culinary Arts
- Culinary Arts I
- Culinary Arts II

## RECOMMENDED COURSES

- Algebra
- Any Science Elective
- Business Essentials
- Computer Applications
- Entrepreneurship
- World Language (Spanish and French)

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Catering Specialist
- Culinary Arts (Standard Pathway or Baking & Pastry Pathway)
- Culinary Nutrition Assistant
- Food and Beverage Director
- Food and Beverage Management
- Food Production Worker I
- Hospitality Management
- Hotel/Restaurant/Tourism Management
- Prep Cook
- Restaurant Manager

### COLLEGES/UNIVERSITIES

- Culinary Arts (Standard Pathway or Baking & Pastry Pathway)
- Food and Beverage Management
- Food Science
- Hospitality Management

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Chef and Head Cook

Work experience needed  
\$31,304 annual salary  
110 annual average openings in Georgia

### Food Services Manager

Work experience needed  
\$49,860 annual salary  
400 annual average openings in Georgia

### Pastry Chef

Work experience needed  
\$34,890 annual salary  
130 annual average openings in Georgia

## ADDITIONAL CAREER CHOICES


Baker  
Cake Designer  
Caterer  
Chocolatier  
Culinary Arts Instructor  
Dining Room Management  
Dining Room Service  
Food and Beverage Director  
Food Stylist and Photographer  
Food Writer and Critic  
Hotel Manager  
Kitchen Manager  
Personal Chef  
Research and Development Chef  
Restaurant Entrepreneur



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





### PROFESSIONAL CAREERS

- Resort Host
- Food and Beverage Director
- Hotel Manager
- Entertainment Manager
- Travel Guides
- Executive Chef
- Economic Development and Tourism Coordinator
- Captain for Cruise Ship
- Marketing Manager
- Catering Sales Manager
- Hotel Sales Manager
- Housekeeping Director

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Forsyth County Schools

## COLLEGE & Career

DEVELOPMENT

### TECHNICAL CAREERS


- Restaurant Managers
- Housekeeping Manager
- Hotel Manager
- Tour Guide
- Travel Agent
- Event Planner
- Sommelier
- Concierges
- Maitre D/Head Waiter
- Convention Manager
- Theme Park Operations Manager
- Museum Exhibit Developer

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### ENTRY LEVEL CAREERS

- Activities Attendant
- Audio Visual Technician
- Resort Assistant
- Bell Attendant
- Breakfast Attendant
- Fitness Attendant
- Housekeeping
- Parking Attendant
- Barista
- Reservation Agent
- Waiter/Waitress
- Banquet Setup Employee

# HOSPITALITY



### Community Hero



**BRIAN TAM**

Owner at Tam's Backstage, Tam's Tupelo, Bluegrass Foods, and School Street Playhouse

**ADJUNCT PROFESSOR**  
Lanier Technical College

**Job Description**  
Supervise 50 full-time, 75 part-time employees. Overall management of 3 restaurants. Produce live community theater productions.

**High School**  
West Lafayette High School, Indiana

**Community Service**

- Elected Official: Forsyth County Board of Commissioner
- Board of Directors: Forsyth County Chamber of Commerce, Humane Society of Forsyth County, CASA, United Way, North Georgia Community Foundation

**First Job**  
Field Worker, Dishwasher

## Find Your Passion!



Georgia represents the 8th largest tourism economy in the country and the 2nd largest industry in Georgia. The Hospitality, Recreation and Tourism Industry consists of the following Lodging, Hotels and Resorts; Conventions, Meetings, Trade Shows and Events; Restaurants and Food Service; Recreation, Attractions, Sporting Events and Parks and Travel, including Air, Rail, Auto and Coach. Since the industry is primarily a service-oriented industry, workers will need good communication skills, and they will have to understand the importance of meeting the needs of individuals.

#### **PATHWAY COURSES**

- Marketing Principles
- Hospitality, Recreation, and Tourism Essentials
- Hospitality, Recreation, and Tourism Management

#### **RECOMMENDED COURSES**

- Advanced Marketing
- Any business or computer course
- Entrepreneurship
- Work-Based Learning
- World Languages

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

- Adventure Tourism
- Communications
- Culinary
- Hospitality Management
- Hospitality Operations Management
- International Tourism
- Marketing Management
- Meetings & Event Planning
- Ski Guide
- Sports Marketing
- See [www.GAfutures.org](http://www.GAfutures.org) for additional information.

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **HOSPITALITY AND TOURISM**

## **HOSPITALITY, RECREATION AND TOURISM PATHWAY**

#### **TOP CAREER CHOICES**

##### **Hotel and Lodging Managers**

Bachelor Degree needed  
\$51,840 per year

##### **Meeting, Convention, Events Planners**

High School and on the job training  
\$47,350 per year  
10% increase expected

##### **Public Relations**

Bachelors degree  
\$58,020 per year

##### **Restaurant Manager**

High School and on the job training  
\$50,820 per year

##### **Travel Agent**

High School and on the job training  
\$36,460 per year

#### **ADDITIONAL CAREER CHOICES**

Brand Manager  
Catering Manager  
Communications Specialist  
Country Club Marketing and Management  
Cruise Director  
Customer Account Representative  
Economic Development Specialist  
Entertainment Marketer  
Entrepreneur  
Golf Course Marketing and Management  
Hotel Management  
International Tourism & Hotel Management  
Parks and Recreation Management  
Purchaser  
Real Estate Agent  
Recreation and Amusements Marketer  
Restaurant Management  
Sales Representative  
Social Media Marketer  
Sports and Entertainment Marketer  
Tourism Director  
Travel Agent  
Travel Blogger  
Travel Planner



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

Social Media Director	Creative Director
Senior Optimization Specialist	Chief Financial Officer
Director of Public Relations	Marketing Consultant
Chief Marketing Officer	Strategist
Chief Executive Officer	Buyer
Professional Sales Director	Brand Manager
Marketing Research Analyst	

**TECHNICAL CAREERS**

- Assistant Sales Manager
- Graphic Designer
- Digital Marketing Coordinator
- Marketing Research Assistant
- Assistant Buyer or Manager
- Assistant Account Executive
- Visual Merchandising Coordinator
- Event Planner
- Media Coordinator
- Content Marketing Specialist
- Sales Representative
- Search Engine Optimization Specialist

**ENTRY LEVEL CAREERS**

- Sales Associate
- Public Relations Assistant
- Brand Ambassador
- Social Media Influencer
- Customer Relations Representative
- Social Media Assistant
- Marketing Assistant
- Retail Sales
- Call Center Coordinator
- Marketing Research Data Collector
- Copywriter
- Promotions Assistant

**MARKETING**

*Find Your Passion!*

**Community Hero**

**SHAWN LAFAVE, CAS**  
 President/CEO at North Georgia Promotions

**Job Description**  
 Small Business Owner monitoring business performance and looking for ways to increase efficiencies as well as sales growth.

**High School**  
 M.D. Bradford High School

**Career Training and Certificates**

- Master Advertising Specialist (MAS)
- Certified Advertising Specialist
- Certified Senior Advisor
- National Faculty facilitating for Social Security, Long Term Care, Medicare and Medicaid
- Certified Long Term Care Specialist
- Certified Retirement Planning Counselor
- Police Officer Standards and Training – Certified

**First Job**  
 Grill Cook at McDonalds

**Skills and Concepts:** Employment, Interview, Trade Information, Leadership, Job Experience, Knowledge, Skills, Target, Contacts, Résumé.



Entertainment is related to film and TV, music, gaming, digital media and sports marketing are huge in Georgia. In addition to basic knowledge and skills in management and entrepreneurship, students in this Pathway will apply their knowledge and skills to this industry in order to master the industry's terminology, market arenas and venues, obtain sponsorships, maintain solid media relations, coordinate and manage campaigns and events, etc. This pathway culminates with an opportunity for students to take the MBA Research "A\*S\*K Marketing Concepts" end of pathway assessment or the NOCTI "Marketing Education Manager Trainee" end of pathway assessment.

#### PATHWAY COURSES

- Marketing Principles
- Introduction to Sports and Entertainment Marketing
- Advanced Sports and Entertainment Marketing

#### RECOMMENDED COURSES

- Advanced Marketing
- Any Business and Computer Science Course
- Entrepreneurship
- Work-Based Learning

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Business Administration
- Business Management
- Executive Coaching
- Expert Sales Management
- Project Management
- Visual Merchandising

##### COLLEGES/UNIVERSITIES

- Accounting
- Advertising
- Bridal Consultant
- Business Economics
- Communication
- Graphic Arts
- Hospitality Administration
- Management
- Marketing
- Professional Sales
- Sport Management
- Travel/Tourism

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### HOSPITALITY AND TOURISM

## SPORTS AND ENTERTAINMENT MARKETING PATHWAY

#### TOP CAREER CHOICES

##### Marketing Manager

Bachelor Degree needed  
\$94,307 annual salary  
310 annual average openings in Georgia

##### Marketing Research Analyst

Bachelor Degree needed  
\$61,464 annual salary  
210 annual average openings in Georgia

##### Public Relations Specialist

Bachelor Degree needed  
\$48,672 annual salary  
120 annual average openings in Georgia

##### Recreation Worker

Short-Term On-the-Job-Training needed  
\$21,570 annual salary  
260 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES


Advertising Account Executive  
Agent  
Brand Manager  
Cashier  
Communications Specialist  
Customer Service Representative  
Demonstrator and Product Promoter  
Desktop Publisher  
Entertainment Marketer  
Entrepreneur  
Fashion Retailer  
Market Research Analyst  
Marketing Specialist  
Media Buyer  
Product Development Management  
Public Relations Specialist  
Purchaser  
Retail Buyer  
Retail Salesperson  
Sales  
Sales Representative  
Sign Maker  
Sports Marketer  
Website Designer  
Web Developer  
Webmaster



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

- Educator
- Chemist for Product Development
- Medial Esthetician
- Union Esthetician
- Licensing Examiners and Inspectors
- Platform Artist
- Mortuary Cosmetologist
- Specialize in Haircutting, Hair Color, and Hair Texture

**TECHNICAL CAREERS**

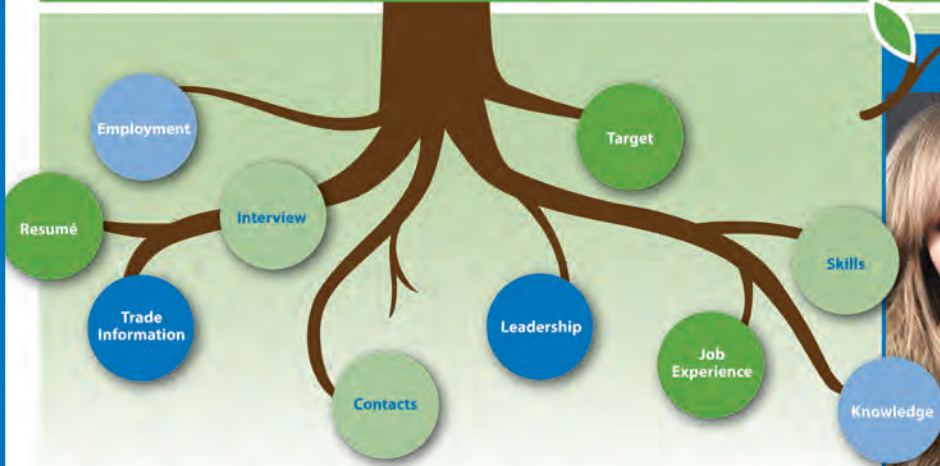
- Hairstylist
- Nail Technician
- Brand Director
- Lash Extensions
- Brow Specialist
- Esthetician
- Salon Manager
- Business/Salon Owner

**ENTRY LEVEL CAREERS**

- Receptionist
- Sales Associate
- Stylist Assistant
- Distributor Sales Consultant
- Shampoo Technician
- Makeup Artist

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# COSMETOLOGY



*Community Hero*

**ZAINAB HAIDER**

**Hairstylist at Bristow Hair Company**

**Job Description**  
 Trained in performing precision haircuts, master colorist, certified Brazilian Blow Out specialist, certified in hair extensions, lifts and tints, relaxers, perms, keratin treatments and other full salon services.

**High School**  
 Habib High School

**Career Training and Certificates**

- Masters of Cosmetology- Aveda Institute Atlanta
- Comprehensive Cutting Program- Sally Rogerson Education
- Brazilian Blow Out Certificate
- Ellebana Lash Lift and Tint Certification
- Academy Pro-hair Extensions Certification

**First Job**  
 Aerobics Instructors

*Find Your Passion!*



*The Personal Care Services Cosmetology pathway is formulated for students who desire to become licensed cosmetologists. All participating students are required by the Georgia State Board of Cosmetology to obtain a total of 1500 unit hours to be eligible for both the written and practical state test. Students benefit from the program because it allows the student the opportunity to obtain at least half of the required state board hours.*

#### **PATHWAY COURSES**

- Introduction to Personal Care Services
- Cosmetology Services II
- Cosmetology Services III

#### **RECOMMENDED COURSES**

- Advanced Cosmetology Services
- Chemistry
- Cosmetology Services - Core IV
- Internship I, II, III, IV, V
- Licensure and Employment Opportunities
- Science and Art of Makeup
- Science of Advanced Skincare
- World Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Barber License
- Cosmetology
- Cosmetology Instructor License
- Cosmetology License
- Esthetician License
- Hair Designer
- Master Cosmetology License
- Shampoo Technician

##### **COLLEGES/UNIVERSITIES**

- Cosmetology

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **HUMAN SERVICES**

## **COSMETOLOGY PATHWAY**

#### **TOP CAREER CHOICES**

Salary ranges from \$15,530 to \$42,460 per year. In order to obtain a license in cosmetology, nail technology, or skin care in the state of Georgia, students must complete the requirements listed below. Please contact the Georgia State Board of Cosmetology for more information. Requirements:

**COSMETOLOGIST:** 1500 Hours,  
Apprenticeship 3000 Hours

**HAIR DESIGN:** 1325 Hours,  
Apprenticeship 2650

**ESTHETICIAN:** 1000 Hours,  
Apprenticeship 2000 Hours

**NAIL TECHNICIAN:** 525 Hours,  
Apprenticeship 1050 Hours

#### **ADDITIONAL CAREER CHOICES**

Barber Stylist  
Chemical Texture Specialist  
Color Specialist Chemist  
Cosmetologist  
Cutting Specialist  
Editorial Specialist  
Esthetician  
Hair Color Specialist  
Hairstylist  
Make-up Artist  
Master Cosmetologist  
Nail Technicians  
Permanent Wave Technician  
Platform Artist  
Receptionist  
Salon Owner  
Shampoo Tech  
Wig Stylist



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

Space Planner	Interior Designer
Public Relations Specialist	Project Manager
Personal Shopper/ Stylist	Fashion Designer
Merchandise/Inventory Planner	Design Professor
Manufacturer Sales Consultant	Textile Designer
Apparel and Merchandising Designer	Creative Director

**TECHNICAL CAREERS**

- Decorator
- AutoCAD Drafter
- Sales Consultant
- Home Stylist
- Design Assistant
- Store Manager
- Technical Assistant

**ENTRY LEVEL CAREERS**

- Junior/Assistant Designer
- Sales/Design Consultant
- Sales Associate
- Drafter
- Style Advisor
- Social Media Intern
- Design Intern
- Personal Assistant

**INTERIOR DESIGN**

*Community Hero*

**WHITNEY REGAN**  
**Director of Interiors**  
**at Jericho Design Group**

**Job Description**  
 Responsible for marketing tactics for the team, meeting with clients, giving direction to staff, and monitoring the progress of projects plans, furniture choices, finishes, room layouts, and other design concepts. Other tasks include leading the conceptual phase of a project and overseeing the final completion through mentorship and coaching.

**High School**  
 Parkview High School

**Career Training and Certificates**

- Bachelors in Fine Arts Interior Design – Georgia State University
- Student ASID
- Currently studying for NCIDQ

**First Job**  
 Assistant at Early Childhood Development Center

**Find Your Passion!**



Students enrolled in the Interior Design pathway will learn about colors, textures, furniture, lighting, and space in public and private sectors including offices, airports, theaters, malls, restaurants, hotels, schools, hospitals, and private homes. Students will use the latest software applications to learn about designing, planning, managing, building and maintaining the built environment.

#### PATHWAY COURSES

- Foundations of Interior Design
- Fundamentals of Fashion
- Textile Science

#### RECOMMENDED COURSES

- Introduction to Graphics and Design
- Foreign Language
- Visual Art Courses
- Work-Based Learning

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Architectural CAD Drafter
- Advanced CAD Drafter
- Advanced CAD Technician
- Auto CAD Refresher
- Auto CAD Specialist
- Auto CAD User
- CAD Operator
- Drafter Assistant
- Drafter Technician
- Drafter Aid
- Graphic Arts
- Landscape Design Technician
- Residential Drafting Technician

##### COLLEGES/UNIVERSITIES

- Architecture
- Interior Design

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### HUMAN SERVICES

## INTERIORS, FASHION, AND TEXTILES PATHWAY

#### TOP CAREER CHOICES

##### Architect

Bachelor Degree needed  
\$71,989 annual salary  
100 annual average openings in Georgia

##### Commercial and Industrial Designer

Bachelor Degree needed  
\$52,312 annual salary  
30 annual average openings in Georgia

##### Graphic Designer

Bachelor Degree needed  
\$44,034 annual salary  
160 annual average openings in Georgia

##### Interior Designer

Associate Degree needed  
\$47,320 annual salary  
100 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Architect  
Building Code Official  
Computer Aided Drafter (CAD)  
Cost Estimator  
Display Designer  
Family & Consumer Science Teacher  
Floral Designer  
Furnishing & Equipment Sales Manager  
Furniture Designer  
Industrial Designer  
Interior Designer  
Interior Designer Assistant  
Interior Design Specialist  
Landscape Designer  
Manufacturers' Representative  
Modeler  
Photographer  
Renderer  
Retail Manager  
Set Designer  
Specifications Writer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

- FACS Teacher
- Dietitian
- Hotel Manager
- Restaurant Manager
- Extension Agent
- Food Scientist
- Flavor Chemist
- Food Labeling Specialist
- Public Health Inspector
- Food and Beverage Director
- Sports Nutritionist

**TECHNICAL CAREERS**

- Licensed Practical Nurse
- Nutritionist
- Dental Assistant
- Medical Assistant
- Preschool Assistant Teacher
- Viticulturist
- Life Coach
- Chef
- Personal Trainer
- Quality Controller
- Strength and Conditioning Trainer

**ENTRY LEVEL CAREERS**

- Grocery Store Clerk
- Deli Clerk
- Bakery Assistant
- Food Prep Worker
- Vitamin Store Owner
- Servers (Restaurant)
- Caterer
- Consulting Dietitian
- Dietetic Technician
- E-Commerce Clerks
- Courtesy Clerks
- Paraprofessional (School)

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

## NUTRITION AND FOOD SCIENCE



**Find Your Passion!**

**Community Hero**

**APRIL COX**

**High School Area Manager and Professional Development Coordinator at Forsyth County Schools**

**Job Description**  
 Coach and support all High School Cafeterias Mentor and teach the Assistant Manager Team Coordinate and organize training for all employees Manage social media efforts

**High School**  
 Forsyth Central High School

**Career Training and Certificates**  
 Columbia Southern University

**First Job**  
 Wal-Mart Shoe Department



*Employment in this field is expected to grow faster than average through 2014 as a result of the increasing emphasis on disease prevention through improved dietary habits. A growing and aging population will increase the demand for meals and nutritional counseling agencies in hospitals, residential care facilities, schools, prisons, community health programs, and home health care.*

#### **PATHWAY COURSES**

- Food, Nutrition, and Wellness
- Food for Life
- Food Science

#### **RECOMMENDED COURSES**

- Any Business and Computer Science Course
- Any Science Elective
- Human Growth and Development for Early Childhood
- Work-Based Learning
- World Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Catering Specialist
- Culinary Arts
- Culinary Nutrition Assistant
- Food and Beverage Director
- Food and Beverage Management
- Food Production Assistant, Worker, or Apprentice
- Food Production Worker I
- Hotel/Restaurant/Tourism Management
- Prep Cook
- Restaurant Manager

##### **COLLEGES/UNIVERSITIES**

- Dietetics/Dietician
- FACS Education
- Food, Nutrition and Wellness Studies
- Food Science and Technology
- See [www.GAcollege411.org](http://www.GAcollege411.org) for additional information.

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **HUMAN SERVICES**

## **NUTRITION AND FOOD SCIENCE PATHWAY**

#### **TOP CAREER CHOICES**

##### **Chef and Head Cook**

Work experience needed  
\$31,304 annual salary  
110 annual average openings in Georgia

##### **Dietician/Nutritionist**

Bachelor Degree needed  
\$42,619 annual salary  
80 annual average openings in Georgia

##### **Food Scientist and Technologist**

Bachelor Degree needed  
\$55,869 annual salary  
10 annual average openings in Georgia

##### **Food Services Manager**

Work experience needed  
\$46,384 annual salary  
400 annual average openings in Georgia

##### **Health Education**

Master Degree needed  
\$53,290 annual salary  
90 annual average openings in Georgia

#### **ADDITIONAL CAREER CHOICES**

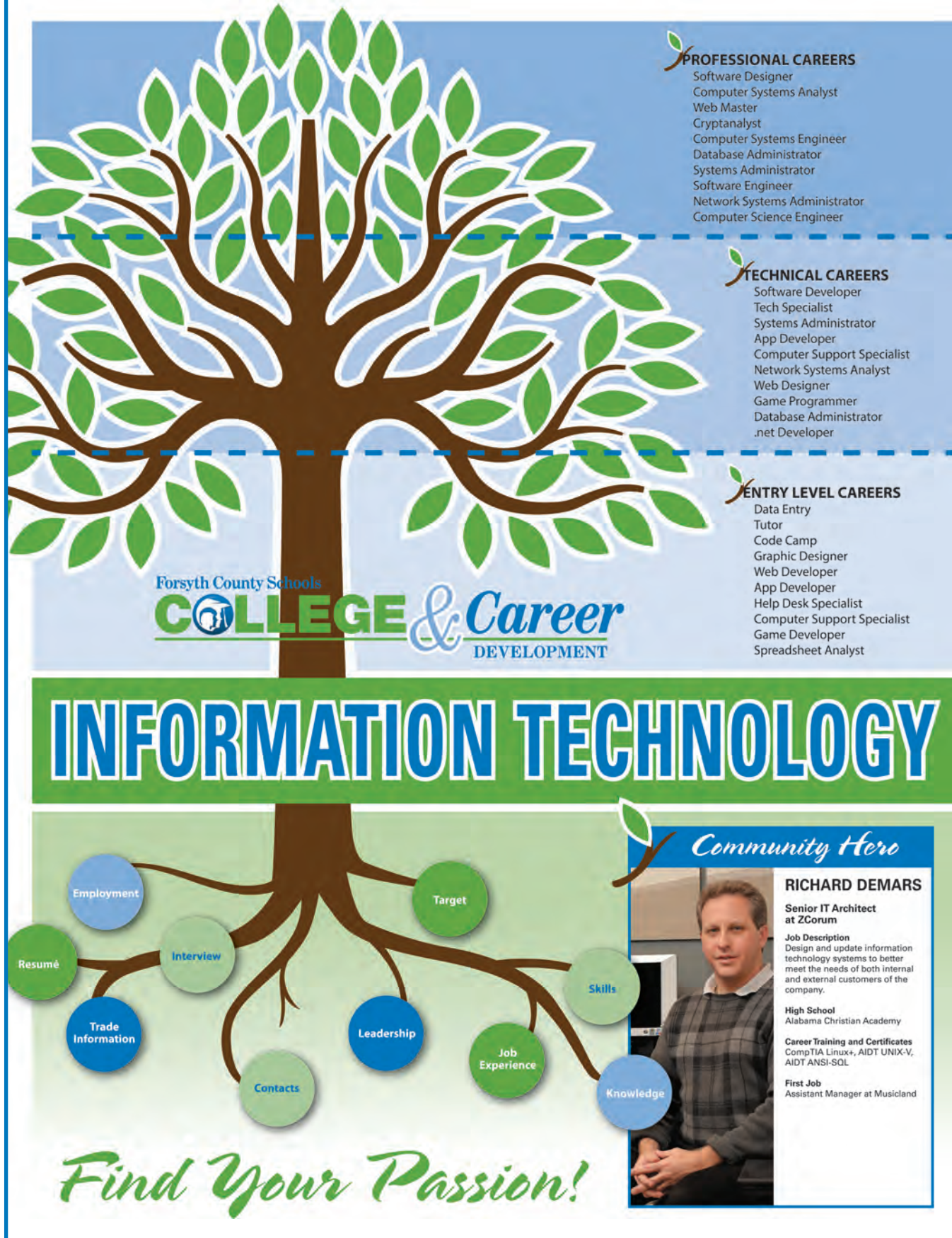
Agricultural Engineer  
Biochemist  
Chemical Technician  
Consumer Representative  
Dietetic Technician  
Family and Consumer Science Teacher  
Flavorist  
Food Inspector  
Food Service Manager  
Geriatric Food Designer  
Health Educator  
Health Inspector  
Microbiologist  
Product Evaluation Scientist  
Research and Development Specialist  
Sensory Scientist  
Teacher Educator  
Technical Writer  
Toxicologist



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

- Software Designer
- Computer Systems Analyst
- Web Master
- Cryptanalyst
- Computer Systems Engineer
- Database Administrator
- Systems Administrator
- Software Engineer
- Network Systems Administrator
- Computer Science Engineer

**TECHNICAL CAREERS**

- Software Developer
- Tech Specialist
- Systems Administrator
- App Developer
- Computer Support Specialist
- Network Systems Analyst
- Web Designer
- Game Programmer
- Database Administrator
- .net Developer

**ENTRY LEVEL CAREERS**

- Data Entry
- Tutor
- Code Camp
- Graphic Designer
- Web Developer
- App Developer
- Help Desk Specialist
- Computer Support Specialist
- Game Developer
- Spreadsheet Analyst

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# INFORMATION TECHNOLOGY

**Community Hero**

**RICHARD DEMARS**  
 Senior IT Architect  
 at ZCorum

**Job Description**  
 Design and update information technology systems to better meet the needs of both internal and external customers of the company.

**High School**  
 Alabama Christian Academy

**Career Training and Certificates**  
 CompTIA Linux+, AIDT UNIX-V, AIDT ANSI-SQL

**First Job**  
 Assistant Manager at Musicland

**Find Your Passion!**

Diagram illustrating the components of finding your passion, connected to the tree trunk:

- Employment
- Target
- Resumé
- Interview
- Trade Information
- Leadership
- Contacts
- Job Experience
- Skills
- Knowledge



The Cloud Computing courses in information technology provides a foundational knowledge in programming languages, software development, app creation and the basics of cloud computing. Technical content includes designing, developing, and deploying a virtual private network, creating a cloud environment that is scalable, and demonstrating safe use of big data. College preparatory students benefit from this pathway if they plan to pursue a degree in Computer Science. It also serves as a foundation for those students wishing to pursue a certificate credential at the technical school level or enter the workforce with entry-level skills.

#### PATHWAY COURSES

- Introduction to Software Technology
- Computer Science Principles or AP Computer Science Principles
- Cloud Computing

#### RECOMMENDED COURSES

- Mathematics
- Programming Languages
- Engineering

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Associate of Applied Science

##### COLLEGES/UNIVERSITIES

- Bachelor of Science, Computer Science
- Bachelor of Science, Computer Engineering
- Master or Ph.D of Computational Science and Engineering
- Master or Ph.D of Computer Science

##### CERTIFICATES

- AWS Certified Cloud Practitioner
- Google Associate Cloud Engineer
- Microsoft Certified Azure Fundamentals

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## INFORMATION TECHNOLOGY

# CLOUD COMPUTING PATHWAY

### TOP CAREERS CHOICES

**AWS Certified Cloud Practitioner**  
\$113,937

**Software Engineer**  
Bachelor's Degree or higher  
\$104,730

**Computer Systems Engineer**  
Bachelor's Degree or higher  
\$86,960

**Systems Administrator**  
Bachelor's Degree or higher  
\$82,897

### ADDITIONAL CAREER CHOICES

Software Engineer

Cloud Engineer

Data Engineer

System Engineer

Full Stack Developer

Java Developer

Data Scientist

Systems Administrator

.NET Developer

Front-end Developer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





*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.*

#### PATHWAY COURSES

- Introduction to Software Technology
- Computer Science Principles or AP Computer Science Principles
- AP Computer Science

#### RECOMMENDED COURSES

- Any Advanced Math Course
- Any Business and Computer Science Course
- Any World Language
- Entrepreneurship

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- CISCO CCNP Specialist
- CISCO Network Specialist
- Computer Engineering Technology
- Computer System Design Specialist
- Computer Support Specialist
- Drafting Technology
- Electrical and Computer Engineering Technology
- Electromechanical Engineering Technology
- Industrial Engineering Technology
- Internet Specialist/Website Design
- LINUX/UNIX System Administrator
- Network Design Technology Specialist
- Network Specialist
- PC Repair & Network Technician
- Telecommunications Engineering Technology
- Wireless Engineering Technology
- Wireless Networking Technician

##### COLLEGES/UNIVERSITIES

- Bachelor of Arts with a Major in Applied Computer Science
- Bachelor of Science with a Major in Computer Game Design and Development
- Bachelor of Science with a Major in Computer Science
- Computer Systems Engineering

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### INFORMATION TECHNOLOGY

## COMPUTER SCIENCE PATHWAY

#### TOP CAREER CHOICES

##### Computer Programmers

Bachelor Degree needed  
\$75,400 annual salary  
230 annual average openings in Georgia

##### Computer System Analysts

Bachelor Degree needed  
\$73,800 annual salary  
810 annual average openings in Georgia

##### Software Developers, Application

Bachelor Degree needed  
\$86,300 annual salary  
340 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Computer Programmers  
Computer & Information Systems Managers  
Computer Hardware Engineers  
Computer Network Architects  
Computer System Analysts  
Database Administrators  
Information Security Analysts  
Network and Computer Systems Administrators  
Software Engineers  
Video Game Designers



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

## INFORMATION TECHNOLOGY

CYBERSECURITY  
PATHWAY

*The increased use of computers has created a high demand for specialists to provide advice to users, as well as for day-to-day administration, maintenance, and support of computer systems and networks. This pathway is designed to introduce students to the field of cybersecurity while examining best practices related to the management of security, ethics, trust, internal/external threats, cryptography, and wireless technologies. Computer-related jobs are generally high paying, and those working in the profession require a foundational knowledge of problem solving and logical thinking.*

**PATHWAY COURSES**

- Introduction to Hardware Technology
- Introduction to Cybersecurity
- Advanced Cybersecurity

**RECOMMENDED COURSES**

- Any Advanced Math Course
- Any Business and Computer Science Course
- Any Engineering Course
- Any World Language

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES****TECHNICAL COLLEGES**

- Cybersecurity
- Cyber Crime Specialist
- Computer Support Specialist

**COLLEGES/UNIVERSITIES**

- Computer Support Specialist
- Computer Science
- Management Information Systems

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS****TOP CAREER CHOICES****Computer & Information Systems Managers**

Bachelor Degree needed  
\$134,679 annual salary  
333 annual average openings in Georgia

**Computer Support Specialists**

Some College/No Degree Required  
\$44,700 annual salary  
830 annual average openings in Georgia

**Network & Computer System Administrators**

Bachelor Degree needed  
\$83,734 annual salary  
246 annual average openings in Georgia

**ADDITIONAL CAREER CHOICES**

Administrative Support Workers Network

Computer & Information Systems Managers

Computer System Administrators

Computer Network Support Specialist

Computer Operators

Computer User Support Specialist

First-Line Supervisors of Office



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



## INFORMATION TECHNOLOGY

GAME DESIGN  
PATHWAY

Students completing this pathway will gain an understanding of the fundamental principles used at every stage of the game creation process. After establishing foundational knowledge, game genres and modes of play are explored in terms of the psychology of incentives, motivation to play, and social networking. Virtual characters and non-player characters are reviewed from concept drawing to 2D and 3D art, rigging, and animation. Level design, storytelling, and animation are added to develop a virtual world around the characters. Students taking this pathway are strongly encouraged to add an internship to their curriculum which will give them real world experience and an understanding of how the computer game industry works. Employment of game designers is expected to increase 8 percent from 2016 – 2026, about as fast as the average for all occupations, resulting in 6,200 jobs available nationwide.

**PATHWAY COURSES**

- Introduction to Software Technology
- Computer Science Principles or AP Computer Science Principles
- Game Design: Animation and Simulation

**RECOMMENDED COURSES**

- Any Art Course
- Any Computer Science Course
- Any Mathematics Course
- Any Physics Course
- Student Internship

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES****TECHNICAL COLLEGES**

- Game Development
- Computer Information Systems
- Computer Programming
- Design and Media Production Technology

**COLLEGES/UNIVERSITIES**

- Computer Engineering
- Computer Science
- Management Information Systems

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS****TOP CAREER CHOICES****Computer Game Designer**

Bachelor Degree Required  
\$63,970 annual salary

**Multimedia Artists and Animators**

Bachelor Degree needed  
\$70,530 annual salary

**Computer and Information Systems Managers**

Bachelor Degree Required  
\$134,679 annual salary  
333 annual average openings in Georgia

**ADDITIONAL CAREER CHOICES**

Audio Engineer

Computer Programmer

Software Developer

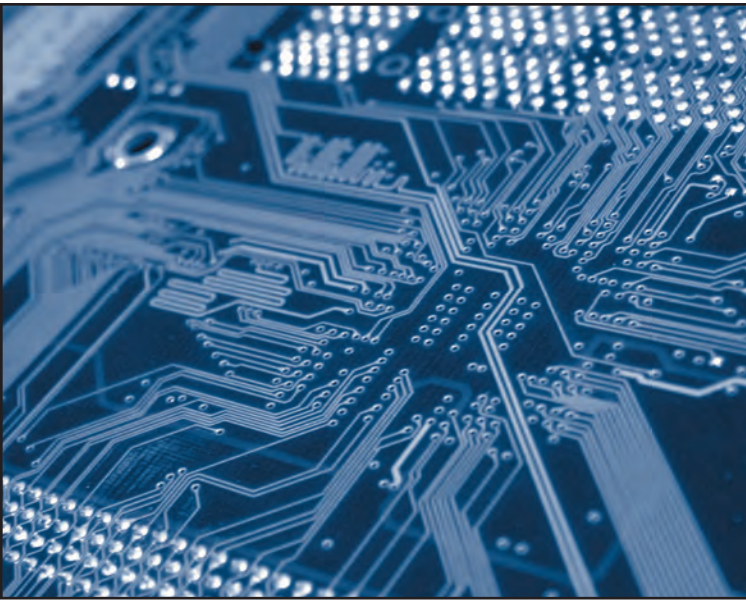
Technology Support Specialist

Video Game Tester



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



*The Programming pathway gives many opportunities to strengthen problem solving skills, and provides needed skills in all disciplines.*

#### **PATHWAY COURSES**

- Introduction to Software Technology
- Computer Science Principles or AP Computer Science Principles
- Programming, Apps, Games and Society

#### **RECOMMENDED COURSES**

- Any Business and Computer Science Course
- Broadcast/Video Production
- Introduction to Engineering Drawing and Design
- Introduction to Graphics and Design
- Work-Based Learning
- World Language

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Business Information Systems
- CISCO CCNP Specialist
- CISCO Network Specialist
- Computer Forensics
- Computer Information Systems
- Computer Programming
- Computer Science
- Computer Software Engineering
- Computer Support Specialist
- Drafting Technology
- Information Science
- Information Technology
- Internet Specialist/Website Design
- LINUX/UNIX System Administrator
- Mathematics
- Networking Specialist
- PC Repair & Network Technician
- Wireless Engineering Technology
- Wireless Networking Technician

##### **COLLEGES/UNIVERSITIES**

- See [www.GAcollege411.org](http://www.GAcollege411.org) for additional information.

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **INFORMATION TECHNOLOGY**

## **PROGRAMMING PATHWAY**

#### **TOP CAREER CHOICES**

##### **Computer Programmers**

Bachelor Degree needed  
\$73,674 annual salary  
330 annual average openings in Georgia

##### **Computer Software Engineers**

Bachelor Degree needed  
\$77,022 annual salary  
730 annual average openings in Georgia

##### **Computer System Analysts**

Bachelor Degree needed  
\$74,443 annual salary  
890 annual average openings in Georgia

##### **Computing and Information Systems Managers**

Bachelor Degree plus experience needed  
\$101,400 annual salary  
530 annual average openings in Georgia

#### **ADDITIONAL CAREER CHOICES**

Actuaries  
Computer Scientist  
Computer Software Engineer  
Computer Systems Analyst  
Database Administrator  
Mathematician



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





The Web Development pathway instructs students on the basics of designing a web page and leads to advanced web design and 3D animation. Web design can be found in every area of business and industry, as well as in individuals' personal life. Students will have the opportunity to learn skills that will help them create web pages, gaming and other digital media features.

#### **PATHWAY COURSES**

- Introduction to Software Technology
- Computer Science Principles or AP Computer Science Principles
- Web Development

#### **RECOMMENDED COURSES**

- Any Business and Computer Science Course
- Art
- Broadcast/Video Production
- Introduction to Graphics and Design
- Marketing Principles
- Work-Based Learning
- World Language
- Yearbook/Journalism

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

##### **TECHNICAL COLLEGES**

- Computer Animation and Multimedia
- Computer Simulation
- Design and Media Production Technology
- Digital Media
- Internet Specialist - Website Design
- Printing and Graphics Technology
- Website Designer

##### **COLLEGES/UNIVERSITIES**

- Animation
- Computational Media
- Computer Science
- Graphic Designer

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



#### **INFORMATION TECHNOLOGY**

## **WEB DEVELOPMENT PATHWAY**

#### **TOP CAREER CHOICES**

##### **Computer Specialist**

Associate Degree needed  
\$55,640 annual salary  
80 annual average openings in Georgia

##### **Desktop Publisher**

Post-Secondary Vocational Training needed  
\$30,680 annual salary  
30 annual average openings in Georgia

##### **Graphic Designer**

Bachelor Degree needed  
\$44,034 annual salary  
160 annual average openings in Georgia

##### **Multi-Media Artist and Animator**

Bachelor Degree needed  
\$44,554 annual salary  
40 annual average openings in Georgia


#### **ADDITIONAL CAREER CHOICES**

Computer Service Technician  
Database Developer  
Graphic Designer  
Help Desk Support  
Illustrator  
Internet Specialist  
Multimedia Developer  
Network Analyst  
Network Engineer  
Programmer  
Project Manager  
Video Game Developer  
Web Developer  
Webmaster  
Website Designer  
Software Trainer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

- Fire Chief
- Assistant Chief
- Fire Marshall
- EMS Chief
- Emergency Operations Center Director
- Director of Emergency Services
- Training Chief
- Logistic Chief
- 911 Director

**TECHNICAL CAREERS**

- Battalion Chief Operations
- Battalion Chief Support
- Training Chief
- PIO (Public Information Officer)
- Fire (Sergeant, Lieutenant, Captain)
- Training (Sergeant, Lieutenant, Captain)
- Health and Safety Officer
- Arson Investigator
- Fire Inspector
- Hazmat Technician
- Fire Protection Engineering
- Paramedic
- Technical Rescue Specialist

**ENTRY LEVEL CAREERS**

- Volunteer Firefighter
- Emergency Medical Responder
- Firefighter
- Emergency Safety Officer
- 911 Dispatcher
- Hazmat Operations
- Water and Fire Restoration Worker
- Fire Extinguish Technicians
- Lifeguard
- Logistics Warehouse Worker

**FIREFIGHTING**

*Community Hero*

**CHIEF BARRY HEAD**  
Fire Chief at Forsyth County Fire Department

**Job Description**  
Responsible for protecting life, property and the environment from fire and all other emergencies and provide emergency medical care. Coordinates activities of the Department's 5 divisions.

**High School**  
Forsyth County High School

**Career Training and Certificates**

- Ga Firefighter Standards and Training
- Ga Fire Chiefs Association
- Ga Peace Officers Standards and Training Council
- Ga Association of Chiefs of Police
- Ga Fire Investigators Association
- International Association of Fire Chiefs
- International Association of Arson Investigators
- National Association of Fire Investigators
- National Fire Academy

**First Job**  
Auto supply store sales

*Find Your Passion!*

Diagram illustrating the components of firefighting career development:

- Employment
- Resumé
- Interview
- Trade Information
- Target
- Leadership
- Job Experience
- Contacts
- Skills
- Knowledge



# FIREFIGHTING PATHWAY



Workers in the Fire & Emergency area work in potentially risky situations protecting the public against fires and other dangers. Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency service workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. Firefighters control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster assistance. The Georgia jobs for firefighters will increase by 9% between 2008 and 2018.

## PATHWAY COURSES

- Introduction to Law, Public Safety, Corrections and Security
- Essentials of Fire and Emergency Services
- Applications of Firefighting

## RECOMMENDED COURSES

- Anatomy
- Business Law
- Chemistry
- Dual Enrollment Courses
- Physics
- World Languages

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

- Advanced Fire Administration
- AFO – Airport Fire Officer
- AMF – Airport Master Firefighter
- Basic Fire Company Officer
- Emergency Medical Responder
- Fire Fighter I & II
- Fire Officer I & II
- Firefighter/EMSP
- Fire Science
- Fire Science Technology
- Health & Safety Officer
- ISO – Incident Safety Officer
- Public/Private Crisis Manager

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### First Line Supervisors and Prevention Workers

Bachelor Degree needed  
\$53,600 annual salary  
90 annual average openings in Georgia

### Fire Inspectors

Some College/No Degree Required  
\$46,500 annual salary  
10 annual average openings in Georgia

### Firefighters

Some College/No Degree Required  
\$35,500 annual salary  
440 annual average openings in Georgia

## ADDITIONAL CAREER CHOICES

Forest Fire Inspectors and  
Prevention Specialists Lifeguards,  
Ski Patrol, Other Recreational Protective  
Service Workers Private Detectives and  
Investigators



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

**PROFESSIONAL CAREERS**

- Forensic Scientist
- FBI Agent
- U.S. Marshal
- Secret Service Agent
- Customs Agent
- DEA Agent
- CIA Agent
- Homeland Security Agent

**TECHNICAL CAREERS**

- Game Warden
- Police Detective
- Computer Forensics
- Crime Scene Investigator
- Criminal Justice Instructor
- Accident Reconstructionist
- Courtroom Deputy
- Canine Officer
- Private Investigator
- Criminal Profiler
- Customs and Border Protection Officer
- Park Ranger

**ENTRY LEVEL CAREERS**

- Police Officer
- Sheriff's Officer
- State Trooper
- Corrections Officer
- Public Safety Dispatcher
- CSI Assistant
- 911 Center Operator
- Private Security Officer
- Correctional Officer

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

# LAW ENFORCEMENT

*Community Hero*

**SHERIFF RON H. FREEMAN**  
Forsyth County Sheriff

**Job Description**  
Responsible for safety of all person in Forsyth County as well as the security of the Courts, Jail, schools, traffic enforcement, criminal investigations, narcotics enforcement and 482 employees.

