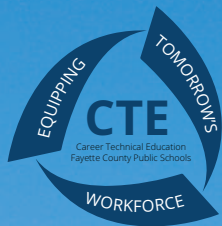


**2019-2020**

**FAYETTE COUNTY PUBLIC SCHOOLS**

# **CTE CAREER PLANNER**



[www.fayetteCTE.org](http://www.fayetteCTE.org)

**SCHOOL KEY SYSTEM**

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

- Fayette County High School
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*Preparing students for success after high school is an inherent component of the Fayette County Public Schools' Vision. 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, Fayette County Public Schools's Career & Technical Education Department has provided this planning guide for use by students and their parents.*

## PARENTS AND STUDENTS

### FAYETTE COUNTY HIGH SCHOOL

1 Tiger Trail  
Fayetteville, GA 30214  
Mrs. Yolanda Briggs-Johnson, Principal  
770.460.3540  
<http://www.fchstigers.org>

### MCINTOSH HIGH SCHOOL

201 Walt Banks Road  
Peachtree City, GA 30269  
Dr. Dan Lane, Principal  
770.631.3232  
<http://www.fcboe.org/mhs>

### SANDY CREEK HIGH SCHOOL

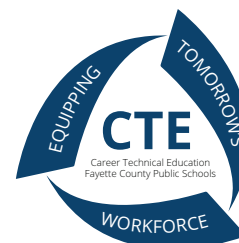
360 Jenkins Road  
Tyrone, GA 30290  
Mr. Robert Hunter, Principal  
770.969.2840  
<http://www.fcboe.org/schs>

### STARR'S MILL HIGH SCHOOL

193 Panther Path  
Fayetteville, GA 30215  
Mr. Allen Leonard, Principal  
770.486.2710  
<http://www.starrsmillhighschool.org>

### WHITEWATER HIGH SCHOOL

100 Wildcat Way  
Fayetteville, GA 30215  
Mr. Steve Cole, Principal  
770.460.3935  
<http://www.whswildcats.org>





## NOTICE OF NON-DISCRIMINATION

*The Fayette County Public Schools Career and Technical Education department does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities and provides equal access to other designated youth groups. The following person(s) has been designated to handle inquiries regarding the non-discrimination policies:*

### **PUBLIC NOTICE FAYETTE COUNTY PUBLIC SCHOOLS**

The Fayette County School system 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. The following is a list of the career clusters being offered this year.

- *Architecture and Construction*
- *Arts, AV Technology, and Communications*
- *Business Management and Administration*
- *Education and Training*
- *Finance*
- *Government and Public Administration*
- *Health Science*
- *Hospitality and Tourism*
- *Human Services*
- *Information Technology*
- *Law, Public Safety, Corrections and Security*
- *Marketing*
- *Science, Technology, Engineering and Mathematics*
- *Transportation Distribution and Logistics*

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

Lisa Collins  
 Director of Career and Technical Education  
 440 Hood Avenue, Fayetteville, GA 30214  
 770.716.1209 ext. 230  
 collins.lisa@mail.FCBOE.org

**504 Coordinator** Audrey Toney  
 Director of Student Services  
 Fayette County Public Schools  
 205 LaFayette Avenue  
 Fayetteville, GA 30214  
 770.460.3990

**Title IX Coordinator** Mike Sanders  
 Assistant Superintendent of Operations  
 Fayette County Public Schools  
 440 Hood Avenue  
 Fayetteville, GA 30214  
 770.716.1209

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





## MIDDLE SCHOOL PERFORMANCE STANDARDS

### APPROVED CAREER, TECHNICAL AND AGRICULTURAL EDUCATION EXPLORATORY PROGRAMS

#### Middle School Business and Computer Science

07.08300 Business and Computer Science (Grade 6)  
07.08400 Business and Computer Science (Grade 7)  
07.08500 Business and Computer Science (Grade 8)

#### Middle School Career Development

32.08300 Career Awareness (Grade 6)  
32.02200 Career Discovery (Grade 7)  
32.02300 Career Management (Grade 8)

#### