



ind Your Passion!

High School Career Pathway Options





Aerospace/Flight Operations

Computer Science Drone/Unmanned Cybersecurity

Fire and Emergency Services/ Emergency Medical Responder Financial Technology (FinTech) Aircraft Systems

Graphic Design Game Design

Healthcare/Clinical Lab Healthcare/Emergency Medical Responder

Healthcare/Emergency Hospitality, Recreation Medical Technician

International Business & Tourism

Legal Services/ Application of Law Law Enforcement/ Forensic Science Mechatronics



Companion Animal Systems Artificial Intelligence Cloud Computing

A/V Technology & Film Architecture/Drafting

> Engineering & Technology Computer Science Entrepreneurship Culinary Arts

Construction/Carpentry

Computer Science

& Design

Marketing & Management Teaching as a Profession Sports & Entertainment Fashion Marketing Financial Services Marketing

nteriors, Fashion, & Textiles leavy Equipment Operations Marketing & Management

Entrepreneurship



Automotive Technology A/V Technology & Film Cloud Computing

Engineering & Technology Computer Science Film Production Cosmetology

> Early Childhood Education Engineering & Technology

Culinary Arts

Marketing Communications Healthcare/Biotechnology Marketing & Management

Nutrition & Food Science Sports & Entertainment Marketing

Teaching as a Profession

Veterinary Science

Feaching as a Profession Veterinary Science

Norkforce Ready

A/V Technology & Film **Business Accounting** Cloud Computing

Engineering & Technology Computer Science Culinary Arts

Public Health Healthcare/

Healthcare/

Healthcare/Biotechnology Financial Services

Healthcare/Sports Medicine **Narketing Communication** Healthcare/Phlebotomy & Promotions

& Promotions

Marketing & Management

Nutrition & Food Science **Teaching as a Profession**

Marketing Communications & Promotions

Marketing & Management

Veterinary Science Web Development

Teaching as a Profession Nutrition & Food Science Sports & Entertainment Marketing





A/V Technology & Film Computer Science **Culinary Arts** Cosmetology

> A/V Technology & Film Advanced Accounting

Computer Science

Engineering & Technology

A/V Technology & Film

Computer Science

Culinary Arts

Healthcare/Biotechnology Engineering & Technology Fashion Marketing Entrepreneurship

> Sports Medicine JROTC Marines

Healthcare/ Allied Health and Medicine

ingineering & Technology

Fashion Marketing

Human Resources Management Landscape

Marketing & Management

3DE Leadership Academ

Junior Achievement

Nutrition & Food Science

Marketing Communications Marketing & Management Management Systems & Promotions

Sports & Entertainment Programming Marketing Teaching as a Profession

Teaching as a Profession Sports & Entertainment Web Development Marketing

Teaching as a Profession

Business Accounting Computer Science Game Design

Financial Services

Marketing & Management Sports & Entertainment Web Development

All students enrolled in career and technical education have the Career Development Coordinator.

opportunity to apply for Internship Forsyth (work-based learning) or Mentorship Forsyth (job shadowing) within their pathway. Visit www.forsyth.k12.ga.us/ctae for more information or contact a



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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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

SUPERINTENDENT AND SCHOOL BOARD MEMBERS

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

ACADEMIES OF CREATIVE EDUCATION

1160 Dahlonega Highway, Cumming, GA 30040 Drew Hayes, Principal 770-781-3141, Fax: 770-888-1193

ALLIANCE ACADEMY FOR INNOVATION

1100 Lanier 400 Parkway, Cumming, GA 30040 Karl Mercer, Principal 470-695-7823, Fax: 470-695-7824

DENMARK HIGH SCHOOL

645 Mullinax Road, Alpharetta, GA 30004 Kim Oliver, Principal 470-533-2521, Fax: 470-533-2522

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8910 Jot Em Down Rd, Gainesville, GA 30506 Jeff Cheney, Principal 770-888-1235, Fax: 770-888-1240

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131 Almon C. Hill Drive, Cumming, GA 30040 Josh Lowe, Principal 770-887-8151, Fax: 770-781-2289

LAMBERT HIGH SCHOOL

805 Nichols Road, Suwanee, GA 30024 Gary Davison, Principal 678-965-5050, Fax: 678-965-5051

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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 Dr. Aaron Archambeau, 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, national origin, religion, sex, disability, or age in its programs, activities, or employment practices and provides equal access to the Boy Scouts and other designated youth groups. 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.

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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 Denmark High School East Forsyth High School Forsyth Central High School Forsyth Virtual Academy SCHOOL KEY SYSTEM Lambert High School North Forsyth High School South Forsyth High School West Forsyth High School

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Basic Agricultural Science Animal Science and Biotechnology

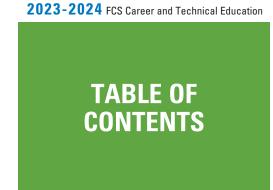
Veterinary Science

LANDSCAPE MANAGEMENT SYSTEMS PATHWAY

General Horticulture and Plant Science Turf Production and Management

VETERINARY SCIENCE PATHWAY

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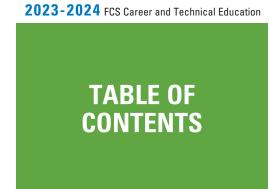


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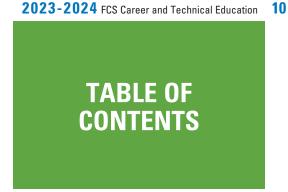
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FCS College and Career Development seeks to provide an ongoing partnership between education and business/industry to prepare the students of Forsyth County with the skills necessary to meet world-class standards, successfully continue life-long learning, 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 opportunites 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 opportunites 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 opportunites 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 prepars 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.



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 Architecture and Construction

Introduction to Architecture and Construction (Grade 6) Fundamentals of Architecture and Construction (Grade 7) Exploring Architecture and Construction (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.



Middle School Career Pathway Options ed your Passion!



Achievement

Junior

Marketing Literacy

Technology

AV

Middle School



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.

NONTRADITIONAL OCCUPATIONS AND RESOURCES

CAREER PLANNING RESOURCES

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.orrg

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

www.ctaern.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

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

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

The careers in this chart have it all!

ork Activities			m So	Maki	cting	1	ehens	adin	1	npreh	thers	ching	OrBai	Equ	2/	S. Sur	Ove	Infor		Jage /
frequently found O occasionally fou	nd	1	roply	rois	Stru	18	10	18	/	100/L	101	1	The Tage		Tre life	Tall I	Ile. M	ata or	1/2/2	Bia y
		king,	& De	nted	eading	Sion	TIP-Ha	/	ressig	Carin	aining	ung of	hines	th Con	esses,	s/Han	1 yze	Smiz,	eath,	/
T jobs have faster than state annual average job owth, above the state annual average wage, and have least 100 annual openings.	Oring	Juda minkinga	Service Beck Solvii	Listen	Oral F. Reading	Dexterit.	Reason	Write	Assign Expression	Coachi &	Comment Painting & Orthers	Control	Workin Machines/Inc. O'Banizas	Monit	Physical Processes, M.	Proces Act	School Stand	Think: O'Buts, Pl. Information	2021 Edition - C.	2020-30 Annu.
Doctoral or professional degree																				
Health Specialties Teachers, Postsec	•	•	•	•	•		•	•	•	•	•	0	•	•	0	•	•	•	\$127,300	690
Lawyers	0	•	•	•	•		•	•			•			•		•	•	•	\$145,900	1,470
Medical Scientists, Except Epidemiologists	•	•	•	0	•		•	•		•		0	•	•		•	•	•	\$78,800	210
Nursing Instructors & Teachers, Postsec	•	•	٠	•	٠		•	•	•	•	•	0	٠	•	0	٠	•	•	\$75,000	120
Physical Therapists	0	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	\$92,500	480
Veterinarians	•	•	•	0	٠	0	•	•	•	0	٠	0	•	•	0	•	0		\$99,700	130
Master's degree																				
Nurse Practitioners	•	•	٠	•	•	•	•	•	•	•	•	0	•	•		•	•	•	\$110,500	1,250
Occupational Therapists	•	•	٠	0	•	0	•	•	•	•	٠		•	•	0	•	•	•	\$92,500	270
Physician Assistants	•	•	•	•	•	0	•	•	•	0	•		•	•		•	0	•	\$108,400	520
Speech-Language Pathologists	•	•	•	•	•		•	•	•	•			•	•		•	•	•	\$81,300	400
Bachelor's degree																			-	-
Accountants & Auditors	•	•		•	•	0	•	•			•		•			•	•	•	\$86,800	3,940
art Directors	•	•	•	0	•		•	0			•		•	•		•	•	•	\$109,000	230
Camera Operators, TV, Video, & Motion Picture	•	•		0	•		•		•	•	•	•	•		0	0	0	•	\$60,200	200
Commercial & Industrial Designers	0	•		0	•		•	•			•		•	•		•	0	•	\$60,800	110
Construction Managers	•	•	•	•	•	H	٠			•	•	0	•	•		•	•	•	\$96,800	1,100
Environmental Scientists & Specialists, Including Health	•	•	•	•	•		•	•			•	0	•	•		•	٠	•	\$78,600	260
Film & Video Editors	•	•		O	•		٠	•			•	0	•	•		•	•	•	\$78,600	160
Financial Examiners	•	•	٠	•	•		•	•		•	•		•	•		0	0		\$96,000	110
Financial Managers	•	•		•	•		•	•		•	•		•	•	П	•	•	•	\$148,300	1,940
General & Operations Managers	•	•	•	•	•		•	•		•	•		•	•		•	•	•	\$118,400	8,060
Human Resources Specialists	0	•	O	O	•		•	•		•	•		•			•	•	•	\$65,300	2,430
Industrial Engineers	•	•	E	•	•	H	•	•	H	•	•	•	•	•		•	•	•	\$90,400	670
Interpreters & Translators	•	•	•	•	•		•	•	•		•		•	•		0		•	\$60,800	310
Loan Officers	•	•	•	•	•		•	•	7		•		•			•	•	•	\$89,700	1,070
Logisticians		•	•	•	•		•	•		•	•		•	•		•	•	•	\$71,200	1,120
Management Analysts	•	•	•	•	•		•	•		•	•	17	•	•	F	•	•	•	\$99,200	2,350
Market Research Analysts & Marketing Spec	•	•		•	o		•	•	F		•		•	•		•	•	•	572,000	2,750
Multimedia Artists & Animators	•	•	5.5	•	•	F	•	•		0			•	•		•	•	•	\$67,400	320
Operations Research Analysts	-		0	-							•					•			\$74,200	350



Fast Job growth Above average wages
At least 100 expected annual job openings

Georgia's

The careers in this chart have it all!