**High School**  
Forsyth County High School

**Career Training and Certificates**

- Associates in Criminal Justice
- Bachelor of Organizational Leadership
- Master of Public Administration
- Graduate FBI National Academy
- Ga Law Enforcement Command College
- FBI Executive Development School
- Georgia Peace Officers Standards and Training Council

**First Job**  
Range Assistant at Cannongate Golf Course

*Find Your Passion!*



## LAW, PUBLIC SAFETY, CORRECTIONS &amp; SECURITY

# LAW ENFORCEMENT/ CRIMINAL INVESTIGATIONS PATHWAY



*This pathway is designed to provide students with career-focused educational opportunities in various public safety fields. Each course has elements which cover tactics, methods, and skills utilized in law enforcement and other public safety organizations.*

## PATHWAY COURSES

- Introduction to Law, Public Safety, Corrections, and Security
- Criminal Justice Essentials
- Criminal Investigations

## RECOMMENDED COURSES

- Accounting
- Anatomy
- Any health care science course
- Introduction to Business and Technology
- World Language
- Forensics Science Elective
- Legal Environment of Business
- Wildlife Management
- Work-Based Learning

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Criminal Justice Technology
- Law Enforcement Technician

### COLLEGES/UNIVERSITIES

- Criminal Justice
- Criminology
- Pre-law

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Corrections Officer

Moderate-Term On-the-Job Training needed  
\$27,498 annual salary  
470 annual average openings in Georgia

### Forensic Science Technician

Associate Degree needed  
\$35,818 annual salary  
20 annual average openings in Georgia

### Lawyer

First Professional Degree needed  
\$115,960 annual salary  
460 annual average openings in Georgia

### Police and Sheriff's Patrol Officer

Long-Term On-the-Job Training needed  
\$35,402 annual salary  
910 annual average openings in Georgia

## ADDITIONAL CAREER CHOICES

Attorney  
Bailiff  
Border Patrol  
Correctional Officer/Jailer  
Crime Scene Investigator  
Detective  
Dispatcher and Communications Officer  
Forest Ranger  
Game Warden  
Judge  
Paralegal  
Parole Officer  
Police Officer  
Private Detective and Investigator  
Private Security Guard  
Probation Officer  
Sheriff's Deputy  
Special Agent  
State Trooper



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

- Judge
- Judicial Law Clerk
- Clerk of Courts
- Bankruptcy Lawyer
- Immigration Lawyer
- Corporate Law
- Military Lawyer
- Civil Rights Attorney
- Criminal Defense Attorney
- Insurance Defense Lawyer
- Personal Injury Attorney
- Employment Lawyer
- Private Practice Lawyer
- Trial Lawyer
- Family and Divorce Lawyer
- IT Lawyer
- Environmental Lawyer
- Real Estate Lawyer
- Law Professor (law school)
- High School Law Teacher
- College Law Instructor
- Police Academy Instructor
- Contract Administrator

**TECHNICAL CAREERS**

- Paralegal
- Law Firm Administrator
- Legal Career Counselor
- Real Estate Closing specialist
- Assistant Court Clerk
- Court Reporter
- Mediator
- Arbitrator
- Jury Consultant

**ENTRY LEVEL CAREERS**

- Court Messenger
- File Clerk/Runner
- Document Coder
- Legal Assistant
- Legal Administrative Assistant
- Legal Receptionist
- Court Clerk Deputy
- Corporate Compliance Specialist
- Legal Recruiter
- E-discovery professional
- Legal Researcher
- Lexis/Nexis sales and recruiting

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

# LEGAL SERVICES



**Community Hero**

**PENNY A. PENN**

**District Attorney at  
Bell-Forsyth Judicial Circuit,  
Lawyer**

**Job Description**  
Oversee a staff of twenty-six, responsible for the prosecution of felony crimes. Represent the State in court proceedings that include hearings and jury trials.

**High School**  
Lake Braddock Secondary School,  
Burke, VA

**Career Training and Certificates**  
Law degree

**First Job**  
Law Firm Administrative  
Assistant

**Find Your Passion!**



## LAW, PUBLIC SAFETY, CORRECTIONS &amp; SECURITY

# LEGAL SERVICES/ APPLICATIONS OF LAW PATHWAY



Law, public safety, corrections, and security workers plan, manage and provide legal, public safety, security, and protective services. Occupations are numerous and represent multiple levels of education and skills. Courses are designed to provide students with the understanding of the various services which ensure the proper function of our nation's legal system. Job openings will stem from employment growth attributable to the desire for increased corporate, industrial and homeland security. Also, a more security-conscious society and concern about drug-related crimes should contribute to the increasing demand.

## PATHWAY COURSES

- Introduction to Law, Public Safety, Corrections and Security
- Essentials of Legal Services
- Applications of Law

## RECOMMENDED COURSES

- American Government/Civics
- Any World Language
- Introduction to Cybersecurity
- Introduction to Digital Technology
- Journalism
- Psychology

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Paralegal Studies
- Legal Assistant
- Court Reporting
- Public Safety Training

### COLLEGES/UNIVERSITIES

- Criminal Justice/Criminology
- Emergency Management/Homeland Security
- Law Enforcement Administration
- Police Science
- Pre-Law leading to Law School

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Attorneys

Advanced Degree needed  
\$137,700 annual salary  
690 annual average openings in Georgia

### Court Reporters

Some College/No Degree Required  
\$51,300 annual salary  
40 annual average openings in Georgia

### Paralegals and Legal Assistants

Bachelor Degree needed  
\$45,300 annual salary  
360 annual average openings in Georgia

## ADDITIONAL CAREER CHOICES

Correction Officers & Jailers

Criminal Investigators

EMTs & Paramedics

Firefighters

Information Security IT Specialists

Police Officers

Public Safety Communication

Security & Protective Services



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

**PROFESSIONAL CAREERS**

- Mechanical Engineer
- CNC Applications Engineer
- Manufacturing Engineer
- Product Design Engineer
- Industrial Systems Engineer
- Biomedical Engineer
- Materials Engineer
- Aerospace Engineer
- Nuclear Engineer

**TECHNICAL CAREERS**

- CNC Machining
- Machinist
- CNL Programmer
- PLC Programmer
- Electrician
- Engineering Technician
- Automotive Technician
- Aerospace Technician
- Shop Supervisor
- Tool Maintenance Technician

**ENTRY LEVEL CAREERS**

- Tool Maker Apprentice
- Tool and Die Repair Technician
- Grinding Machine Tool Setter
- Maintenance Technician
- Machinist /Machinist Apprentice
- CNC Set Up Handler/Technician
- Milling Machine Tool Operators
- Turning Machine Tool Operators
- CNC Machine Tool Operators

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

# ENGINEERING, MECHATRONICS & MANUFACTURING

**Roots:**

- Employment
- Target
- Resumé
- Interview
- Trade Information
- Leadership
- Contacts
- Job Experience
- Skills
- Knowledge

*Find Your Passion!*

**Community Hero**

**RICK YOTHER**  
First Class Transformer Repairman at General Electric

**Job Description**

- Welding, Brazing, and Wiring
- Mechanical and Electrical Systems
- Safety Implementation
- New Employee Training

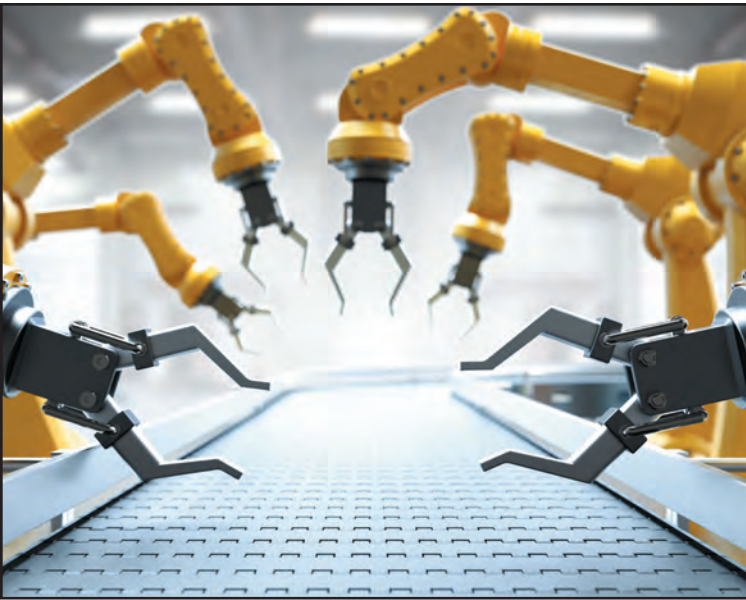
**High School**  
Forsyth County High School

**Career Training and Certificates**

- Welding Certification
- OSHA Training
- PCB Awareness Training
- Asbestos Training

**First Job**  
Chevron Gas Attendant





*Mechatronics is a diverse field. It encompasses many inter-related disciplines including Electronics, Mechanics, Fluid Power, Electrical Control Systems, Programmable Logic Controllers (PLC), Computers, and Robotics. Mechatronics is a term which includes the above disciplines and takes an integrated approach to their study. People employed in the mechatronics field deal with automated systems in a wide variety of applications. They also deal with related professional and technical support activities such as production planning and control, maintenance, and engineering.*

#### **PATHWAY COURSES**

- Introduction to Mechatronics
- AC Theory, Electric Motors, and Hydraulic Systems
- Semiconductors Mechanical Systems, and Pump and Piping Systems

#### **RECOMMENDED COURSES**

- Advanced Math
- Physics
- Foundations of Engineering and Technology
- Intro to Digital Technology

#### **POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**

- 4-Year Universities/Colleges
- 2-Year Colleges
- Technical Colleges
- State Registered Apprenticeships
- Special Purpose Schools
- On-the-Job Training
- Military

#### **CAREER AND TECHNICAL STUDENT ORGANIZATIONS**



## **MANUFACTURING**

# **MECHATRONICS PATHWAY**

### **TOP CAREER CHOICES**

#### **Industrial Engineer**

Bachelor's Degree  
\$76,880 annual salary

#### **Industrial Engineering Technician**

Associate's Degree  
\$48,330 annual salary

#### **Industrial Machinery Mechanics**

On-Job-Training  
\$42,500 annual salary

### **ADDITIONAL CAREER CHOICES**

Chemical Plant & System Operators

Commercial & Industrial Equipment Repairers

Computer User Support Specialists

Electrical and Electronics Repairers

Electronics Engineering Technicians

Industrial Engineers

Industrial Engineering Technicians

Industrial Machinery Mechanics



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

**PROFESSIONAL CAREERS**

- Social Media Director
- Senior Optimization Specialist
- Director of Public Relations
- Chief Marketing Officer
- Chief Executive Officer
- Professional Sales Director
- Marketing Research Analyst
- Creative Director
- Chief Financial Officer
- Marketing Consultant
- Strategist
- Buyer
- Brand Manager

**TECHNICAL CAREERS**

- Assistant Sales Manager
- Graphic Designer
- Digital Marketing Coordinator
- Marketing Research Assistant
- Assistant Buyer or Manager
- Assistant Account Executive
- Visual Merchandising Coordinator
- Event Planner
- Media Coordinator
- Content Marketing Specialist
- Sales Representative
- Search Engine Optimization Specialist

**ENTRY LEVEL CAREERS**

- Sales Associate
- Public Relations Assistant
- Brand Ambassador
- Social Media Influencer
- Customer Relations Representative
- Social Media Assistant
- Marketing Assistant
- Retail Sales
- Call Center Coordinator
- Marketing Research Data Collector
- Copywriter
- Promotions Assistant

**MARKETING**

*Find Your Passion!*

**Community Hero**

**SHAWN LAFAVE, CAS**

**President/CEO at North Georgia Promotions**

**Job Description**  
Small Business Owner monitoring business performance and looking for ways to increase efficiencies as well as sales growth.

**High School**  
M.D. Bradford High School

**Career Training and Certificates**

- Master Advertising Specialist (MAS)
- Certified Advertising Specialist
- Certified Senior Advisor
- National Faculty facilitating for Social Security, Long Term Care, Medicare and Medicaid
- Certified Long Term Care Specialist
- Certified Retirement Planning Counselor
- Police Officer Standards and Training - Certified

**First Job**  
Grill Cook at McDonalds





## MARKETING

# FASHION, MERCHANDISING & RETAIL MANAGEMENT PATHWAY



The Fashion Marketing pathway introduces students to the retail industry including the fundamentals of fashion marketing, key marketing concepts essential to every business, types of businesses involved in the industry, and an array of career opportunities. Students will develop skills in such areas as fashion economics, marketing segmentation and target marketing, product selection and buying, and inventory systems. Additionally, students will develop skills necessary for managing the following marketing elements: pricing, visual merchandising, advertising, special promotions, professional sales, and customer service.

**PATHWAY COURSES**

- Marketing Principles
- Fashion, Merchandising, and Retailing Essentials
- Advanced Fashion, Merchandising, and Retailing

**RECOMMENDED COURSES**

- Any Business and Computer Science course
- Marketing and Management
- Work-Based Learning
- World Language

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES****TECHNICAL COLLEGES**

- Business Management
- Cosmetics and Fragrance Marketing
- Interior Design
- Retail Manager
- Retail Merchandise Management
- Sales Professional Certificate
- Visual Merchandising Associate Certificate

**COLLEGES/UNIVERSITIES**

- Advertising and Marketing Communications
- Fashion Design
- Fashion Journalism
- Fashion Marketing and Management
- Public Relations
- Textile Development and Marketing

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS****TOP CAREER CHOICES****Advertising and Promotions Manager**

Bachelor Degree needed  
\$100,300 annual salary

**Wholesale and Retail Buyers**

Bachelor Degree needed  
\$58,800 annual salary  
80 annual average openings in Georgia

**Online Merchants**

Bachelor Degree needed  
\$66,000 annual salary

**ADDITIONAL CAREER CHOICES**

Brand Managers  
Divisional Merchandise Managers  
Entrepreneurs/Company Owners  
Fashion Designers  
Financial Analysts  
General Merchandise Managers  
Merchandise Analysts  
Manufacturer's Sales Representatives  
Manufacturer's Store Coordinators  
Product Developers  
Retail buyers  
Visual Merchandisers  
Work-Based Learning



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



Students develop knowledge and skills in the foundational areas of marketing (economics, human relations and business basics) and the functional areas of marketing (product and service planning, marketing information management, purchasing and pricing, selling and promotion, risk management, financing and distribution/logistics), as well as international marketing, management and entrepreneurship.

#### PATHWAY COURSES

- Marketing Principles
- Marketing and Entrepreneurship
- Marketing Management

#### RECOMMENDED COURSES

- Any Business and Computer Science Course
- Sports and Entertainment Marketing
- Work-Based Learning
- World Language

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

##### TECHNICAL COLLEGES

- Business Administration
- Business Management
- Entrepreneurship
- Expert Sales Management
- Fashion Design and Marketing
- Retail and Merchandising

##### COLLEGES/UNIVERSITIES

- Accounting
- Advertising
- Business Economics
- Communication
- Graphic Arts
- Hospitality Administration
- International Business
- Management
- Marketing
- Professional Sales
- Real Estate
- Risk Management and Insurance

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



#### MARKETING

## MARKETING AND MANAGEMENT PATHWAY

#### TOP CAREER CHOICES

##### Chief Executive

Bachelor Degree plus experience needed  
\$155,168 annual salary  
850 annual average openings in Georgia

##### Human Resources, Training and Labor Relations Specialist

Bachelor Degree needed  
\$53,061 annual salary  
150 annual average openings in Georgia

##### Marketing Manager

Bachelor Degree plus experience needed  
\$94,307 annual salary  
310 annual average openings in Georgia

##### Marketing Research Analyst

Bachelor Degree needed  
\$61,464 annual salary  
210 annual average openings in Georgia

##### Personal Financial Advisor

Bachelor Degree needed  
\$75,754 annual salary  
470 annual average openings in Georgia

#### ADDITIONAL CAREER CHOICES

Advertising Account Executive  
Advertising Executive  
Agent  
Airline Customer Service Agent  
Art Dealer and Director  
Automobile Salesperson  
Barber and Salon Owner  
Brand Manager  
Cashier  
Communications Specialist  
Creative Director  
Customer Service Representative  
Demonstrator and Product Promoter  
Desktop Publisher  
Entertainment Marketer  
Entrepreneur  
Fashion Retailer  
Floral Designer  
Funeral Director  
Insurance Agent  
Interior Designer  
Landscape Architect  
Logistics Specialist  
Market Research Analyst  
Marketing Specialist  
Media Buyer  
Mortgage Broker  
Painter and Illustrator  
Product Development Management  
Public Relations Specialist  
Purchaser  
Real Estate Agent  
Retail Buyer and Salesperson  
Sales Representative  
Sign Maker  
Sports Marketer  
Travel Agent  
Website Designer  
Web Developer



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





## MARKETING

# MARKETING COMMUNICATIONS AND PROMOTIONS PATHWAY



Keen competition should be expected in these highly coveted jobs. Those working in the marketing communications and promotion field coordinate market research, market strategies, sales, advertising, promotion, pricing, product development and public relations activities. Job opportunities available in this field include advertising managers, account executives, creative directors, media directors, promotions managers, marketing managers, product development managers, market research managers, public relations managers and sales managers. These jobs are found in almost every industry, and the number of jobs available is expected to increase faster than average through 2020. College graduates with related experience, a high level of creativity and strong communication skills will have the best job opportunities. Technology is changing the way we communicate and promote goods and services with potential customers. As a result, the more computer related skills one can accumulate, the better his/her employment opportunities in this industry.

**PATHWAY COURSES**

- Marketing Principles
- Promotional and Digital Marketing
- Integrated Marketing Communications

**RECOMMENDED COURSES**

- Any Business and Computer Science Course
- Entrepreneurship
- Marketing Management
- Work-Based Learning
- World Language

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES****TECHNICAL COLLEGES**

- Business Administration
- Expert Sales Management
- Project Management

**COLLEGES/UNIVERSITIES**

- Accounting
- Advertising
- Business Economics
- Communication
- Graphic Arts
- International Business
- Management
- Marketing
- Professional Sales

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS****TOP CAREER CHOICES****Advertising and Promotions Manager**

Bachelor Degree needed  
\$102,602 annual salary  
71 annual average openings in Georgia

**Public Relations Specialists**

Bachelor Degree needed  
\$57,399 annual salary  
112 annual average openings in Georgia

**Market Research Analysts**

Bachelor Degree needed  
\$66,503 annual salary  
519 annual average openings in Georgia

**ADDITIONAL CAREER CHOICES**

Advertising and Promotion Managers Search

Business Teachers/Post-Secondary

Green Marketers

Marketing Managers

Marketing Strategists

Public Relations Specialists Advertising

Sales Agents/Sales Managers

Sales Representatives



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

**PROFESSIONAL CAREERS**

- Mechanical Engineer
- CNC Applications Engineer
- Manufacturing Engineer
- Product Design Engineer
- Industrial Systems Engineer
- Biomedical Engineer
- Materials Engineer
- Aerospace Engineer
- Nuclear Engineer

**TECHNICAL CAREERS**

- CNC Machining
- Machinist
- CNL Programmer
- PLC Programmer
- Electrician
- Engineering Technician
- Automotive Technician
- Aerospace Technician
- Shop Supervisor
- Tool Maintenance Technician

**ENTRY LEVEL CAREERS**

- Tool Maker Apprentice
- Tool and Die Repair Technician
- Grinding Machine Tool Setter
- Maintenance Technician
- Machinist /Machinist Apprentice
- CNC Set Up Handler/Technician
- Milling Machine Tool Operators
- Turning Machine Tool Operators
- CNC Machine Tool Operators

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

# ENGINEERING, MECHATRONICS & MANUFACTURING

Employment  
Resumé  
Interview  
Trade Information  
Target  
Leadership  
Job Experience  
Contacts  
Skills  
Knowledge

*Community Hero*

**RICK YOTHER**  
First Class Transformer Repairman at General Electric

**Job Description**

- Welding, Brazing, and Wiring
- Mechanical and Electrical Systems
- Safety Implementation
- New Employee Training

**High School**  
Forsyth County High School

**Career Training and Certificates**

- Welding Certification
- OSHA Training
- PCB Awareness Training
- Asbestos Training

**First Job**  
Chevron Gas Attendant

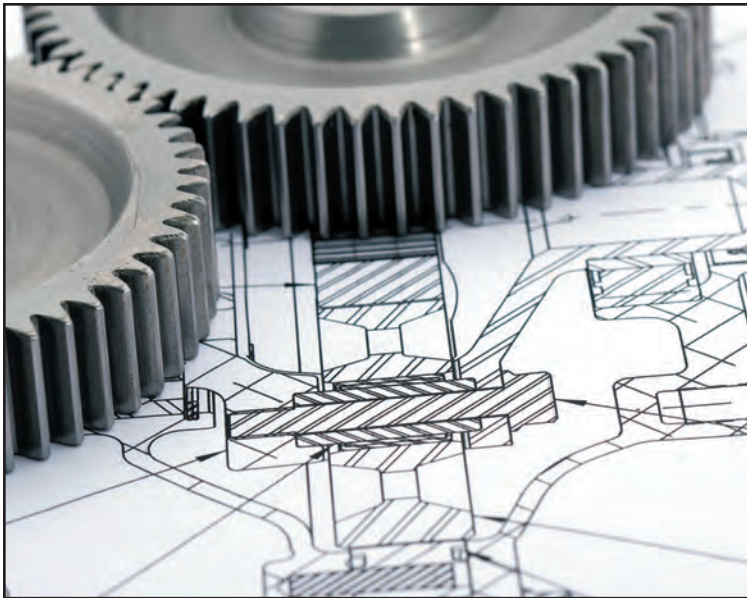
*Find Your Passion!*





## SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

# ENGINEERING AND TECHNOLOGY PATHWAY



*Introduction to Engineering Design (IED) is a high school level course that is appropriate for 9th or 10th grade students who are interested in design and engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB-learning challenges students to continually hone their interpersonal skills, creative abilities and understanding of the design process. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.*

### PATHWAY COURSES

- Foundations of Engineering and Technology
- Engineering Concepts
- Engineering Applications

### RECOMMENDED COURSES

- Algebra/Geometry
- Trigonometry/Physics

### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

#### TECHNICAL COLLEGES

- Electrical Utility Technology
- Engineering Technology
- Industrial Systems Technology
- Mechatronics Technology
- Military
- On-the-Job Training
- Special Purpose Schools
- State Registered Apprenticeships
- Wireless Engineering Technology

#### COLLEGES/UNIVERSITIES

- See [www.GAcollege411.org](http://www.GAcollege411.org) for additional information.

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



### TOP CAREER CHOICES

#### Civil Engineer

Bachelor Degree needed  
\$56,259 annual salary

#### Electrical Engineer

Bachelor Degree needed  
\$52,990 annual salary

#### Industrial Engineer

Bachelor Degree needed  
\$47,720 annual salary

#### Materials Engineer

Bachelor Degree needed  
\$51,420 annual salary

#### Mechanical Engineer

Bachelor Degree needed  
\$47,900 annual salary

### ADDITIONAL CAREER CHOICES

Civil Engineer

Designer

Drafter

Machinist

Manufacturing

Mechanical Engineer

Quality Control Inspector



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**PROFESSIONAL CAREERS**

- Airport Manager
- Customs Agent
- Aerospace Engineer
- Border Patrol Pilot
- Sky Marshall
- Commercial Pilot
- Aviation Medical Examiner
- Aviation Attorney
- Meteorologist

**TECHNICAL CAREERS**

- Air Traffic Controller
- Fire and Crash Rescue Team Member
- Flight Dispatcher
- Aeronautical Engineer or Drafter
- Aircraft Assembler
- Airframe Equipment and Engine
- Assembly Worker
- Aerial Firefighter
- Flight Attendant
- Aviation Safety Inspector
- Aircraft Maintenance Technician
- Flight Instructor

**ENTRY LEVEL CAREERS**

- Air Freight or Cargo Agent
- Baggage or Cargo Handler
- Operations Manager Overseeing
- Fuel Sales
- Passenger Service Agent
- Ramp Service Personnel
- Ticket or Travel Agent
- Skycap
- Quality Control Technician
- Utility Company Aerial Surveillance
- Drone Operator
- Crop Dusting

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# AVIATION



**Find Your Passion!**

**Community Hero**

**TROY WHEELER, JR.**

**Professional Pilot,  
First Officer, President at  
Lanier Flight Center, LLC**

**Job Description**  
Provide unparalleled flight service and value for our charter customers with the highest dedication to safety, innovation and teamwork. Develop skills to become safe, competent, and confident professionals in flying.

**High School**  
North Fulton

**Career Training and Certificates**

- Student Pilot Certificate
- Private Pilot License
- Instrument Rating
- Commercial Pilot License
- Multi-Engine Rating
- Airline Transport Pilot Certificate
- Airman Check-ride Approved (Charter Division)

**First Job**  
Server at Shoney's Restaurant

Roots: Employment, Target, Interview, Skills, Trade Information, Leadership, Job Experience, Knowledge, Contacts, Resumé.



## TRANSPORTATION, DISTRIBUTION, &amp; LOGISTICS

## AEROSPACE FLIGHT OPERATIONS PATHWAY



Those employed in flight operations include aircraft pilots, flight engineers, flight attendants and air traffic controllers. The demand for these job positions is projected to increase as growth in world travel rises and many employed in the field are expected to retire. Job opportunities will be highest among passenger and cargo airline companies with the best job prospects being regional airlines and low-cost carriers. This pathway will introduce students to the basics of aircraft navigation and the communication methods necessary for safe aircraft operations. Additionally, students will gain a meteorological foundation for understanding the forecasting and charting of weather patterns as applied to the air transportation industry.

### PATHWAY COURSES

- Fundamental of Aerospace
- Flight Operations I
- Flight Operations II

### RECOMMENDED COURSES

- Any Business or Marketing Course
- Any World Language
- Any Engineering Course
- Chemistry/Physics/Environmental Science
- Human Geography

### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

- Aerospace Engineering
- Aviation Management
- Professional Flight/Aeronautics

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS



### TOP CAREER CHOICES

#### Air Traffic Controllers

Associate's Degree  
\$124,540 annual salary  
40 annual average openings in Georgia

#### Airfield Operations Specialists

High School Diploma  
\$44,500 annual salary  
40 annual average openings in Georgia

#### Commercial Pilots

Bachelor's Degree preferred/commercial pilot's license required  
\$111,930 annual salary  
80 annual average openings in Georgia

### ADDITIONAL CAREER CHOICES

Aerospace Engineers  
Aircraft Cargo Handling Supervisors  
Airfield Operations Specialists  
Aviation Safety Specialists  
Avionics Inspectors  
Flight Attendants  
Operations Technicians



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>

## TRANSPORTATION, DISTRIBUTION, &amp; LOGISTICS

# DRONE/UNMANNED AIRCRAFT SYSTEMS PATHWAY



*The Unmanned Aircraft Systems Pathway provides students a fundamental knowledge base in aviation history and regulations, the basics of flight, aerospace careers, and factors influencing work. This pathway provides a foundation for a student to earn a commercial license to pilot an unmanned aircraft system. Topics covered will be weather and effects of weather on an unmanned aircraft, types and uses of unmanned aircraft, pre-flight planning and checks, FAA requirements, technology and remote instruction, radio communications, and more. Students will have an opportunity to earn their remote pilot license by taking and successfully passing the FAA Part 107 Exam.*

## PATHWAY COURSES

- Fundamentals of Aerospace
- Flight Operations I
- Unmanned Aircraft Systems

## RECOMMENDED COURSES

- Any Business or Marketing Course
- Any World Language
- Any Engineering Course
- Chemistry/Physics/Environmental Science
- Human Geography

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- Drone Technology
- FAA Part 107 Certificate
- Unmanned Aircraft Systems Operations
- Drone Training
- Unmanned Aerial Systems

### COLLEGES/UNIVERSITIES

- Aeronautics and Engineering
- Aerospace Science
- Air Traffic Management
- Aviation Management
- Aviation Safety and Operations
- Unmanned Aircraft Systems Science

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

**Unmanned Aircraft Vehicle (UAV) Pilot**  
\$80,415 annual salary

**Public Safety/Emergency Services**  
\$77,892 annual salary

**Surveyors and Mapping Technicians**  
\$66,680 annual salary

**Television, Video and Film Camera Operators and Editors**  
\$61,900 annual salary

**Photographers**  
\$41,280 annual salary

## ADDITIONAL CAREER CHOICES

Unmanned Aircraft Vehicle (UAV) Pilot

Public Safety/Emergency Services

Surveyors and Mapping Technicians

Television, Video, and Film Camera

Operators and Editors

Photographers

Delivery Services

Insurance and Claim Research

Lighting Technician

Agriculture

Delivery Services

Engineering

Insurance and Claim Research

Mining Inspections

Research Hazardous Material Inspections

Nuclear Power Plant Inspections

Sewer and Cave Inspections

Telecommunications and Utility Companies



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**PROFESSIONAL CAREERS**

- Field Service Engineer
- Fixed Ops Director
- Service Manager
- Product Engineer
- Quality Control Engineer
- District Manager
- Technical Assistant
- Automotive Instructor
- Testing Engineer
- Business Admin