kills and Abilities			1	1	1.0	an	Ski d Ab	ilitie	s	1	1	1				Activ		-	21.05	/ chi
advanced skills required O moderate skills	requ	ired		king	100	1	nsion	iness	/	ehenet	ILS ON	"BOTH	antzation	quipmen	1	urround	Object	orman	& Prioritiz Wik	Estimate
Vork Activities		1	blem	In Ma	Luctil	1	Preh	read	/	Jound	Orhe	each	60	1/2	1/1	18,8	Joye /	or Im	1 /8	Wage /
frequently found O occasionally fo	und	Ingila	Deci	ed/In	ding	on/Com	-Hand	/	Ssionic	ring	ning &	B Outsi	nes/Inst	Compu	Ses, May	Handle	Ze Date	iz, Plan	ithely a	la l
T jobs have faster than state annual average job owth, above the state annual average wage, and hav least 100 annual openings.	e Milo	Juda Think	Service & Decie Solving	Listenia Oriented/Inc.	Oral F.	Dexterit.	Reason	Written	Assisn Expr	Coaching & C	Comming Training & Thers	Control	Working to:	Monitor p. Comp.	Physical A Mar-	Process, A. Mandle A. Surroum	Schedula	Thinking Orgaiz, Plan	2021 Edition - Gar	2020-30 A-
Bachelor's degree continued	-							_							-	-	4			
Personal Financial Advisors	o	•		•	•		•	0	٠	•	•		•	•		•	•	•	\$113,700	740
Producers & Directors		•		٠	•		•	•			•		•	•		•	•	•	\$93,200	650
Registered Nurses	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•	\$74,400	5,470
Securities, Commodities, & Financial Svcs Sales Agents	•	•	0	•	•	1	٠	•		0	•		•			•	•	•	\$89,800	1,300
Social & Community Service Managers	•	•	•	0	•		•	•	•	•	•		•			•	•	•	\$71,500	430
Training & Development Specialists	•	•	•	•	•		•	•		•	•		•	•		•	•	•	\$69,000	1,250
Writers & Authors	•	•	0	•	•		•	•		П	•		•				•	•	\$70,800	330
Associate's degree																				
Cardiovascular Technologists & Technicians	1.	•	•	•	•	•	•	•	•	u		0	•	•	0	•	0		\$64,100	130
Diagnostic Medical Sonographers		•	•	•	•	•	•	•	•	•	•	•	•	0		•	•	•	\$63,500	260
Magnetic Resonance Imaging Technologists	•	•	•	•	•	0	•	•	•	•	•	•	•	•	Ó	•	•	•	\$73,700	160
Occupational Therapy Assistants		•	•	0	•	•	•	•	•	•	•	0	•		•	•	•	•	\$69,800	240
Paralegals & Legal Assistants	0	•	0	٠	•		•	•			•		•	•		•	•		\$56,300	1,600
Physical Therapist Assistants	0	•	•	0	•	•	•	•	•	•	•	0	•	•	0	•	0	•	\$61,400	540
Radiologic Technologists		•	0	•	•	•	•	•	٠		•	o	•	•	0	•	0	•	\$60,500	490
Respiratory Therapists	•	•	•	0	•	٠	•	•	•	•		•	Н		•		•		\$59,000	390
Postsecondary non-degree award				100																
Tool and Die Makers	1.	٠		0	•	•	•	O		0	S	•	•	•	0		0	•	\$58,500	120
Some college, no degree																				
Actors	0			٠	•	15		0			•			•	•	-	O	•	\$72,900	340
High school diploma or equivalent																				
Chefs & Head Cooks	0	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	\$62,300	360
Flight Attendants	0	•	0	•	•	0	•	0	•			O		•	•	•	•		\$61,900	1,220
Food Service Managers	•	•	•	0	•	•	•	•	•	•	•	0		•	0		•		\$61,000	1,810
Industrial Machinery Mechanics		•		0	•	•	•	0				٠		•	•		Ò		\$55,600	1,560
Lodging Managers		•	•	0	•		•	•	•	0	•	0	•	•		•	٠	•	\$60,900	230
Media & Communication Workers, All Other	0	•	•	•	•		٠	•		•	٠		٠			•	•	•	\$67,500	110
Private Detectives & Investigators		•	0	٠	•		٠	•			٠		٠		1	•	•	•	\$64,300	110
																-	-		-	
Tax Preparers			0	•			٠			•			•				•		\$55,500	250

Solution: 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.

GEORGIA'S STEM Careers to 2030

Science | Technology | Engineering | Mathematics

Knowledge	Knowledge																Educ	ation	Occupational Characteristics					
Understanding of principles and facts of subject matter full knowledge required Some knowledge required Education Typical education needed to enter an occupation iobs have faster than state annual average job growth, above the state annual average wage, and have at least 100 annual openings.	Administration and Management	Biology/Chemistry	Design/Bidg 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	2021 Edition - Georgia Wage Estimates	2020-30 Annual Openings
Life and Physical Science, Engineering, Mat	hem	natio	cs, a	nd	Info	rm	atio	n T	ech	nolo	pgy	Occ	upa	tio	ns									
Aerospace Engineers			0			•			•	•		•	•			•		Ш		- 4	1		\$117,900	170
Biological Science Teachers, Postsecondary		•		•	0	•		•		•	•			•					1				\$93,800	90
Biological Scientists, All Other	•	•	0	0		•		•		•	0	•									V		\$78,800	100
Biological Technicians		•				•		I		•		•									1		\$49,600	250
Chemical Technicians		0				•				•		•										4	\$54,100	290
Chemists		0	4	0		•			٠	•		•		E							V		\$90,400	140
Civil Engineering Technicians	•		•	•		•		•	•	•		•	O			•						1	\$53,000	130
Civil Engineers	•		•	0	F	•	•		•	•	0	•	Ξ,		•	•					V		\$84,300	580
Computer & Information Systems Managers	٠			0		•		•	٠	•		•			٠						V		\$154,900	1,320
Computer Hardware Engineers			•		O	•			•	•		•				•					4		\$112,000	140
Electrical & Electronics Engineering Techs			0	0		•			•	•		•	•			•						V	\$70,300	370
Electrical Engineers			o			•			٠				O			٠					1		\$105,600	360
Electronics Engineers, Exc Computer			0	O	o	•		h	•	•		•	•			•		I			1		\$105,600	300
Engineers, All Other	•	•	0	0	0	•		•	•		O	•	٠			•					V		\$105,500	630
Environmental Engineers	٠	•	0	0		٠			٠	•	•					•					V		\$89,300	130
Environmental Scientists & Specialists, Including Health	•	•		0		•			•	•	Ó	•				•					V		\$78,600	260
Forensic Science Technicians		o				•			•	•	•										V		\$52,300	90
Industrial Engineering Technicians			0	0				В	٠	•	Ö	•				•						1	\$66,600	140
Industrial Engineers 🌃	•		0	0		•		•	•	•		•	•								V		\$90,400	660
Life, Physical, & Social Science Technicians, All Other	•	•		0		•		•	•	•		•	0									V	\$59,700	170
Mechanical Drafters			0	0		•		•	٠				٠			•						1	\$56,500	100
Mechanical Engineers	•	0	0	•				•	•	•		•	•			•					V		\$95,800	400
Medical Scientists, Except Epidemiologists 🇱		•				•						•		•					1				\$78,800	210
Operations Research Analysts	٠		I						٠	•		٠									Ý		\$74,200	360
Sales Engineers				0		•						•									V		\$125,700	390
Sales Reps, Wholesale & Mfg, Tech & Scientific Products	•			0		•							0								V		\$92,400	780
Surveying & Mapping Technicians			0	0		•	i,		٠			•										1	\$48,500	180
Health Occupations																								
Cardiovascular Technologists & Technicians				0		•																1	\$64,100	130
Chiropractors	•	0	1	0	5	•	Ь	•		•			11	•	•		Ó	•	1				\$67,300	80
Dentists, General	•	0		0			0				ii				•		0	F	V				\$182,900	130
Diagnostic Medical Sonographers (0		•		•				•						0	0					1	\$63,500	-
Dietitians & Nutritionists	•			•								•		•			o	•			Ý		\$53,400	
Health Specialties Teachers, Postsecondary					0						•						0		V				\$127,300	



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GEORGIA'S **STEM Careers to 2030**

Science | Technology | Engineering | Mathematics

Knowledge Understanding of principles and facts of subject matter	L	Knowledge												Educ	ation	Occupational Characteristics								
full knowledge required some knowledge required Education	nagement		uction	Personal Swc	ns and Media	nics	ing		Vgolo		Law and Govt/Public Safety and Security		and Processing		resources		nd Anthropology		Degree			ee/Some College	Nage Estimates	20
Typical education needed to enter an occupation	nd Ma	>	Constr	randi	nicatio	lectro	count	guinie	Fechno		blic Sa		uction	ntistry	man F		logy a	Bu	ssiona	14	di	c Degr	orgia	Denin
jobs have faster than state annual average job growth, above the state annual average wage, and have at least 100 annual openings.	Administration and Management	Biology/Chemistry	Design/Bidg 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/Pu	Mathematics	Mechanical/Production and Processing	Medicine and Dentistry	Personnel and Huntan Resources	Physics	Psychology/Sociology and Anthropology	Therapy/Counseling	Doctoral or Professional Degree	Master's Degree	Bachelor's Degree	HS Diploma/Assoc Degree/Some College	2021 Edition - Georgia Wage Estimates	2020-30 Annual Openings
Health Occupations Continued																								
Licensed Practical & Licensed Vocational Nurses	1.	0		•						•	•	•		•				•				1	\$46,500	2,230
Magnetic Resonance Imaging Technologists		0		0		•				•	0			•		•	0					V	\$73,700	160
Nurse Anesthetists				o							•			•	•	0	0			1			\$186,800	SC
Nurse Practitioners W		•		•	0			•	T	•	•	•		•			•	•		1			\$110,500	1,250
Nursing Instructors & Teachers, Postsec W		•		•	0	•		•		•	o	•	1	•			•	•	V				\$75,000	110
Occupational Therapists		o		Ó						•				•			•	•		1			\$92,500	280
Ophthalmic Medical Technicians				•		•				•				•								1	\$35,900	110
Opticians, Dispensing				•						•		•	0									4	\$40,700	180
Pharmacists						•					0			•			0	•	V				\$123,600	470
Pharmacy Technicians				•			П							•				Н				V	\$33,400	1,160
Physical Therapists 🌇								•		•				•			0	•	1		Ţ.		\$92,500	470
Physician Assistants				0		•				•				•			•	•		1			\$108,400	520
Radiologic Technologists 🍪		0		•		•				•	0	•	•	•			0					1	\$60,500	490
Recreational Therapists				0				•		•	0			•			•	•			1		\$50,300	70
Registered Nurses		0		0		•			Т	•		•		•			0	•			1		\$74,400	5,460
Respiratory Therapists		•		0		•				•		•		•			o					1	\$59,000	380
Speech-Language Pathologists				0				•		•			-	•			0	•		1	7		\$81,300	400
Surgical Technologists				0						•				•								V	\$49,900	330
Therapists, All Other				0						•							•	•			1		\$64,200	80
Veterinarians 🇱	•			0						•		•		•					1				\$99,700	120
Veterinary Technologists & Technicians		0		•	Ĭ.					•		•		•								1	\$35,600	320
Architecture Occupations																								
Architects, Exc Landscape & Naval			•	0		•	•		•	•	•	•			•						V	3	\$102,000	290
Architectural & Civil Drafters			٠	0		•			•	•	0	•										1	\$59,100	200
Architectural & Engineering Managers			Ó	0		•			•	•	•	•	•		٠	•					1		\$154,500	340
Architecture Teachers, Postsec			•		0	•		•	•	•	•	•					•		>				\$86,300	30
Landscape Architects		0	٠	٠	0	٠	٠		•	٠	٠	•									1		\$78,700	50
Social Science Occupations																								
Psychologists, All Other				0						•	•						٠	•		1			\$100,800	90
Psychology Teachers, Postsec						•		٠		٠		•					٠	•	1				\$86,400	70
Social Science Research Assistants				•		•		•		•		•					•				4		\$58,200	160
Social Scientists & Related Workers, All Other	•		•						•	•	9	•									1		\$94,600	190
Survey Researchers				4	٠	•				٠		•	1				٠			1			\$56,300	70
Urban & Regional Planners				٠	٠	H					•				٠				+	7			\$66,500	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.

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WHAT IS

CAREER, ECHNICAL, & AGRICULTURAL **EDUCATION**



92% of high school students and 69% of college and adult students are engaged in CTAE, learning skills in the classroom and on the job.



CTAE is delivered at comprehensive and CTAE-dedicated high schools, magnet schools, area technical centers, community and technical colleges, and some four-year universities.

CTAE students earn industry certifications and licenses, postsecondary certificates, associate degrees, bachelor's degrees, and higher.



CTAE is good for students, good for businesses, and good for communities.

CTAE high school students are college and career ready -94% graduate high school, and most enroll directly in college.

CTAE associate degrees can pay \$10,000 more per year than associate degrees in other fields - and can even pay more than bachelor's degrees – while limiting student debt.



LEARN MORE ABOUT CTAE AT CTAEDELIVERS.ORG.



projected deficit of 6.5 million, including infrastructure, healthcare, and manufacturing jobs.

CTAE PREPARES THE WORKFORCE ACROSS A WIDE RANGE OF INDUSTRIES AND OCCUPATIONS.