**TECHNICAL CAREERS**

- Journeyman Technician
- Diagnostician
- Heavy Line Technician
- Service Writer
- Service Manager
- Fixed Ops Manager/Director
- Shop Fireman
- Warranty Admin
- Assistant Service Manager
- Express Manager

**ENTRY LEVEL CAREERS**

- Parts Center Representative
- Lube Technician
- Porters
- Express Technician
- Lightline Technician
- Tint Salesman
- Detail Technician
- Body Shop Prep
- Paint Prep
- Parts Deliverer

Forsyth County Schools  
**COLLEGE & Career**  
 DEVELOPMENT

# AUTOMOTIVE



**Find Your Passion!**

*Community Hero*

**JOHN H. RICHARDS IV**

**Service Manager at Troncalli Chrysler, Dodge, Jeep and Ram**

**Job Description**  
Manage Service, Rental and Detail Departments

**High School**  
Byron Center High School

**Career Training and Certificates**  
Certifications with General Motors, Isuzu, Mitsubishi, Subaru and Chrysler, Jeep, Dodge and Ram. Training and schooling completed for Certified Service Manager, Service Advisor and Auto Technician

**First Job**  
Service Agent for National Car Rental

## TRANSPORTATION, DISTRIBUTION, &amp; LOGISTICS

# AUTOMOTIVE TECHNOLOGY PATHWAY



*The auto mechanics of the past were self-taught, learning from local auto shops or dealerships. Employers are now hiring employees with good people skills and backgrounds in electronics, computers and communications, along with math and problem-solving skills. This program will teach “head skills” and “hand skills” to prepare the student for the world of automotive technology careers and to meet the needs of prospective employers.*

## PATHWAY COURSES

- General Automotive Technology 1
- General Automotive Technology 2
- General Automotive Technology 3
- Advanced Automotive Technology 4
- Advanced Automotive Technology 5
- Advanced Automotive Technology 6
- Automotive Service Technology Internship 1
- Automotive Service Technology Internship 2
- Automotive Service Technology Internship 3

## RECOMMENDED COURSES

- Advanced Algebra/Trigonometry
- Business Essentials
- Computer Applications
- Engine Performance Concepts
- Entrepreneurship
- Heating Ventilation and Air Conditioning Concepts
- Money Management
- Physics
- Preventative Maintenance Inspection
- Work-Based Learning
- World Language

## POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

### TECHNICAL COLLEGES

- ASE
- Automotive Collision Repair
- Automotive Technology/Technician
- Industrial Truck (Fork Lift) Maintenance Technician
- Motorsports Vehicle Technology
- Welding

### COLLEGES/UNIVERSITIES

- Automotive Engineering
- Business Management
- Education

## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



## TOP CAREER CHOICES

### Automotive Service Technician and Mechanics

Post-Secondary Vocational Certification  
\$34,549 annual salary  
1,000 annual average openings in Georgia

### Bus and Truck Mechanic/Diesel Engine Specialist

Post-Secondary Vocational Certification  
\$36,504 annual salary  
380 annual average openings in Georgia

### Electrical and Electronics Repairers, Commercial and Industrial Equipment

Post-Secondary Vocational Certification  
\$47,611 annual salary  
130 annual average openings in Georgia

### Vocational Teacher, Post-Secondary School

Bachelor Degree or higher plus work experience  
\$44,637 annual salary  
250 annual average openings in Georgia

## ADDITIONAL CAREER CHOICES

Auto Manufacturer Sales  
Auto Manufacturer Service  
Auto or Body Technician  
Automotive Engineer  
Automotive Mechanist  
Automotive Parts Sales  
Automotive Sales  
Body Shop Manager  
Dealership or Shop Owner  
DOT Salvage Inspector  
Insurance Adjuster  
Parts Professional  
Quality Control Technician  
Retail  
Service Advisor  
Service Director Dealership  
Specialized Technician Teacher  
Technician (ASE Certified)  
Warranty Clerk  
Waste Management (EPA)



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>





**WORKFORCE READY** employability skills are transferrable skills and key personal attributes which are highly valued by employers and essential for effective performance in the workplace. Unlike professional or technical skills, these employability skills are generic in nature, rather than job-specific, and are common to all work roles and workplaces across all industry types. Employability skills are also often referred to as employment skills, soft skills, work-readiness skills or foundational skills. They often improve your performance, minimize errors and promote collaboration with your coworkers, enabling you to perform your role more effectively. Employers have high regard for employability skills because they are much harder to teach than job-specific skills. Some employable qualities come naturally, while others can be acquired through education, work or daily practice. Workforce Ready is an employability skills pathway in which you take a deep dive into developing competency and understanding including:

- the significance of work/jobs on individual, family, community, state, nation, and world economies
- development of critical thinking skills related to employment and workforce
- communication in workplace and between workers
- customer service techniques in various work settings
- self-advocacy/self-determination skills related to employment, work-related situations, and personal development
- teamwork practices in various settings
- personal and workplace health and safety
- technology applications
- workplace comprehension—reading and listening
- dependability in the workplace
- personal financial literacy
- conflict resolution strategies for the workplace
- leadership through Career Technical Student Organizations

Upon completing the third course of Workforce Ready Pathway, you may earn a minimum of two credentials of value—one selected by the district, and one or more selected collaboratively by the student, teacher, and parent based upon student need. The district selected credential of value is an Employability Skills credential. Additional “value added” credentials will support student access to post-secondary education and/or employment, apprenticeship, etc. Students are to be encouraged to earn as many “value added” credentials as necessary to prepare for and reach career goals. They include:

- GeorgiaBEST
- ACT Work Keys National Career Readiness Certificate
- NOCTI Employability Exam – 21st Century Skills/Workplace Skills, Employability Skills, or Workplace Readiness)



## WORKFORCE READY

# WORKFORCE READY PATHWAY

## WORKFORCE READY PATHWAY

is designed to provide you with heavy exposure to all aspects of workplace readiness and employability skills development through:

- Integration of course content into hands-on class activities as applications of the concepts; not to be treated as a unit or separate body of knowledge
- Project-based learning
- Frequent interaction with business & industry; community as subject matter experts, guest speakers, visits/tours, virtual industry tours, job shadowing, internships, work-based learning placements, and jobs.
- Earned credentials of value at the completion of course 3.

## PATHWAY COURSES

Introduction to Career Competencies  
Career Competencies  
Advanced Career Competencies

## CAREER CHOICES

All Careers

## VALUE ADDED CREDENTIAL

The student, teacher, and parent may choose any “value added” credential(s) that will support student access post-secondary and/or employment:

- Employment
- ServSafe
- OSHA-10
- Microsoft Office Specialist
- CPR-First Aid
- ACCUPLACER/SAT/ACT program ready scores
- Any identified Technical Certificate of Credit
- Driver's License or State ID card
- Certified Maintenance Employee (Goodwill)
- Certified Guest Service Professional (Goodwill)
- Customer Service and Sales Certification



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



### INTERNSHIP FORSYTH

is a structured experience that connects a student's career goal and classroom learning with a productive learning environment. Internship Forsyth provides students with opportunities for instruction in occupational skills and career exploration, and guidance in identifying employment and educational goals. Students have the opportunity to connect what they learn in school with work site application.

Internship Forsyth program is designed to provide experiences and activities that support a school to career transition. This simply means that students are allowed to work off campus in the business community in order to learn more about a chosen career. Once a student has met all requirements, the Career Development Coordinator will determine the correct placement for the student. The students will earn one unit of credit for each completed course.

### REQUIREMENTS FOR INTERNSHIP FORSYTH

- 16 years of age or older in good standing with the school system
- A valid picture ID
- A Georgia Driver's License and proof of auto insurance in order to provide your own dependable transportation or ability to provide your own dependable transportation
- On track for graduation and willing to utilize the Internship Forsyth Program as an elective credit
- Career, technical, and agriculture education (CTAE), academic, fine arts, or world language coursework related to a career goal and job placement
- A good attendance and discipline record
- Parental support and consent
- Willing to submit to all health related screenings required by the sponsoring employer (ex. pre-employment drug screenings, etc.)

### CAREER DEVELOPMENT COORDINATORS

The FCS follows the state model where each high school has one Career Development Coordinator. The coordinator is required to attend GADOE trainings, as well as all region meetings. Some responsibilities of the coordinator include: properly placing students in the right course number, finding job or internship placements for students, creating business partnerships, conducting employer/mentor training, visiting jobsites four times annually, using CNet to record all data such as job visits and wage/hour reports, teaching employability skills, coordinating shadow day, being active in community groups such as the Chamber of Commerce.

### SPECIALTIES

## INTERNSHIP FORSYTH

### APPLY ONLINE AT

[www.forsyth.k12.ga.us/ctae](http://www.forsyth.k12.ga.us/ctae)  
or email [vlowe@forsyth.k12.ga.us](mailto:vlowe@forsyth.k12.ga.us)

### INTERNSHIP FORSYTH IS AVAILABLE THROUGH THE FOLLOWING PROGRAMS

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, AV Technology, and Communications
- Business Management and Administration
- Education and Training
- Energy
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Correction and Security
- Manufacturing
- Marketing
- Science, Technology, Engineering and Mathematics (STEM)
- Transportation Distribution and Logistics

### OTHER PATHWAYS

- Advanced Academic Pathways
- Fine Arts Pathways
- World Language Pathways

### HIGH SCHOOL CAREER DEVELOPMENT COORDINATORS

Marelle Bowers

Alliance Academy for Innovation

Hailey Brock

East Forsyth HS and North Forsyth HS

Susan Fagan

Lambert HS

Dianne King

Denmark HS and West Forsyth HS

Nancy Ruff

South Forsyth HS

Lauren Westbrook

Forsyth Central HS



# INTERNSHIP FORSYTH WORK-BASED LEARNING

## Forsyth County Schools

**Internship Forsyth** is a structured experience which connects classroom learning to an engaging job opportunity. Internships can be paid or unpaid. Students are allowed to leave the school campus to intern with local businesses, earning course credit for the experience.



On-Campus Students



Virtual Students



Dual Enrollment Students



### WHY PARTICIPATE IN INTERNSHIP FORSYTH?

- Start focused preparation for college, careers, and today's workforce!
- Gain access to some of the best jobs/internships in the community. Many employers actively seek high school students who are enrolled in Internship Forsyth.
- Stand out when you apply to college - internships catch the eye of admissions counselors.
- Receive internship/work experience directly related to your chosen career pathway.
- Gain marketable skills.

### REQUIREMENTS FOR INTERNSHIP FORSYTH

- Students must have a defined career goal and must have taken or be enrolled in the appropriate related coursework.
- Students must be at least 16 years of age (with reliable transportation).
- Students must have good attendance and grades, positive discipline record, and teacher recommendations.
- **For Additional Information:** Visit a Career Development Coordinator or School Counselor!

## Ready to Apply?

Click the QR Code below or visit <https://www.forsyth.k12.ga.us/ctae!>

### Step 1:

#### REVIEW THE REQUIREMENTS

- Enrolled in Related Coursework
- 16 Years of Age with Reliable Transportation
- Good Attendance and Grades
- Positive Discipline Record
- Good Teacher Recommendations

### Step 2:

#### APPLY FOR INTERNSHIP

- Click on the QR code or link and submit the online application.
- Ensure you have teacher recommendation information completed.

### Step 3:

#### CONNECT WITH CAREER DEVELOPMENT COORDINATOR

- Ensure your contact information is correct on the application.
- Your school's Career Development Coordinator will reach out this Spring to discuss placement options.
- If accepted, you will be notified after Spring Break and be given information about a Student Orientation Meeting. All students are required to attend.
- Coordinators will contact school to add coursework to your schedule.

### Step 4:

#### SECURE AN INTERNSHIP PLACEMENT

- Your application will note if you currently have a placement. Make sure this placement will work for your Career Development Coordinator.
- If you need an internship placement, your Career Development Coordinator will assist you with options close to the beginning of school. Students are expected to obtain their own job.
- You are encouraged to work over the summer on your own for placement availability and options, as placements are not guaranteed.
- Placements can be paid or unpaid.
- Having your own placement is not required prior to the beginning of the school year. You will be given several weeks to explore options in the community.

### Step 5:

#### ATTEND ORIENTATION AND COMPLETE PAPERWORK

- Students will be required to attend an introductory meeting with their Career Development Coordinator at the beginning of the school year.
- Students will meet monthly with their Career Development Coordinator throughout the school year.
- Students will complete required paperwork electronically with their employers at the beginning of the school year.



Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

FOR ADDITIONAL INFORMATION:  
email: [vlowe@forsyth.k12.ga.us](mailto:vlowe@forsyth.k12.ga.us) or visit [www.forsyth.k12.ga.us/ctae!](https://www.forsyth.k12.ga.us/ctae!)

The Forsyth County School District does not discriminate on the basis of race, color, religion, national origin, age, disability or gender in employment decisions or educational programs and activities, including its athletic programs.



### WHAT IS THE APPLICATION PROCESS?

After completing an application, students are selected into the program based on their abilities, aptitudes, and career goals. In addition, students are required to answer essay questions and include teacher and community member references. The selection committee will use all written evidence and data gathered in the application to make their selection. You will be contacted by May 2020 if you are selected into the program.

### WHAT WILL I DO IN THE HONORS MENTORSHIP PROGRAM, AND HOW WILL I BE GRADED?

First, you will be paired with a mentor who is an expert and/or professional in the field of your choice. Once you have been paired, you will begin an internship that will occur 4-5 hours per week for a full school year. In addition, you will complete weekly assignments through itslearning. The majority of your grade will be from your capstone portfolio project, which you will be researching and working on throughout the year.

### DO I ACTUALLY COME TO CLASS EACH DAY?

No. We will have monthly face to face meetings, but all other coursework and communication will happen through a virtual environment via its learning.

### WHAT FIELDS/CAREERS ARE OFFERED IN THE HONORS MENTORSHIP PROGRAM?

We are currently offering any type of career fields. As long as we can secure a community mentor for you to intern with, the possibilities are endless!