Agriculture, Food & Natural Resources

Architecture & Construction









Education & Training

Energy





Finance

Government & **Public Administration**



Health Science

Hospitality & Tourism





Human Services

Information Technology





Law, Public Safety Corrections & Security

Manufacturing





Marketing

Science, Technology Engineering & Mathematics (STEM)





Transportation, Distribution & Logistics

*Adapted from ACTE's February 2022, What is Career and Technical Education



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-theart 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

Agriculture (Certified by Georgia Farm Bureau):

Denmark High School

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):

Alliance Academy for Innovation Denmark High School Forsyth Central High School Lambert High School North Forsyth High School South Forsyth High School West Forsyth High School

Culinary Arts (Certified by ACFEF):

Denmark High School 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

Food and Nutrition (Certified by Georgia Nutrition and Food Science Foundation, Inc. and Sodexo):

Forsyth Central High School Lambert High School North 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):

Alliance Academy for Innovation Denmark High School Forsyth Central High School Lambert High School North Forsyth High School South Forsyth High School West Forsyth High School

FY24 INDUSTRY CERTIFICATION PROCESS:

A/V Technology & Film

North Forsyth High School* West Forsyth High School*

Business and Computer Science

West Forsyth High School*

Engineering/Mechatronics

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

Healthcare Science

Lambert High School* North Forsyth High School*

Marketing

Lambert High School*
West Forsyth High School*

FY25 INDUSTRY CERTIFICATION PROCESS:

Agriculture

North Forsyth High School

Automotive

Forsyth Central High School*

A/V Technology & Film

East Forsyth High School South Forsyth High School

Business and Computer Science

East Forsyth High School

Construction

East Forsyth High School

Culinary Arts

Denmark High School*
East Forsyth High School

Engineering/Mechatronics

East Forsyth High School

Marketing

East 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





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

February 12-16, 2024

DENMARK HIGH SCHOOL

February 26-March 1, 2024

EAST FORSYTH HIGH SCHOOL

February 26-March 1, 2024

FORSYTH CENTRAL HIGH SCHOOL

March 4-8, 2024

LAMBERT HIGH SCHOOL

February 5-9, 2024

NORTH FORSYTH HIGH SCHOOL

February 12-16, 2024

SOUTH FORSYTH HIGH SCHOOL

March 4-8, 2024

WEST FORSYTH HIGH SCHOOL

March 19-23, 2024



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/

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.orrg

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

www.ctaern.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

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

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
	PERSONAL CHARACTERISTICS
Attitude	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.
Initiative	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.
Flexibility	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.
Organization	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.
Discipline	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.
Integrity	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.
	INTERACTIONS WITH OTHERS
Respect	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.
Effective Communication	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.
Teamwork	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.
	EMPLOYER EXPECTATIONS
Attendance and Punctuality	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.
Service to Others	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.
Critical Thinking and Problem Solving	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.
Technology Usage and Social Media Ethics	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.
Professionalism	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.
Following the Rules	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

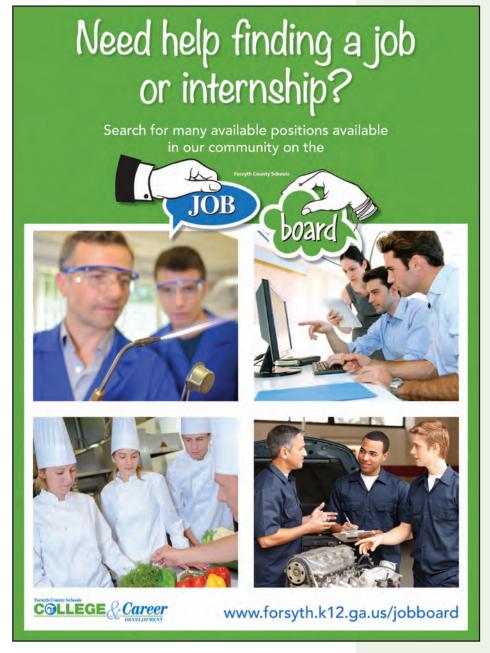
Georgia

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	
PERSONAL CHARACTERISTICS		
Attitude	The ability to: • demonstrate a positive, optimistic outlook • take responsibility for actions • use appropriate language • avoid gossip • show politeness • smile on a regular basis • to be enthusiastic and self-confident • take direction • be eager and motivated to complete tasks.	
Initiative	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.	
Flexibility	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.	
Organization	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.	
Discipline	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.	
Integrity	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.	
INTERACTIONS WITH OTHERS		
Respect	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.	
Effective Communication	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.	
Teamwork	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.	
EMPLOYER EXPECTATIONS		
Attendance and Punctuality	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.	
Customer Service	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.	
Critical Thinking and Problem Solving	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.	
Technology Usage and Social Media Ethics	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.	
Professionalism	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.	
Adherence to Policy	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. 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



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 ELIGLIBLE 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 2023-24 ENROLLMENT

FORSYTH COUNTY SCHOOLS
Dual Enrollment Information Night
January 23, 2024 at 5:30pm and 7pm
FoCAL Center



UNIVERSITY OF NORTH GEORGIA November 28, 2023 at 6PM Cumming Campus December 5, 2023 at 6PM Virtual (Zoom) Cumming Campus 300 Aquatic Circle, Cumming, GA 30040 470-239-3100



LANIER TECHNICAL COLLEGE November 29, 2023 at 6PM

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



32 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, pursing 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/hopestate-aid-programs/scholarships-grants/dual-enrollment/



WORKFORCE FORSYTH



In 2014, Forsyth County Schools (FCS), in partnership with the Forsyth County Chamber of Commerce, 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.

Workforce Forsyth is also the outcome of Forsyth County Schools partnership with business and industry throughout the community to promote job growth by determining business needs and developing solutions that included the following components:

- Academics: teaching curricula for career pathway courses built from corporate training materials and other in-kind donations, strengthened post-secondary relationships among Lanier Technical College, the University of North Georgia, and other post-secondary institutions
- Work-Based Learning: overseas cultural experiences, externships, clinical, and other work-based learning and job shadowing opportunities
- Employment Pipelines: workforce needs assessments, Chamber of Commerce/local economic development support, and online systems to match students to job opportunities.

Building on the initial efforts, FCS completed a community workforce development plan with guidance from UGA's Carl Vinson Institute of Government in June 2018. These efforts

built on the initial Workforce Forsyth plan from 2014 and led to the creation of a roadmap to guide CTAE programing within the school district over the last few years through 2022. This plan provided priorities to guide investments in and strategies for workforce development. During the 2021-22 school year, the district worked with UGA's Carl Vinson Institute on the latest Workforce Forsyth Strategy for our future workforce to guide the district over the next four years.

Focus for the 2022-23 School Year:

- · Vertical Alignment of Pathways in Clusters
- Continuation of CTAE Connect
- CTAE Excellence Guide Benchmarking
- Creating Experiential Learning Experiences
- Business Partnership Focus/Evaluation/Training with Stakeholder Summit
- Internal Monitoring/Review Process for High Schools: North Forsyth HS and South Forsyth HS
- Self-Reflection:
 - Does your classroom reflect local business/industry, and how are you involving them into curriculum, projects, and daily discussions?
 - Are you infusing local business/industry needs or situations into project-based application as often as possible in the classroom and with your CTSO?
 - How many students from your program areas are involved in Internship and Mentorship?

Workforce Forsyth Priorities from 2022-2026 Short-Term Strategies Long-Term Strategies Priority 1 · Keep program equipment and labs up to date; assess existing Consider design and development of a skilled-trades program equipment accessible to all Forsyth County students offered at a centralized In Demand Job location · Evaluate program offerings to ensure alignment to local economy **Priority 2** · Encourage teacher use of CTAE Excellence Guides as framework Evaluate current participation for teacher externships and encourage participation; Explore ways to reduce administrative for their programs Continuous Quality burden placed on teachers through additional administrative Improvement Seek additional ways for more planning time with middle/high support, process improvements, and policy changes. school by pathway offerings and vertical teams Assess existing partnership relationships and look for areas that · Fully implement a customer relationship management system **Priority 3** are lacking deep partnerships; Work with Chamber and other (CRM) with Salesforce **Grow and Enhance** community stakeholders to recruit and engage more partners; **CTAE Partnerships** fully leverage the CRM for managing lifecycle of CTAE partners **Priority 4** · Develop a comprehensive outreach and marketing strategy with Target outreach and marketing efforts in elementary and middle areas such as website improvements, showcasing success stories, school; showcase benefits of pathways to parents; host annual Outreach and increase social media presence, and showcase students and parents Stakeholder Summit and ongoing conversations around the many career opportunities that exist in Forsyth County. workforce development.



2023-2024

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
- ✓ 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, N)
 Basic Agriculture Science
 Animal Science and Biotechnology
 Veterinary Science*
 Internship Forsyth or Mentorship Forsyth

ARCHITECTURE AND CONSTRUCTION CLUSTER

- ✓ Architectural Drafting 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
- ✓ Heavy Equipment Pathway (E)
 Industry Fundamentals and Occupational Safety
 Introduction to Heavy Equipment
 Heavy Equipment Operations 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
- ✓ 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
- ✓ International Business Pathway (A) Introduction to International Business Global Awareness and Cultural Competency International Business Concepts* Internship Forsyth or Mentorship Forsyth



- A Alliance Academy for Innovation
- C Forsyth Central HS
- D Denmark HS
- D Delililark 110
- **E** East Forsyth HS **F** Forsyth Virtual
- Lambert HS
- North Forsyth HS
- S South Forsyth HS
- W West Forsyth HS





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!



2023-2024

Forsyth County Schools

HIGH SCHOOL **CAREER PATHWAYS**



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

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

HEALTH SCIENCE CLUSTER

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



- Alliance Academy for Innovation
- Forsyth Central HS
- Denmark HS
- East Forsyth HS Forsyth Virtual
 - Lambert HS
- North Forsyth HS
- S South Forsyth HS
- W West Forsyth HS





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2023-2024

Forsyth County Schools

HIGH SCHOOL CAREER PATHWAYS



- Phlebotomy Pathway (L) Introduction to Healthcare Science Essentials of Healthcare Diagnostics Phlebotomy* 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
- ✓ 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, 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
- ✓ Interiors, Fashion, and Textiles Pathway (E)
 Foundations of Interior Design
 Fundamentals of Fashion
 Fundamentals of Textile Science*
 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

INFORMATION TECHNOLOGY CLUSTER

- ✓ Artificial Intelligence Pathway (D)
 Foundations of Artificial Intelligence
 Artificial Intelligence Concepts
 Artificial Intelligence Applications
 Internship Forsyth or Mentorship Forsyth
- ✓ Cloud Computing Pathway (C, D, L) Introduction to Software Technology Computer Science Principles or AP Computer Science Principles Cloud Computing* Internship Forsyth or Mentorship Forsyth
- ✓ 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 A* Internship Forsyth or Mentorship Forsyth



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





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2023-2024

Forsyth County Schools

HIGH SCHOOL **CAREER PATHWAYS**



- ✓ 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 (S) Introduction to Software Technology Computer Science Principles or AP Computer Science Principles Programming, Games, Apps, and Society* Internship Forsyth or Mentorship Forsyth
- Web Development Pathway (F, N, W) Introduction to Software Technology Computer Science Principles or AP Computer Science Principles Web Development* Internship Forsyth or Mentorship Forsyth

LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY CLUSTER

Fire and Emergency Services - EMR Pathway (A) Introduction to Law, Public Safety, Corrections and Security Essentials of Fire and Emergency Services Emergency Medical Responder* Internship Forsyth or Mentorship Forsyth

- Law Enforcement/Forensic Science Pathway (A) Introduction to Law, Public Safety, Corrections and Security Criminal Justice Essentials Forensic Science and 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, L, N, 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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2023-2024

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)

Logistics Fundamentals Logistics Operations Materials Management* 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!



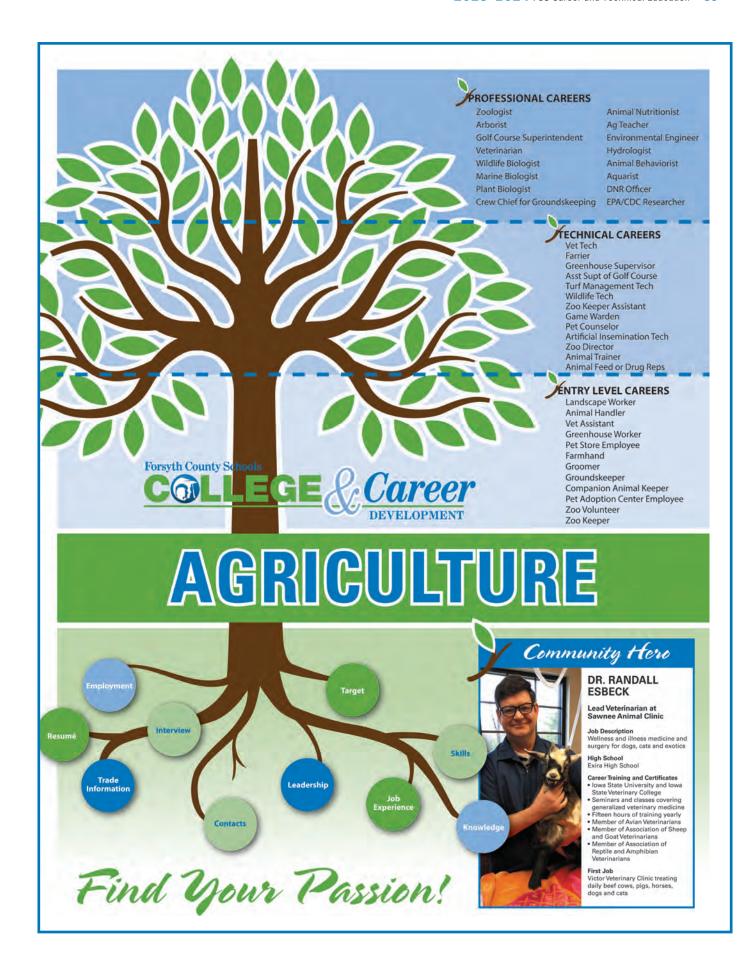


- Alliance Academy for Innovation
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Companion animals are a large part of the animal care industry. Veterinarians diagnose, treat, and research medical conditions and diseases of pets, livestock, and other animals. Veterinary technologists and technicians 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 nonfarm 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





AGRICULTURE, FOOD AND NATURAL RESOURCES

COMPANION ANIMAL SYSTEMS **PATHWAY**

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



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





AGRICULTURE, FOOD AND NATURAL RESOURCES

LANDSCAPE MANAGEMENT SYSTEMS PATHWAY

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

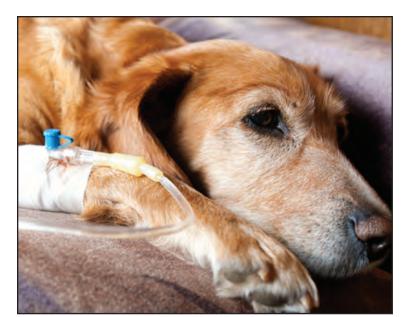
Greenhouse Technician

Master Gardener

Natural Resource Manager

Pesticide Handler





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 col-lege 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 eduation 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





AGRICULTURE, FOOD AND NATURAL RESOURCES



VETERINARY SCIENCE PATHWAY

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

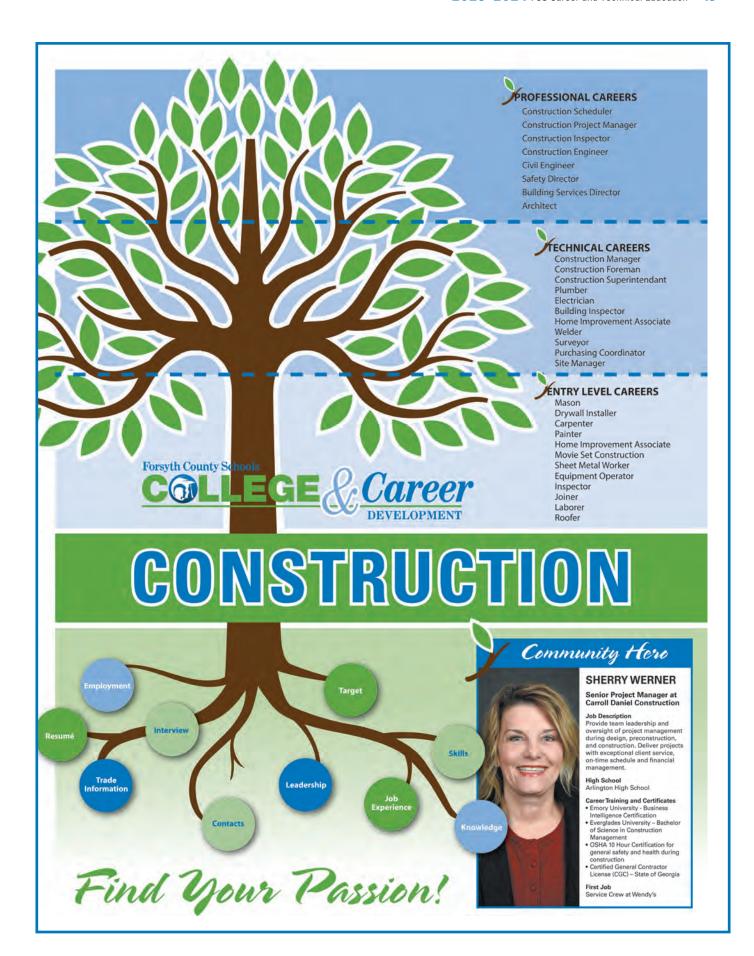
Embryo Transfer Technician

Equipment Sales Representative

Equitation Instructor

Extension Educator





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



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









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



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









ARCHITECTURE AND CONSTRUCTION

HEAVY EQUIPMENT OPERATIONS PATHWAY

TOP CAREER CHOICES

Heavy Equipment Operator \$90,000 - \$100,000 annual salary

Heavy Equipment Mechanic \$45,000 - \$65,000 annual salary

ADDITIONAL CAREER CHOICES

Heavy Equipment Service Technician Forklift Operator Backhoe and Dozer Operator Articulated Dump Truck Operator Pipe Layer



Students will gain foundational knowledge in construction including carpentry, plumbing, electrical, welding and HVAC. The pathway will focus and build on the concepts related to earthmoving as well as reading and using blueprints and specifications related to grading and grade calculations. The pathway provides specific knowledge and skills in operating and maintaining utility tractors and heavy equipment.

PATHWAY COURSES

- Industry Fundamentals and Occupational Safety
- Introduction to Heavy Equipment
- Heavy Equipment Operations I

RECOMMENDED COURSES

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

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

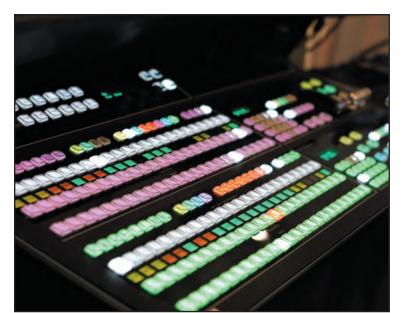
TECHNICAL COLLEGES

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









Audio and Video Technology and Film is a pathway that teaches all aspects of video production from pre-production, production, and postproduction, 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





ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATIONS

AUDIO/VIDEO TECHNOLOGY AND FILM PATHWAY



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





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

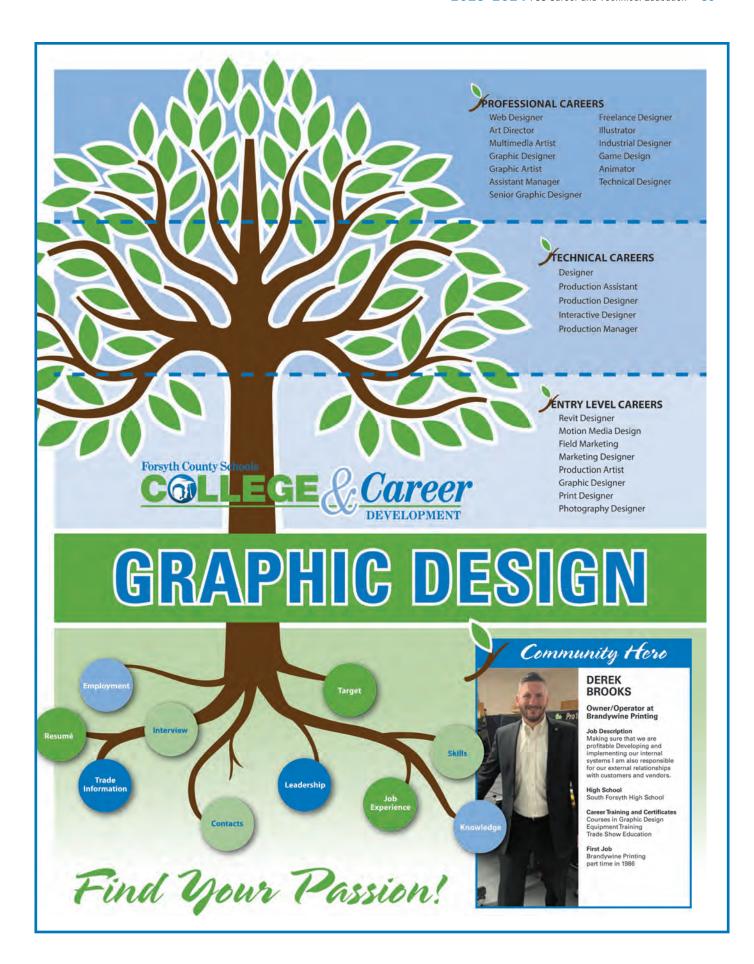
Station Manager

Technical Directors/Managers



Source: GADOE Plans of Study

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



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



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 screenprinting 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

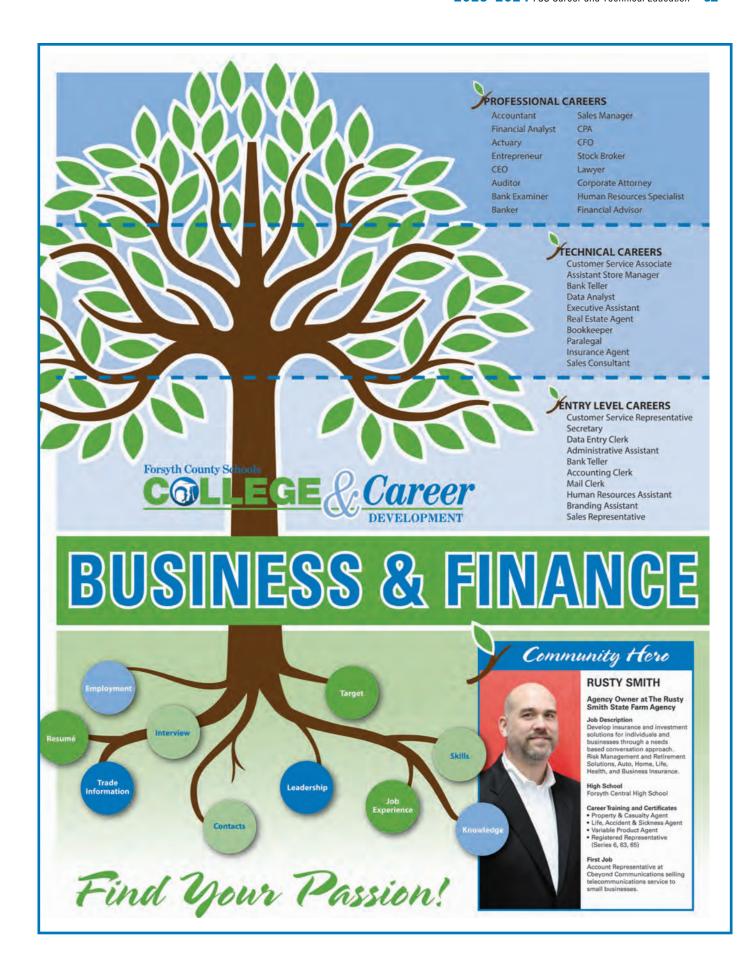
See www.GAfutures.org for additional information.