### WHO CAN APPLY?

We encourage any rising 11th and 12th grade students who desire a challenging, enriching, and career-based internship opportunity to apply. Student **MUST** be highly motivated and mature to be accepted in to the program.

*Note: Each participant will be responsible for his/her own transportation to the worksite of his/her assigned mentor and to the off-campus classroom.*

### SPECIALTIES

## MENTORSHIP FORSYTH

### APPLY ONLINE AT

[www.forsyth.k12.ga.us/ctae](http://www.forsyth.k12.ga.us/ctae)  
or email [vlowe@forsyth.k12.ga.us](mailto:vlowe@forsyth.k12.ga.us)!

### Mentorship Forsyth is a year-long blended learning experience for 11th and 12th grade students!

Mentorship Forsyth program designed to provide high school students challenging and enriching career-oriented opportunities not usually available within the regular classroom. Selected participants understand that this course replaces an otherwise traditional elective credit. Open to honors level juniors and seniors, the program expands the elective curriculum beyond the school site.

Students will work and study under the direction of a Community Mentor – a person of recognized ability and success in the community. This internship incorporates the student's individual talents and intellectual abilities. The rigorous curriculum and demands of this course require students to be focused, goal-oriented, self-motivated, mature, determined to pursue enriched learning, and passionate about a particular career field.

Selected students understand that they will need to invest a minimum number of hours per week, depending on your Mentorship Forsyth class scheduling, in order to receive full credit for the course. This schedule is flexible and both the student and the mentor determine the weekly meeting times. Other requirements for this course include: providing suggested names and/or specific businesses as potential mentors in the chosen career field; attending all meetings with the Mentorship Forsyth Coordinator and Community Mentor, creating a career portfolio, using technology throughout the course, presenting a culminating capstone project to a panel of community professionals, participating in team-building activities, and working with a Community Mentor Professional in his/her career field.



# MENTORSHIP FORSYTH

## JOB SHADOWING

### Forsyth County Schools

**Mentorship Forsyth** gives motivated, mature students a job shadowing experience designed around the individual student's interest in a specific field or career. Participants will engage with a community mentor and will work with that mentor for the duration of the school year. Mentorships are non-paid experiences in the community. Students are allowed to leave the school campus to job shadow in local businesses and organizations, earning course credit for the experience.



On-Campus Students



Virtual Students



Dual Enrollment Students



#### WHY PARTICIPATE IN MENTORSHIP FORSYTH?

- Start focused preparation for college, careers, and today's workforce!
- Explore your passion for a profession.
- Stand out in a competitive college and job market.
- Seek to gain valuable networking skills and contacts.

#### REQUIREMENTS FOR MENTORSHIP FORSYTH

- Students must be at least 16 years of age (with reliable transportation).
- Students must complete a year-long, career-related capstone project.
- Students must have good attendance and grades, positive discipline record, and teacher recommendations.
- **For Additional Information:** Visit a Career Development Coordinator or School Counselor!

## Ready to Apply?

Click the QR Code below or visit <https://www.forsyth.k12.ga.us/ctae>!

### Step 1:

#### REVIEW THE REQUIREMENTS

- Enrolled in Related Coursework
- 16 Years of Age with Reliable Transportation
- Good Attendance and Grades
- Positive Discipline Record
- Good Teacher Recommendations

### Step 2:

#### APPLY FOR MENTORSHIP

- Click on the QR code or link and submit the online application.
- Ensure you have teacher recommendation information completed.

### Step 3:

#### CONNECT WITH CAREER DEVELOPMENT COORDINATOR

- Ensure your contact information is correct on the application.
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### Step 5:

#### ATTEND ORIENTATION AND COMPLETE PAPERWORK

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Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT

#### FOR ADDITIONAL INFORMATION:

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## SPECIALTIES

# CAREER & TECHNICAL STUDENT ORGANIZATIONS

### CTSO CORE VALUES

CTSOs are co-curricular organizations with leadership programs and competitive events which reflect current curriculum standards and competencies for the instructional programs they serve. Teachers infuse CTSO activities into the instructional activities, thereby helping students see the real world value of their academic studies.

**Commitment** *To create among members, educators and business and industry an adherence and appreciation for all Career, Technical and Agricultural Education Programs.*

**Conviction** *To develop patriotism through knowledge of our nation's heritage and practice of democracy.*

**Education** *To create enthusiasm and empower students to become lifelong learners.*

**Integrity** *To deal honestly and fairly with one another.*

**Leadership** *To develop leadership abilities through participation in educational, professional, community and social activities.*

**Professionalism** *To promote high standards in career ethics, workmanship, scholarship and safety.*

**Recognition** *Appreciation of the value of achievement.*

**Service** *To cultivate a desire to contribute to the benefit and welfare of others*

**Teamwork** *To enhance the ability of students to plan together, organize and carry out worthy activities and projects through the use of the democratic process.*



CTI  
Career and Technical Instruction

The mission of Georgia CTI is to provide meaningful leadership and employment experiences for students with disabilities through career, technical and agricultural education courses.

**Applicable Pathways:** All CTAE Career Clusters and Pathways



DECA  
Distributive Education Clubs of America

The mission of DECA, an Association of Marketing Students, is to prepare emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe.

**Applicable Pathways:** Marketing and Management • Fashion Marketing • Sports and Entertainment Marketing • Marketing Communications and Promotion • Hospitality and Tourism • Finance • Business Management and Administration



FBLA  
Future Business Leaders of America

The mission of Georgia FBLA is to bring business and education together in a positive working relationship through innovative leadership and career development programs.

**Applicable Pathways:** Accounting • Computer Science • Cybersecurity • Entrepreneurship • Financial Services • Financial Technology • Game Design • Human Resources Management • Networking • Programming • Web Development





## SCHOOL KEY SYSTEM

Throughout this book, a school key system is used to indicate which programs, classes, and clubs are offered at each school.

● Alliance Academy for Innovation	● Lambert High School
● Denmark High School	● North Forsyth High School
● East Forsyth High School	● South Forsyth High School
● Forsyth Central High School	● West Forsyth High School
● Forsyth Virtual Academy	

## SPECIALTIES

# CAREER & TECHNICAL STUDENT ORGANIZATIONS



**FCCLA**  
Family, Career, and Community  
Leaders of America

**The mission of FCCLA** is to promote personal growth and leadership development through family and consumer sciences education. Focusing on the multiple roles of family member, wage earner and community leaders, members develop skills for life through -- character development, creative and critical thinking, interpersonal communication, practical knowledge, and career preparation.

**Applicable Pathways:** Culinary Arts • Early Childhood Education • Fashion • Interiors • Nutrition and Food Science • Teaching as a Profession • Textiles



**HOSA**  
Health Occupations Students  
of America

**The mission of HOSA** is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development for all health science technology education students, therefore, helping students to meet the needs of the health care community.

**Applicable Pathways:** Biotechnology Research & Development • Emergency Medical Responder • Health Information Technology • Phlebotomy • Sports Medicine • Therapeutic Services



**FFA**  
An Association of Agricultural  
Students

**The mission of FFA, Future Farmers of America**, is to make a positive difference in the lives of young people by developing their potential for premier leadership, personal growth, and career success through agricultural education.

**Applicable Pathways:** Agriculture Leadership • Animal Science • Companion Animal Systems • Environmental Agriculture Systems • Landscape Management Systems • Veterinary Science



**SkillsUSA**  
Students Taking Action  
with Recognition

**The mission of SkillsUSA** is to help its members become world class workers, leaders and responsible American citizens. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel.

**Applicable Pathways:** Animation and Digital Media • Architectural Drawing and Design • Automotive Technology • A/V, Technology & Film • Aviation Maintenance • Carpentry/Construction • Cosmetology • Firefighting • Flight Operations • Graphic Design • Law Enforcement/Criminal Investigations • Legal Services/Applications of Law • Personal Care Services



**FIRST ROBOTICS**  
For Inspiration and Recognition  
of Science and Technology

**The mission of FIRST Robotics** is to inspire young people to be science and technology leaders and innovators, by engaging them in exciting mentor-based programs that build science, engineering, and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

**Applicable Pathways:** Engineering • Mechatronics



**TSA**  
Technology Student Association

**The mission of the Technology Student Association** is learning to lead in a technical world. TSA enhances personal development, leadership, and career opportunities in STEM, whereby members apply and integrate these concepts through intracurricular activities, competitions, and related programs.

**Applicable Pathways:** Energy Systems • Engineering • Mechatronics



Throughout career and technical education curriculum in Forsyth County, occupational dress codes are studied as part of the pathway. In addition, students are taught and shown examples of proper interview attire in preparation for community Mock Interview Weeks, CTSO events, scholarship interviews, graduation ceremonies, and other important times during their high school careers. Because of the emphasis placed on appropriate dress, all high schools implement Dress for Success Days several times each school year. Overall, this program seeks to remind students that clothing and appearance are important parts of making a good impression.

#### DRESS FOR SUCCESS DAYS ALLOW STUDENTS TO:

- Foster confidence and continue to develop a positive self-image
- Understand the importance of dressing well for an interview
- Analyze various types of attire for the workplace
- Describe components of acceptable dress for an interview
- Explain various definitions of business casual dress and discuss why companies have different definitions of business casual

#### ESSENTIAL COMPONENTS OF DRESS FOR SUCCESS DAYS:

- **Campus Impact:** Students around the school campus not involved in a career pathway or CTSO learn more about the importance of looking your best!
- **Family/Community Connections:** Local business/industry are able to demonstrate and speak to classes about proper interview attire and bring samples for students to see.
- **CTSO Connection:** Students learn how proper dress will impact them in student competition related to their career pathway.
- **Service Learning Projects:** Students are encouraged to organize service learning projects around dressing successfully. This may come through organizing a professional interview clothing drive or selling awareness bracelets, stickers, etc. to support their CTSO.



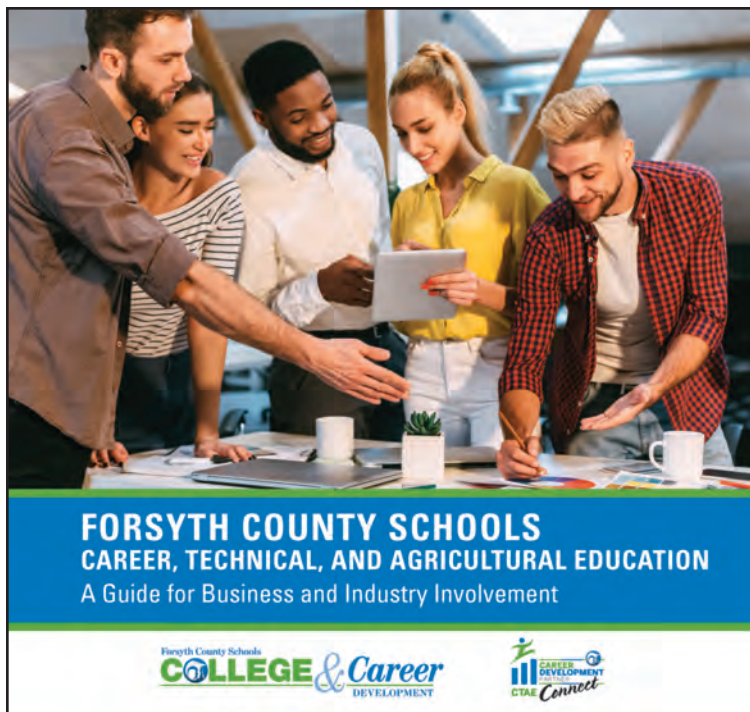
#### SPECIALTIES

## DRESS FOR SUCCESS

FOR ADDITIONAL INFORMATION  
Contact [vlowe@forsyth.k12.ga.us](mailto:vlowe@forsyth.k12.ga.us) or  
visit [www.forsyth.k12.ga.us/ctae](http://www.forsyth.k12.ga.us/ctae) today!







Forsyth County Schools is committed to building a strong base of business, industry, and community support that can help provide career development opportunities for our students! When our community becomes a Career Development Partner, they allow students to go beyond the classroom and into the community to consider different career fields, learn basic workplace behavior, and develop specific skills within an industry. Through these experiences, students can apply what they are learning in the classroom as they prepare to transition into post-secondary education and training.

#### COMMUNITY PARTNERSHIP OPPORTUNITIES:

Career pathways provide seamless instruction in career and technical education that connects academic and technical skills to future educational and career opportunities. Successful completion of a career pathway also allows students to earn industry credentialing required in today's job market and other benefits such as:

- *blending rigorous academic/technical preparation*
- *discovering their interests and passions*
- *utilizing career development services*
- *experiencing all aspects of a business or industry*
- *planning for transitions into post-secondary opportunities*

Because a collaborative cannot happen alone, we need your help! Our strategic direction, Workforce Forsyth, guides the district in continuing to develop Georgia's most comprehensive and innovative roadmap for developing and retaining a talented workforce. Our business community and learning organizations have actively come together to provide a seamless connection from secondary to post-secondary which supports our current workforce needs! Please consider how your organization can partner with Forsyth County Schools!



[www.forsyth.k12.ga.us/ctae](http://www.forsyth.k12.ga.us/ctae)

#### SPECIALTIES

## BUSINESS AND INDUSTRY INVOLVEMENT

#### FOR ADDITIONAL INFORMATION

[www.forsyth.k12.ga.us/ctae](http://www.forsyth.k12.ga.us/ctae)  
or email [vlowe@forsyth.k12.ga.us](mailto:vlowe@forsyth.k12.ga.us)!

#### CAREER DEVELOPMENT OPPORTUNITIES FOR PARTICIPATION

- Certification/Curriculum Advice
- Job Shadowing/Field Trips
- College & Career Fair Participation
- Internships
- Mentorships
- Mock Interviews
- Classroom Speaker
- Teacher Externships
- Advisory Council
- Facilities/Equipment Advice
- CTSO Support
- Competitive Event Judging
- Awards/Recognition Support
- Career Transitions for Students with Special Needs and/or At-Risk Students





# JA DISCOVERY CENTERS

## ja biztown & ja finance park

### ANNUAL IMPACT

STUDENTS	80,000
VOLUNTEERS	15,000
TEACHERS	5,000
PARTNERS	300

### TOTAL IMPACT TO DATE

STUDENTS	170,000+
LEARNING HOURS	4,700,000+

### SCHOOL SYSTEM PARTNERS

ATLANTA PUBLIC SCHOOLS
CALHOUN CITY SCHOOLS
DAWSON COUNTY SCHOOLS
DEKALB COUNTY SCHOOLS
FORSYTH COUNTY SCHOOLS
FULTON COUNTY SCHOOLS
GAINESVILLE CITY SCHOOLS
GWINNETT COUNTY PUBLIC SCHOOLS
HALL COUNTY SCHOOLS
LUMPKIN COUNTY SCHOOLS
MARIETTA CITY SCHOOLS

### PRESENTED BY:



UNG UNIVERSITY OF NORTH GEORGIA

georgia.ja.org | @jageorgia

### OVERVIEW

Through the JA Chick-fil-A Foundation Discovery Center in Atlanta, the JA Discovery Center at Gwinnett and the Mike & Lynn Cottrell JA Discovery Center at North Georgia, a quarter of all middle school students in Georgia participate in the unique and innovative learning delivered by JA BizTown and JA Finance Park. These 360-degree programs bring relevance, authenticity and application into the traditional learning model in order to energize students around academics and their future possibilities.