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



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





BUSINESS MANAGEMENT AND ADMINISTRATION

HUMAN RESOURCES MANAGEMENT PATHWAY

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





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

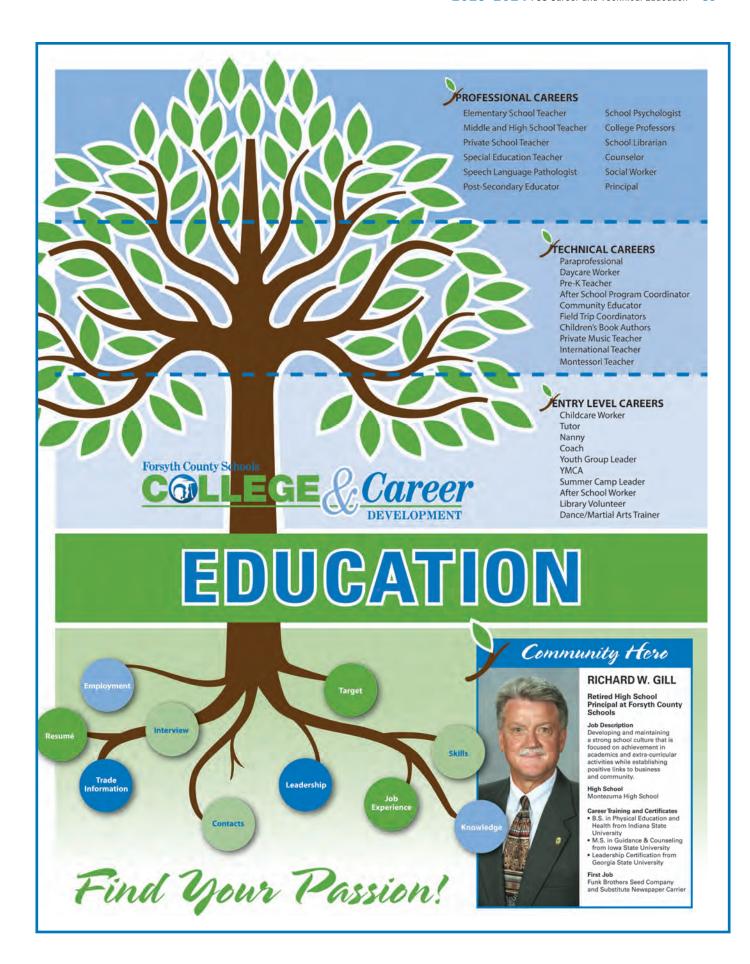
Trade Specialist

Import/Export Coordinator

Sales Executive

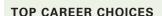
International Accountant





EDUCATION AND TRAINING

EARLY CHILDHOOD EDUCATION PATHWAY



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



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









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





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



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







Source: GADOE Plans of Study

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



FINANCE

BUSINESS

ACCOUNTING PATHWAY



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



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









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-ofwork 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





FINANCE

FINANCIAL SERVICES PATHWAY

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





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 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

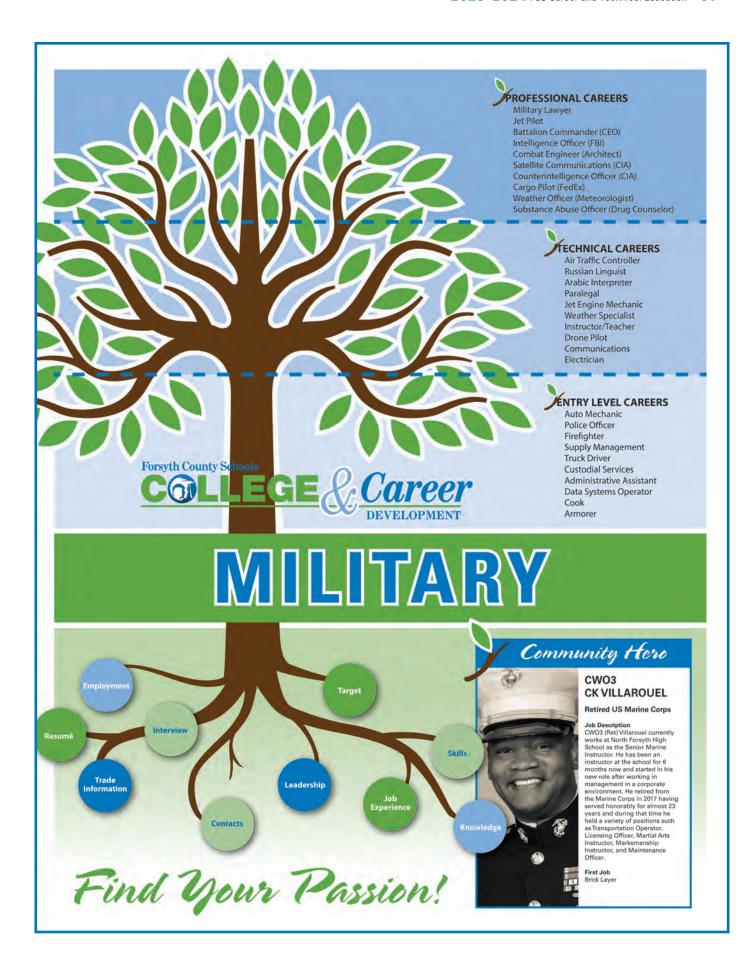
Email Marketing Specialist

Product Manager

Senior NET Developer

Software Engineer/Developer







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

- Anv 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 or if they plan on a career in the military they will find "Military Occupations" listed on www.gafutures.org under the Career Planning Tab.

ADDITIONAL CAREER CHOICES

Administration

Air Traffic Controller

Aviation Ordinance

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

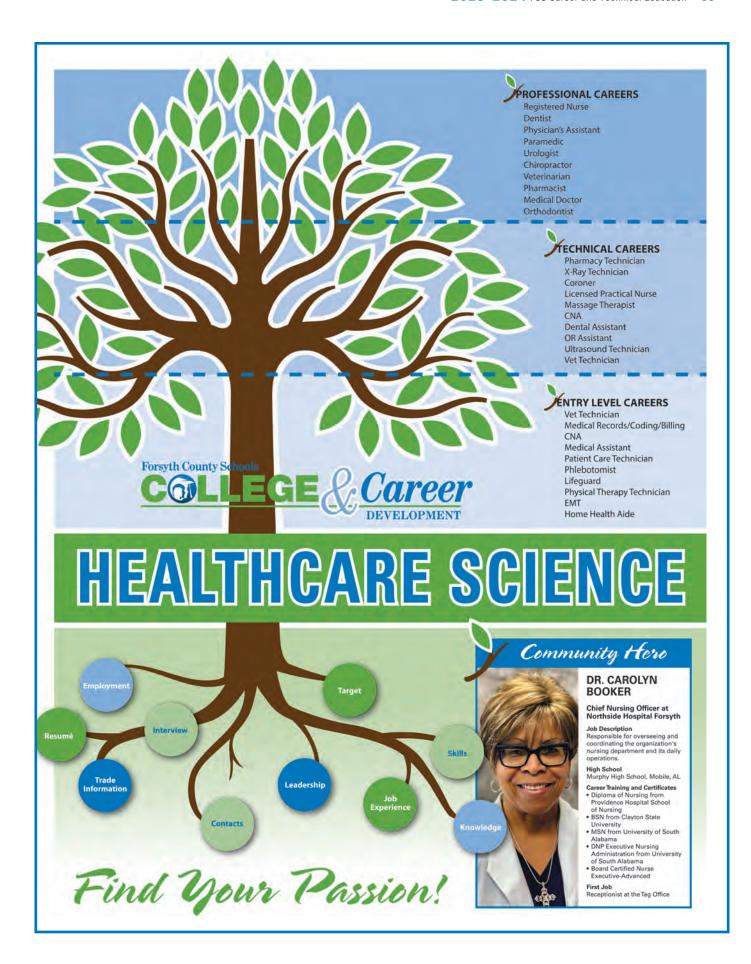
Naval Aviation (Pilot)

Photographer

Supply Logistic

Transportation Management







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

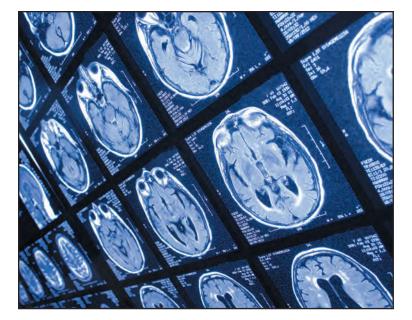
Physical Therapist

Radiologic Technologist

Surgical Technologist

Veterinarian





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 for additional information.

CAREER AND TECHNICAL STUDENT ORGANIZATIONS





HEALTH SCIENCE

BIOTECHNOLOGY RESEARCH AND DEVELOPMENT PATHWAY

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



DIAGNOSTIC-PATHWAY

CLINICAL LAB

TOP CAREER CHOICES

Medical & Health Services Managers

Bachelor's Degree \$104,956 annual salary 320 annual average openings in Georgia

Medical & Clinical Lab Technologists

Bachelor's Degree \$58,776 annual salary 219 annual average openings in Georgia

Ophthalmic Medical Technologists

Postsecondary credentials \$41,009 annual salary 106 annual average openings in Georgia

Medical & Clinical Laboratory Technicians

Associates Degree \$38,166 annual salary 248 annual average openings in Georgia

ADDITIONAL CAREER CHOICES

Clinical Chemistry Technologists

Immunology Technologists

Medical and Clinical Laboratory Technicians

Medical and Health Services Managers

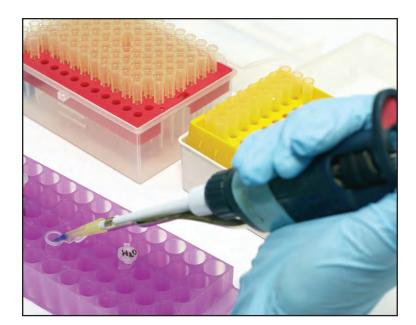
Medical Lab Assistants

Medical Technologists

Microbiology Technologists

Nuclear Medicine Technologists

Registered Nurses



This pathway provides career opportunities for persons with a strong interest in the initial phase of detecting health problems—the diagnostic phase. This phase includes procedures such as X-rays, fluoroscopies, sonograms, and clinical laboratory tests examining blood and other body fluids. Workers in this pathway discover "evidence" that physicians use to make correct diagnoses and administer appropriate treatment. Occupations are increasingly more varied because of complex new technology seeking to explain how the human body works.

PATHWAY COURSES

- Introduction to Healthcare Science
- · Essentials of Healthcare
- Clinical Lab I

RECOMMENDED COURSES

- Biology II
- 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







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



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.GAfutures.org for additional information.







EMERGENCY MEDICAL TECHNICIAN PATHWAY

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



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). 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)

Required national certification from the National Registry of Emergency Medical Technicians (www.nremt.org)





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



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





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



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







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



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

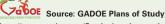
- · Associates of Science in Nursing
- Dental Hygiene
- · Orthopedic Technology
- Physical Therapist Assistant
- Radiologic Technology
- Surgical Technology

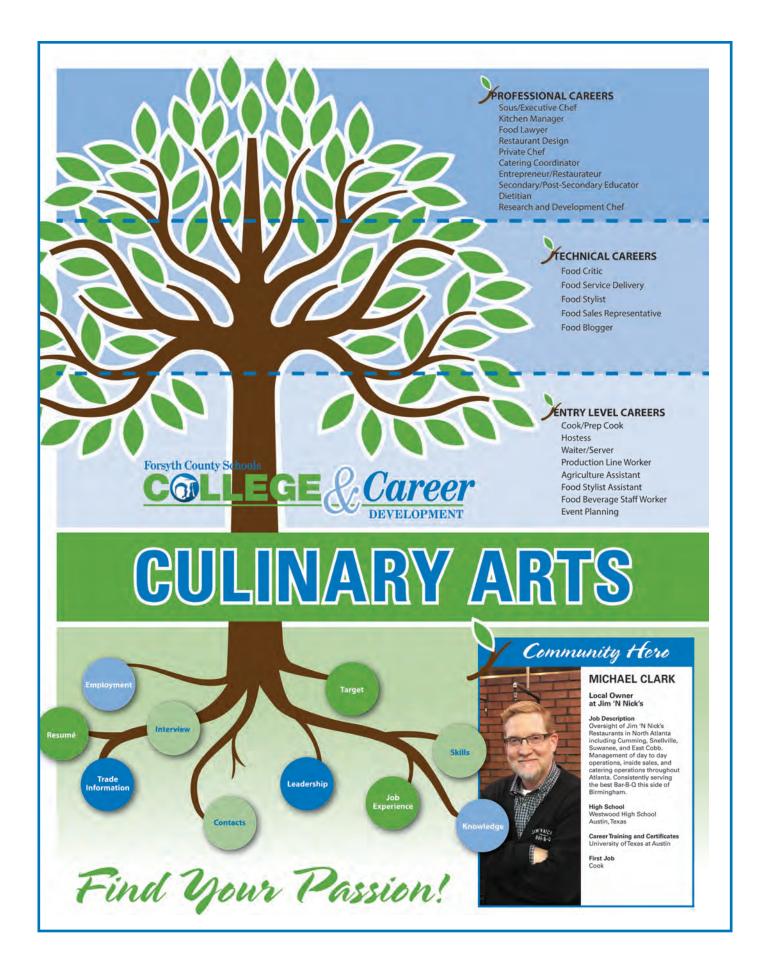
COLLEGES/UNIVERSITIES

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









HOSPITALITY AND TOURISM

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







HOSPITALITY, **RECREATION AND TOURISM PATHWAY**





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



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 s ervice-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 for additional information.









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









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



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

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

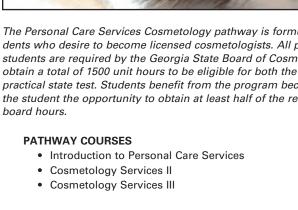
- Barber License
- Cosmetology
- Cosmetology Instructor License
- Cosmetology License
- Esthetician License
- Hair Designer
- Master Cosmetology License
- Shampoo Technician

COLLEGES/UNIVERSITIES

Cosmetology











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



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

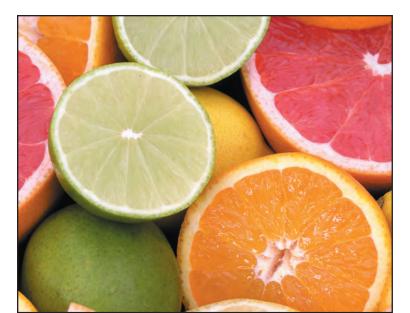
- Architecture
- Interior Design











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 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

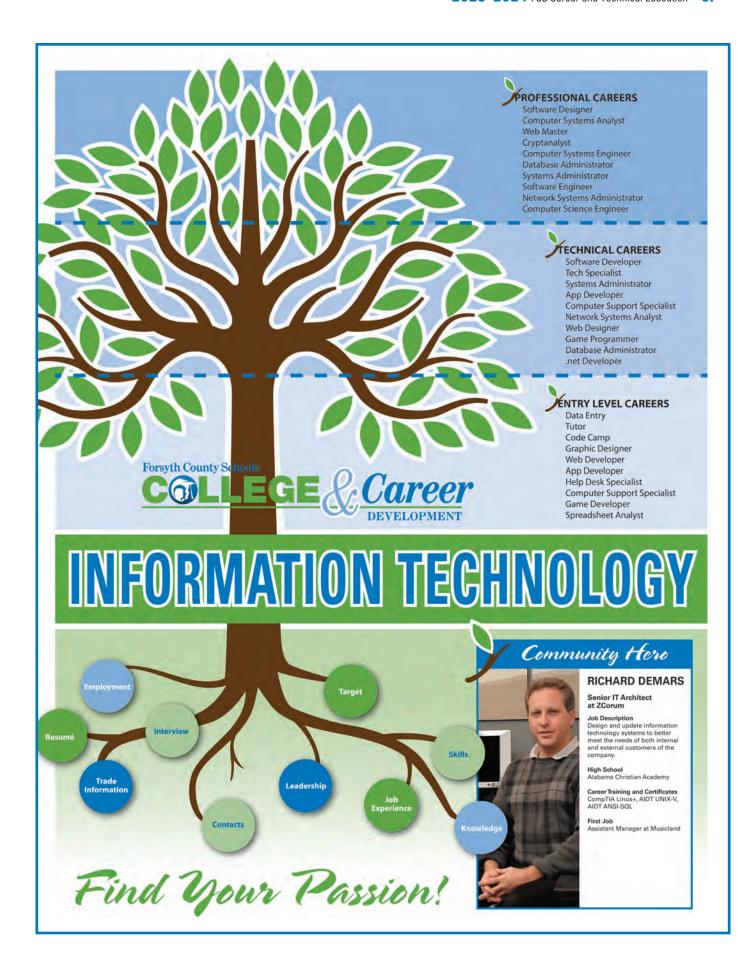
Technical Writer

Toxicologist



Source: GADOE Plans of Study

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





Artificial Intelligence is an area of study that deals with the simulation of intelligent behavior in computers. Artificial Intelligence sits at the intersection and synergy of critical components from a variety of fields including programming, data science, mathematical reasoning, creative problem solving, ethics, and applied experiences. Students in the Al pathway will apply professional software development tools and processes to create functional, real-world applications of Artificial Intelligence using machine learning.

PATHWAY COURSES

- · Foundations of Artificial Intelligence
- Artificial Intelligence Concepts
- Artificial Intelligence Applications

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

- · Certified Artificial Intelligence Engineer
- · Google Data Analytics Certificate
- IBM Applied Al Professional Certificate
- IBM Al Engineering Professional Certificate
- IBM Data Science Professional Certificate
- · Microsoft Certified: Azure Al Fundamentals

COLLEGES/UNIVERSITIES

- Analytics
- Artificial Intelligence & Innovation
- · Cognitive Science
- Computational Mathematics
- Computational Science & Engineering
- Computer Science with Al Research
- Electrical/Mechanical Engineering
- Information and Data Sciences

CAREER AND TECHNICAL STUDENT ORGANIZATIONS





INFORMATION TECHNOLOGY

ARTIFICIAL INTELLIGENCE PATHWAY

TOP CAREER CHOICES

Machine Learning Engineers

Leverage big data tools and programming frameworks to create production-ready scalable data science models that can handle terabytes of realtime data. \$145,300+ average annual salary

Data Scientists

Collect and analyze data to glean insights using various technology tools, processes, and algorithms, extracting knowledge from data and identifying meaningful patterns. \$119,300+ average annual salary

Business Intelligence Developers

Process complex internal and external data to identify trends, typically responsible for designing, modeling, and maintaining complex data in highly accessible cloudbased data platforms. \$92,200+ average annual salary

ADDITIONAL CAREER CHOICES

Big Data Engineer/Architect

Computer Vision Engineer

Data Mining/Analysis

Natural Language Processing Engineer

Researcher/Research Scientist

Robotics Engineer

Software/Al Engineer

Software Architect

User Experience (UX) Designer/Developer





CLOUD

COMPUTING PATHWAY



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



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











COMPUTER SCIENCE PATHWAY



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



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 A

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 Techician
- 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







CYBERSECURITY PATHWAY

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



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









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



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







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

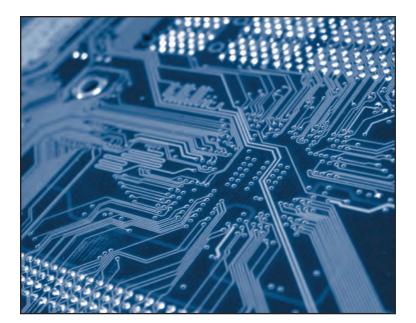
Computer Scientist

Computer Software Engineer

Computer Systems Analyst

Database Administrator

Mathematician



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 Techician
- Wireless Engineering Technology
- Wireless Networking Technician

COLLEGES/UNIVERSITIES

See www.GAcollege411.org for additional information.









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

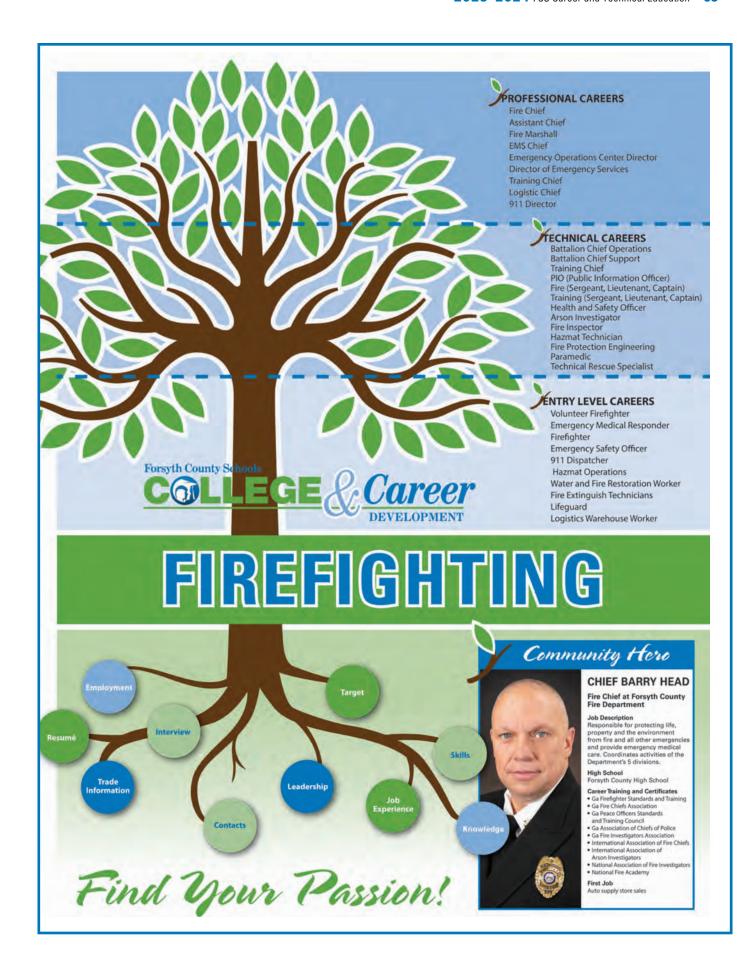
Webmaster

Website Designer

Software Trainer



Source: GADOE Plans of Study





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
- Emergency Medical Responder

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





LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY



FIRE AND EMERGENCY SERVICES - EMR

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

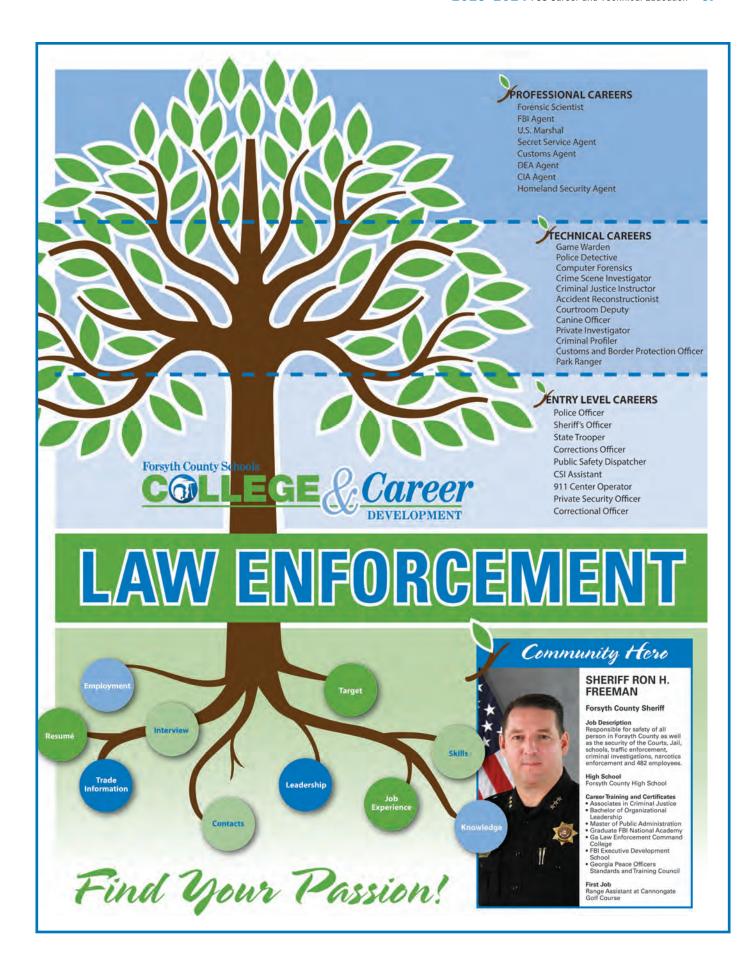
Prevention Specialists Lifeguards,

Ski Patrol, Other Recreational Protective

Service Workers Private Detectives and

Investigators





LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY





Students will examine the basic concepts of law related to citizens' rights and the responsibilities, and students will receive instruction in critical skill areas including: communicating with diverse groups, conflict resolution, ethics, CERT, basic firefighting, report writing, terrorism, civil and criminal law. Students will learn investigative techniques and crime scene investigation skills using the scientific method.