### MODELS

#### JA BizTown

An unforgettable experience where students interact within a simulated economy and take on the challenge of fueling a business. Here, students discover the intricacies of being a member of the community, while exploring a myriad of opportunities awaiting their futures.

#### JA Finance Park

An authentic simulation where students experience their financial futures. Guided by their 'life situation,' students apply knowledge gained in the classroom to make routine budget decisions; ultimately, building skills to confidently navigate today's economic environment.

### MEASUREMENTS OF SUCCESS

With a focus to engage students in learning and provide all children the opportunity to develop the knowledge, skills, and confidence to thrive, JA collaborated with partners and third-party evaluators to develop an evaluation framework that measures key indicators to drive students' success in academics and beyond:

#### Student Engagement

Through authentic, experiential and relevant programming, students exhibit positive increases in behavioral and cognitive engagement in academics.

#### Content Knowledge

With both in-class and on-site learning, students develop foundational economic, business and financial literacy concepts.

#### Skills & Techniques

Students apply higher-order thinking and problem-solving techniques as well as postsecondary, transferable skills within the context of a real-world setting.

#### Relevance of Education

Students discover the connections between academic lessons and real-world application in order to understand the influence of education on future opportunities.

### OUTCOMES

More Than 90% of Teachers Observed Their Students Effectively Integrating



#### Application of Content Knowledge

VOLUNTEERS OBSERVED STUDENTS UNDERSTANDING HOW SAVINGS AND INVESTING, AND THE AMOUNT THEY PUT TOWARDS EACH, IMPACTS THEIR FUTURE FINANCIAL WELL-BEING.

#### Realization of Relevance of Education

TEACHERS BELIEVED PARTICIPATION HELPED STUDENTS UNDERSTAND IMPORTANCE OF SETTING 'REAL-WORLD' LONG-TERM GOALS.

97%





## CAREER AND TECHNICAL STUDENT ORGANIZATIONS



**INTERNSHIP FORSYTH**  
**WORK-BASED LEARNING**  
 Forsyth County Schools

## HONOR SOCIETIES

Beta Club  
 Mu Alpha Theta  
 National Honor Society  
 National Technical Honor Society  
 Academic Honor Societies

## ALLIANCE ACADEMY FOR INNOVATION OF CUMMING-FORSYTH COUNTY

1100 Lanier 400 Parkway | Cumming, Georgia 30040

Ms. Brandi Cannizzaro, Principal  
 bcannizzaro@forsyth.k12.ga.us

## SEVEN INTEREST-THEMED ACADEMIES



### SCHOOL OF AEROSPACE & DRONE TECHNOLOGY

Flight Operations  
 Unmanned Aircraft Systems



### SCHOOL OF CRIMINAL JUSTICE, LAW, & PUBLIC ADMINISTRATION

Applications of Law  
 Criminal Investigations  
 Public Management and Administration



### SCHOOL OF CYBERSECURITY & DIGITAL INTELLIGENCE

Computer Science  
 Cybersecurity  
 Game Design: Animation & Simulation



### SCHOOL OF HEALTHCARE & FIRST RESPONDERS

Emergency Medical Responder  
 Emergency Medical Technician  
 Fire and Emergency Services



### SCHOOL OF HOSPITALITY & DESIGN

Graphic Design  
 Hospitality and Tourism



### SCHOOL OF INTERNATIONAL BUSINESS & FINANCE

International Business  
 Financial Technology



### SCHOOL OF MECHATRONICS & ENERGY

Energy Systems  
 Mechatronics





# EARN YOUR CTAE *Medallion*



To earn a CTAE *medallion* upon graduation, you must

- Complete three specific courses within your CTAE pathway
- Pass an End of Pathway Assessment/ Industry Recognized Credentialing Exam
- Remain an active member of a Career and Technical Education Student Organization (CTSO) for a minimum of two years
- Become an active member of the National Technical Honors Society (NTHS)
- Maintain a 3.0 GPA
- Complete a Community Service Project with CTAE
- Complete a minimum of two World Language courses
- Completion of a minimum of two Advanced Placement (AP), International Baccalaureate (IB), or Dual Enrollment (DE) courses

Forsyth County Schools  
**COLLEGE & Career**  
DEVELOPMENT





# CAREER READY Diploma Seals

Career Ready Diploma Seals are awarded to graduating high school students who complete a series of accomplishments as outlined and engage in activities, courses, and experiences that foster career readiness. The diploma seal is a signal to employers that a student is prepared to participate in the workforce.



## EMPLOYABILITY/SOFT SKILLS SEAL

Awarded to high school graduates who:

- Complete an Employability Skills/Soft Skills program approved by the local system and their business partners (GeorgiaBEST)

## PATHWAY SKILLS SEAL

Awarded to high school graduates who:

- Complete a Career, Technical and Agricultural Education (CTAE) pathway in at least one of Georgia's 17 Career Clusters
- AND ONE (1) OF THE FOLLOWING**
- Pass an End of Pathway Assessment (EOPA)/Industry Recognized Credentialing exam (if it applies)
- Complete a pathway in an industry-certified program
- Earn at least one unit in a state-approved Work-Based Learning program in the concentrated pathway area
- Complete all components of the Career-Related Capstone Project in the concentrated pathway area, as outlined by the Ga DOE
- Earn a rank of E-5 or above in a JROTC program
- Via dual enrollment complete two Technical Certificates of Credit (TCC) in one pathway, earning a Technical College Diploma, or earning an Associates Degree

## LEADERSHIP SKILLS SEAL

Awarded to high school graduates who:

- Complete one year of membership in a state-recognized Career and Technical Student Organization (CTSO) or one year in a JROTC co-curricular activity
- Prepare a portfolio to include as a minimum, a cover letter, resume, and three letters of recommendation
- AND ONE (1) OF THE FOLLOWING**
- Present to business and industry, civic organizations, legislators, and/or local, state, or national board of education members on behalf of local CTAE, CTSSOs, or JROTC
- Receive a regional, state, or national honor and/or recognition
- Participate in at least 40 hours of documented community service, and/or community service campaigns (i.e. March of Dimes)
- Earn a rank of E-5 or above and at least 2 JROTC credits

## Distinguished Seal

Awarded to high school graduates who:

- Complete the requirements above
- AND**
- Earn at least one unit in a state-approved Work-Based Learning program in the concentrated CTAE pathway area

## Distinguished Seal

Awarded to high school graduates who:

- Complete a Career, Technical and Agricultural Education (CTAE) pathway in one of Georgia's 17 Career Clusters
- AND TWO (2) OF THE FOLLOWING**
- Pass an End of Pathway Assessment (EOPA)/Industry Recognized Credentialing exam (if it applies)
- Complete a pathway in an industry-certified program
- Earn at least one unit in a state-approved Work-Based Learning program in the concentrated pathway area
- Complete all components of the Career-Related Capstone Project in the concentrated pathway area, as outlined by the Ga DOE
- Earn a rank of E-5 or above in a JROTC program

## Distinguished Seal

Awarded to high school graduates who:

- Complete two years of membership in a state-recognized Career and Technical Student Organization (CTSO) or two years in a JROTC co-curricular activity
- Present to business and industry, civic organizations, legislators, and/or local, state, or national board of education members on behalf of local CTAE, CTSSOs, or JROTC
- Hold or previously held a leadership office at the local, regional, state or national level in a state-recognized CTSSO during high school or a JROTC Command or Staff position within the unit or JROTC co-curricular activity and earn a rank of E-7 or above
- Participate in at least 80 hours of documented community service, and/or community service campaigns (i.e. March of Dimes)







# Great Careers Begin Here!



43 exciting program areas filled with  
*High Demand/High Wage Jobs*



We're training YOU for Georgia's **HOT** Careers to 2026!

## Associate Degree Programs

(with Annual Wages & Job Openings)

Dental Hygienist - \$63,800 with 200 jobs

Physical Therapist Assistant - \$55,700 with 110 jobs

Radiologic Technologist - \$52,500 with 180 jobs

Registered Nurse - \$64,100 with 2,980 jobs

Web Developer - \$79,300 with 140 jobs

## Diploma Programs

(with Annual Wages & Job Openings)

Computer Support Specialist - \$52,700 with 570 jobs

Automotive Body/Related Repairers - \$49,700 with 150 jobs

Supervisors of Construction Trades - \$59,000 with 380 jobs

Office Supervisors - \$56,800 with 1,160 jobs

Source: Georgia Department of Labor





## 28 Courses Guaranteed to Transfer\* to UNG, UGA, GA Tech, and Other Public Universities in Georgia

*Close By! • Affordable! • Class Options!*

The 28 courses listed below will transfer\* to any school  
within the University System of Georgia.

\*Guaranteed Transfer with a grade of C or better

Technical College System of Georgia (title, prefix, & number)		University System of Georgia Equivalent	USG Area option if USG equivalent not available
American Government	POLS 1101*	POLS 1101	Area E – Social Sciences
American Literature	ENGL 2130	ENGL 2130	Area C – Humanities, Fine Arts, & Ethics
Art Appreciation	ARTS 1101	ARTS 1100 - 1107	Area C – Humanities, Fine Arts, & Ethics
Biology Introduction I	BIOL 1111 BIOL 1111L	BIOL 1111 BIOL 1111L	Area D – Natural Sciences, Math, & Technology Non – Majors biology credit
Biology Introduction II	BIOL 1112 BIOL 1112L	BIOL 1112 BIOL 1112L	Area D – Natural Sciences, Math, & Technology Non – Majors biology credit
Calculus	MATH 1131	MATH 1131	Area A2 – Quantitative Skills Area D – Natural Sciences, Math & Tech
Chemistry I (Intro)	CHEM 1151 CHEM 1151L	CHEM 1151 CHEM 1151L	Area D – Natural Sciences, Math, & Technology Non – Majors chemistry credit
Chemistry II (Intro)	CHEM 1152 CHEM 1152L	CHEM 1152 CHEM 1152L	Area D – Natural Sciences, Math, & Technology Non – Majors chemistry credit
College Algebra	MATH 1111	MATH 1111	Area A2 – Quantitative Skills
Economics (Macro)	ECON 2105	ECON 2105	Area E for Non - Majors
Economics (Micro)	ECON 2106	ECON 2016	Area E for Non - Majors
Economics (Principles)	ECON 1101	ECON 1101	Area E – Social Sciences
English Composition I	ENGL 1101	ENGL 1101	Area A1 – Communication
English Composition II	ENGL 1102	ENGL 1102	Area A1 – Communication
Humanities (Intro)	HUMN 1101	HUMN 1101	Area C – Humanities, Fine Arts & Ethics
Math Modeling (Intro)	MATH 1101	MATH 1101	Area A2 – Quantitative Skills
Pre – Calculus	MATH 1113	MATH 1113	Area A2 or Area D
Physics I (Intro)	PHYS 1111 PHYS 1111L	PHYS 1111 PHYS 1111L	Area D – Natural Sciences, Math, & Technology Non – Majors physics credit
Physics II (Intro)	PHYS 1112 PHYS 1112L	PHYS 1112 PHYS 1112L	Area D – Natural Sciences, Math, & Technology Non – Majors physics credit
Psychology (Intro)	PSYC 1101	PSYC 1101	Area E – Social Sciences
Public Speaking	SPCH 1101	COMM 1100-1110	Area B – Institutional Options Area C – Humanities, Fine Arts & Ethics
Quantitative Skills & Reasoning	MATH 1103	MATH 1001	Area A
Sociology (Intro)	SOCI 1101	SOCI 1101	Area E – Social Sciences
Statistics (Intro)	MATH 1127	MATH 1127	Area D – Natural Sciences, Math, & Technology (not approved in the USG for Area A)
US History I	HIST 2111**	HIST 2111	Area E – Social Sciences
US History II	HIST 2112**	HIST 2112	Area E – Social Sciences
World History I	HIST 1111	HIST 1111	Area E – Social Sciences
World History II	HIST 1112	HIST 1112	Area E – Social Sciences

This table applies if the accepting USG institution offers a comparable course

\*Satisfies US and GA Constitution legislative requirements

\*\*Satisfies US and GA History legislative requirements



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COLLEGES**  
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IN THE SOUTH  
*U.S. NEWS &  
WORLD REPORT*

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A  
**NATIONAL  
TOP-PRODUCER  
OF FULBRIGHT  
STUDENTS**  
2018 AND 2019

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UNG is designated as a State Leadership Institution and as The Military College of Georgia®.



# Forsyth County CTAE Delivers a Roadmap Toward Your Future



## MILITARY SERVICE

Through JROTC programs, Georgia students are offered citizenship development, service learning and leadership awareness activities that prepare them for the opportunities accompanying active duty enlistment, commissioned officer training and defense of our state and nation.



## FOUR-YEAR UNIVERSITY

Unified under the governing authority of the Board of Regents since 1931, the University System of Georgia is deeply connected to all 159 counties, providing a host of academic and outreach services through their 28 public higher education institutions, libraries, and archives.

## CAREER

There are numerous opportunities to do what you love while providing for yourself and your family, right in your own backyard. We're preparing Georgia's students for future successes in the careers of their choosing.



## REGISTERED APPRENTICESHIPS

As the Georgia economy continues to grow and diversify, it is critical that business and industry-led, work-based training programs are supplied a sustainable pipeline of career-ready employees. Widely used around the world, apprenticeship programs are a key component of our global competitiveness.



## TECHNICAL COLLEGE

Recognized among the best technical college systems in the nation, the Technical College System of Georgia provides technical and adult education, business and industry training and community and economic development services through 22 member-colleges comprising 85 campuses.



Forsyth County Schools does not discriminate on the basis of race, color, religion, national origin, age, disability, or gender in employment decisions or educational programs and activities.