PATHWAY COURSES

- · Introduction to Law, Public Safety, Corrections, and Security
- Criminal Justice Essentials
- Forensic Science and 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





LAW ENFORCEMENT/ FORENSIC SCIENCE **PATHWAY**

TOP CAREER CHOICES

Forensic Psychologist

Medical Degree \$143,000 annual salary

Forensic Investigator

Bachelor Degree \$72,000 annual salary

Police Officer

Postsecondary Certificate \$48,000 annual salary

ADDITIONAL CAREER CHOICES

Fingerprint Technician

Forensic Pathologist

Medical Examiner

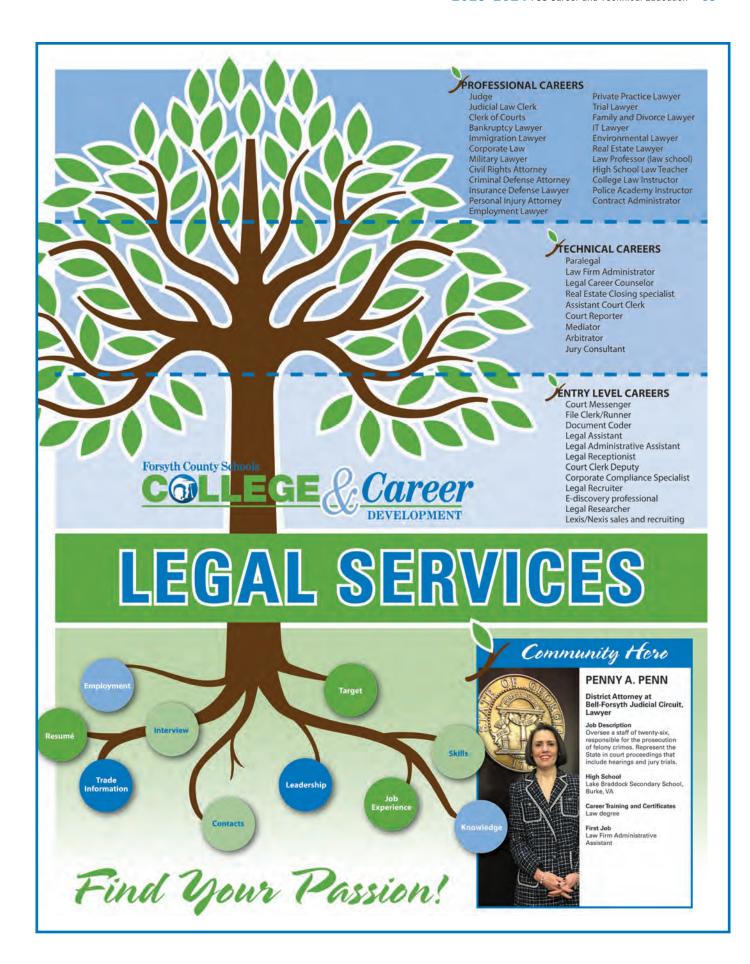
Coroner

Evidence Technician

Detective

Sheriff's Officer

Special Agent





LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

LEGAL SERVICES/ APPLICATIONS OF LAW **PATHWAY**

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



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

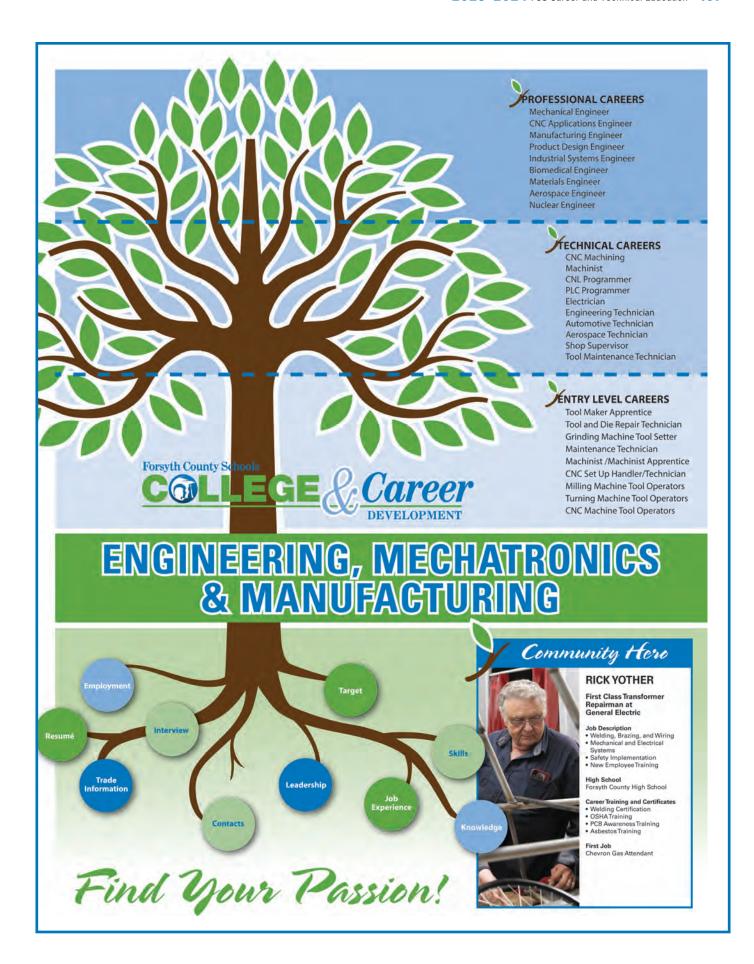
COLLEGES/UNIVERSITIES

- · Criminal Justice/Criminology
- · Emergency Management/Homeland Security
- · Law Enforcement Administration
- Police Science
- Pre-Law leading to Law School









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



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

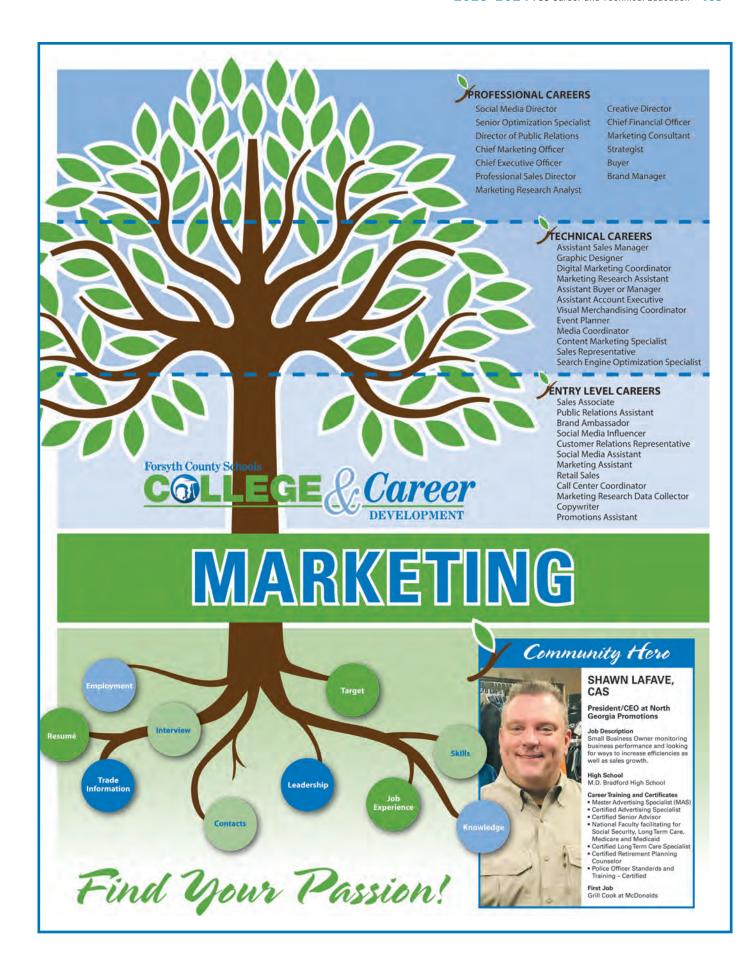














The Fashion Marketing pathway introduces students to the retail industry including the fundamentals of fashion marketing, key marketing concepts essential to every business, types of businesses involved in the industry, and an array of career opportunities. Students will develop skills in such areas 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





MARKETING

FASHION, MERCHANDISING & RETAIL MANAGEMENT PATHWAY

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 buvers

Visual Merchandisers

Work-Based Learning





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



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





MARKETING

MARKETING COMMUNICATIONS AND PROMOTIONS PATHWAY

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

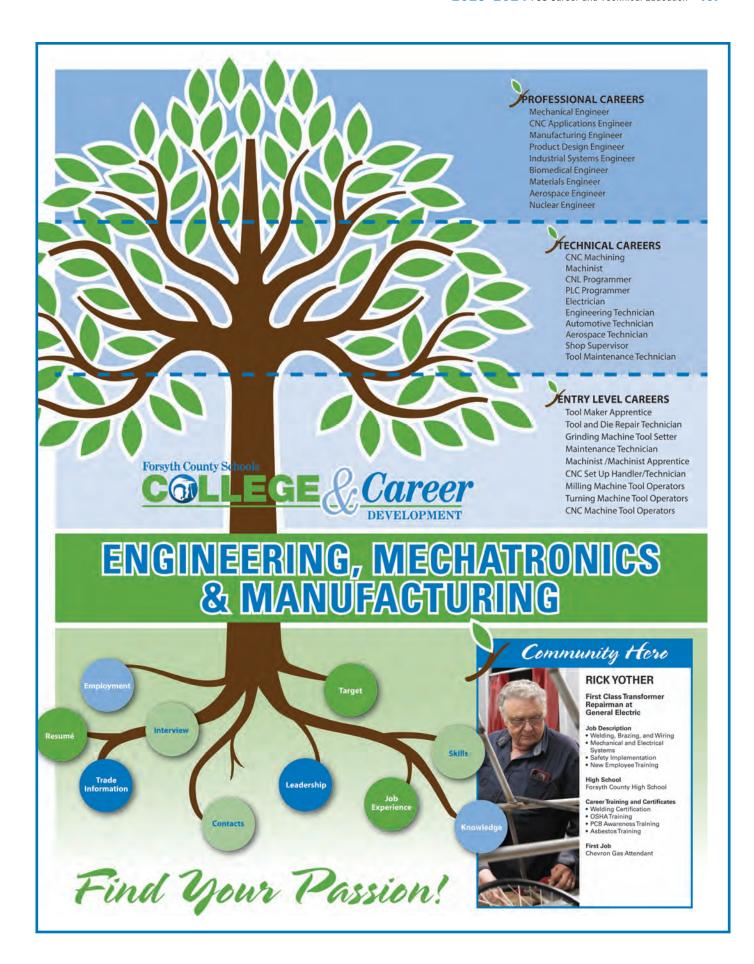
Public Relations Specialists Advertising

Sales AgentsSales Managers

Sales Representatives



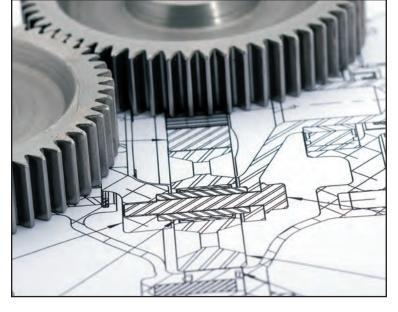
http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx



SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS







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 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

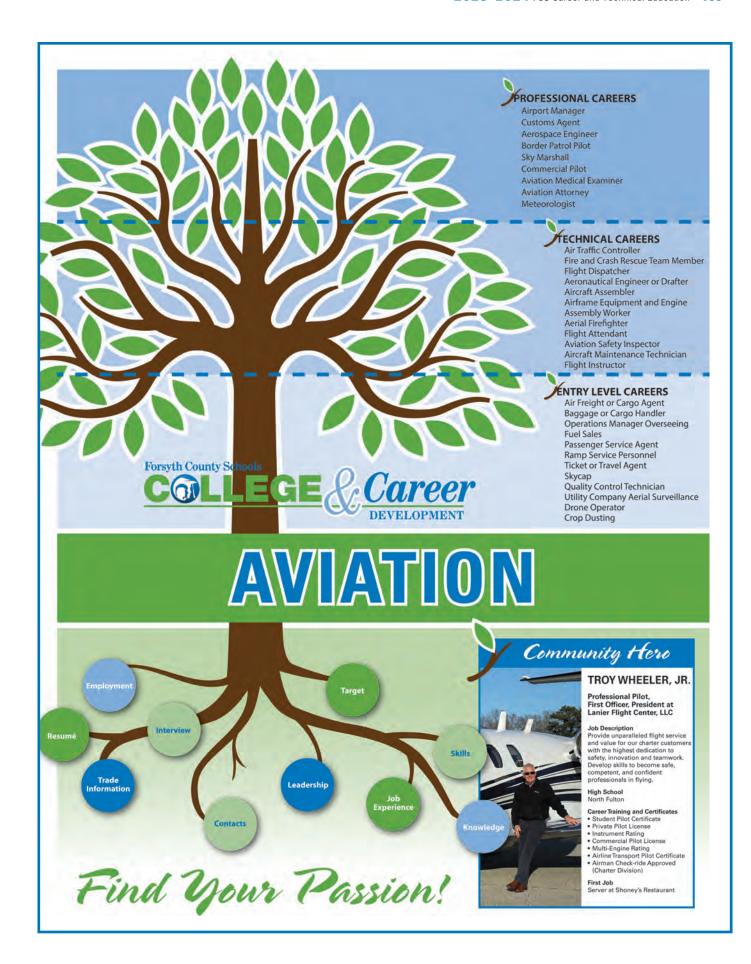
Drafter

Machinist

Manufacturing

Mechanical Engineer

Quality Control Inspector





TRANSPORTATION, DISTRIBUTION, & LOGISTICS

AEROSPACE FLIGHT OPERATIONS PATHWAY

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



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





TRANSPORTATION, DISTRIBUTION, & LOGISTICS





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 remove 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





DRONE/UNMANNED AIRCRAFT SYSTEMS **PATHWAY**

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

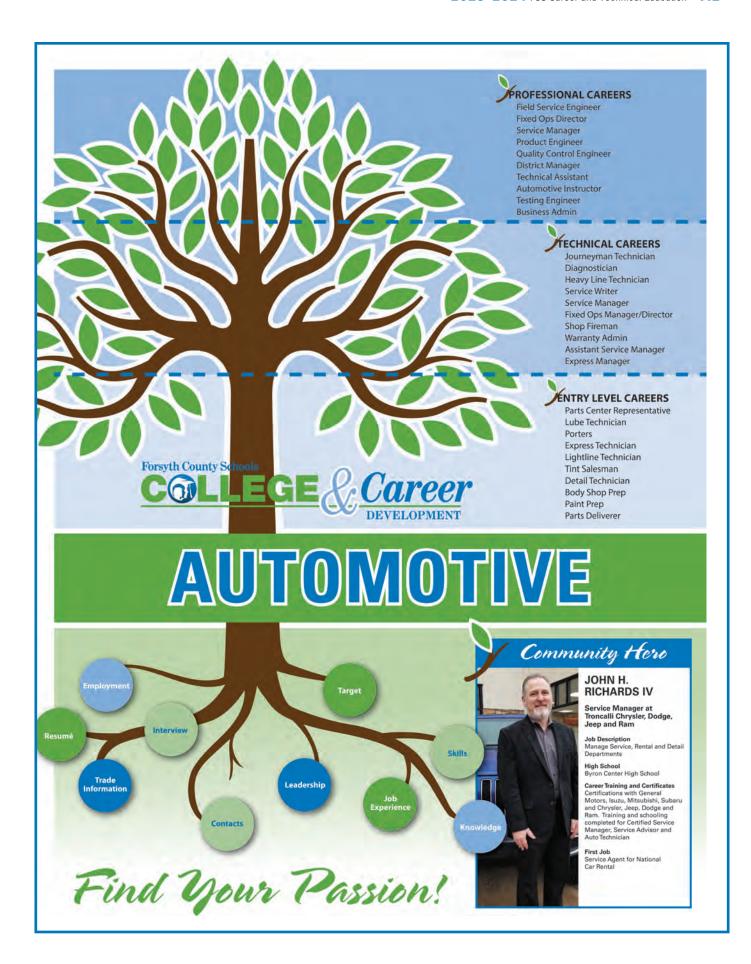
Research Hazardous Material Inspections

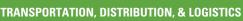
Nuclear Power Plant Inspections

Sewer and Cave Inspections

Telecommunications and Utility Companies







AUTOMOTIVE

TECHNOLOGY PATHWAY



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)

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

PATHWAY COURSES

employers.

- 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







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



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



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)





















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



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 or visit www.forsyth.k12.ga.us/ctae today!







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 or email vlowe@forsyth.k12.ga.us!

INTERNSHIP FORSYTH IS AVAILABLE THROUGH THE FOLLOWING PROGRAMS

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, AN 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

NTERNSHIP FORSYTH **NORK-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.







Virtual 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/ctael

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

Step 2:

- Ensure your contact information Click on the QR code or link and submit the online appli-
- · Ensure you have teacher recommendation information completed.

Step 3:

CONNECT WITH CAREER

- is correct on the application.
- · Your school's Career Developout this Spring to discuss
- If accepted, you will be notified after Spring Break and be given information about a Student Orientation Meeting. All students are required to
- · Coordinators will contact school to add coursework to your

Step 4:

SECURE AN INTERNSHIP PLACEMENT

- Your application will note if you 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 quaranteed
- Placements can be paid or unpaid.
- Having your own placement is not required prior to the begin-ning 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 begin-ning of the school year.





FOR ADDITIONAL INFORMATION:

SPECIALTIES







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





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





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



CAREER & 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.

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 Forsyth Virtual Academy West Forsyth High School







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





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





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





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





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





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

Applicable Pathways: Energy Systems • Engineering • Mechatronics



We are excited that this program will honor outstanding CTAE students from each CTSO, Internship/Mentorship, and ROTC with one overall CTAE High School Student of the Year being named for Forsyth County Schools. Along with our high school awards, the night will feature middle school awards and the prestigious Michael Gravitt CTAE Partnership Award to recognize business and industry involvement in our programs.

FINALIST (DISTRICT LEVEL) REQUIREMENTS FOR STUDENTS:

- **I. APPLICATION** Complete the student application in its entirety. All information must be typed.
- II. RÉSUMÉ Include a résumé that highlights the student's academic achievements, volunteer experience, as well as any career and technical education involvement.
- III. STUDENT REFLECTION Detail how your career and technical education experience has impacted your future career choices and high school pathway interests.
- IV. STUDENT PHOTOS Submit one photo of the student actively involved in their career pathway/CTSO and one headshot in professional dress or CTSO blazer with a white shirt. Photos will be used in the awards program. Please make sure the photos highlight the student and are high resolution. Do not submit a group shot where the student is not the focus.
- V. CTAE TEACHER LETTER OF RECOMMENDATION Submit a letter of recommendation from a Career, Technical, and Agricultural Education teacher.
- VI. PRINCIPAL AND CTAE ASSISTANT PRINCIPAL SIGN-OFF FORM All applications must include the school administration sign-off form with all appropriate signatures.



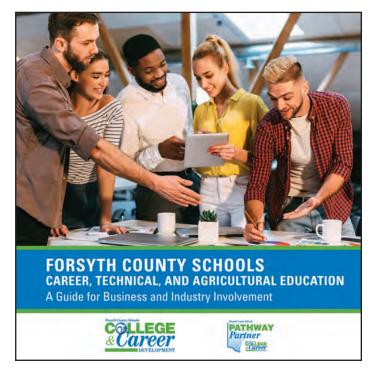
CTAE **EXCELLENCE AWARDS PROGRAM**

2022-23 AWARD CATEGORIES:

- · New! CTSO Advisor of the Year
- Michael Gravitt Partnership Award
- . MS Students of the Year
- · HS Agriculture
- HS Architecture & Construction
- HS Automotive
- HS Aviation
- HS A/V Technology & Film
- HS Business/Finance/Information Technology
- HS Cosmetology
- · HS Culinary Arts
- HS Education ECE & TAP
- HS Energy/Engineering/Mechatronics
- HS Government & Public Administration/ Law, Public Safety, Corrections & Security
- HS Graphic Design
- HS Health Science
- · HS Interior Design
- HS Marketing/Hospitality & Tourism
- . HS Nutrition and Food Science
- Internship Forsyth

Last Year's Winners:

Video From Last Year: https://forsythk12orgmy.sharepoint.com/:v:/g/personal/vlowe_fors ythk12_org/ERSiufUq_8xFrJSXByt_7kkB_3B-P7vTTjdbUoghdT6-hA?e=FyFKgF



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 Pathway 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

SPECIALTIES

BUSINESS AND INDUSTRY INVOLVEMENT

FOR ADDITIONAL INFORMATION www.forsyth.k12.ga.us/ctae or email vlowe@forsyth.k12.ga.us!

PATHWAY PARTNER OPPORTUNITIES FOR PARTICIPATION

- · Certification/Curriculum Advice
- Job Shadowing/Field Trips
- College & Career Fair Participation
- Internships
- · Mock Interviews
- · Classroom Speaker
- · Teacher Externships
- · Advisory Board
- · 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:







allalla CISCO











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 thirdparty 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 realworld application in order to understand the influence of education on future opportunities.

OUTCOMES

More Than 90% of Teachers Observed Their Students Effectively Integrating

COLLABORATION CRITICAL COMMUNICATION **ECONOMIC**

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.



ALLIANCE ACADEMY FOR OF CUMMING-FORSYTH COUNTY

1100 Lanier 400 Parkway | Cumming, Georgia 30040

Mr. Karl Mercer, Principal KMercer@forsyth.k12.ga.us

CAREER AND TECHNICAL STUDENT **ORGANIZATIONS**













NTERNSHIP FORSYTH WORK-BASED LEARNING Forsyth County Schools

HONOR SOCIETIES

Beta Club Mu Alpha Theta **National Honor Society** National Technical Honor Society **Academic Honor Societies**

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**



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

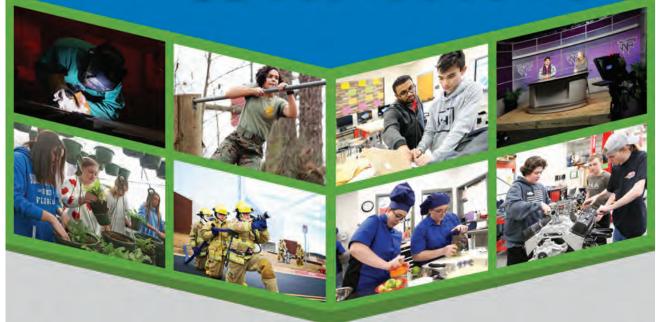
International Business Financial Technology



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





















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)

• Earn at least one unit in a state-approved Work-Based Learning

program in the concentrated CTAE pathway area

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

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 DNE (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, CTSOs, 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

· Complete the requirements above

AND

Distinguished Seal

 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

- · 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, CTSOs, or JROTC
- · Hold or previously held a leadership office at the local, regional, state or national level in a state-recognized CTSO 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 **MOT** Careers to 2026!

<u>Associate Degree Programs</u>

(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



LANIER 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		University System of	USG Area option if USG	
(title, prefix, & number)		Georgia Equivalent	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 1111	Area D – Natural Sciences, Math, & Technology	
	BIOL 1111L	BIOL 1111L	Non – Majors biology credit	
Biology Introduction II	BIOL 1112	BIOL 1112	Area D – Natural Sciences, Math, & Technology	
	BIOL 1112L	BIOL 1112L	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 1151	Area D – Natural Sciences, Math, & Technology	
, , ,	CHEM 1151L	CHEM 1151L	Non – Majors chemistry credit	
Chemistry II (Intro)	CHEM 1152	CHEM 1152	Area D – Natural Sciences, Math, & Technology	
Chemistry ii (iiitro)	CHEM 1152L	CHEM 1152L	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 2100	ECON 2010	Area E – Social Sciences	
English Composition I	ENGL 1101	ENGL 1101	Area A1 –Communication	
English Composition II	ENGL 1101	ENGL 1101	Area A1 –Communication 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 1101	MATH 1101 MATH 1113	Area A2 or Area D	
		PHYS 1111	Area D – Natural Sciences, Math, & Technology	
Physics I (Intro)	PHYS 1111		Non – Majors physics credit	
District II (Inter)	PHYS 1111L	PHYS 1111L	Area D – Natural Sciences, Math, & Technology	
Physics II (Intro)	PHYS 1112	PHYS 1112 PHYS 1112L	Non – Majors physics credit	
Developer (Intro)	PHYS 1112L	PSYC 1101		
Psychology (Intro)	PSYC 1101		Area E – Social Sciences	
Public Speaking	SPCH 1101	COMM 1100-1110	Area C. Humanitias Fine Arts 8 Ethics	
Quantitative Skills & Reasoning	MATH 1103	MATH 1001	Area C – Humanities, Fine Arts & Ethics Area A	
	SOCI 1101	SOCI 1101		
Sociology (Intro)			Area D. Natural 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 2111**	HIST 2111	Area E – Social Sciences Area E – Social Sciences	
World History I	HIST 1111	HIST 1111	Area E – Social Sciences Area E – Social Sciences	
World History II	HIST 1111	HIST 1112	Area E – Social Sciences	
This table applies if the accepting USG			ALCA 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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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.





The Forsyth County School District does not discriminate on the basis of race, color, national origin, religion, sex, disability, or age in its programs, activities, or employment practices and provides equal access to the Boy Scouts and other designated youth groups.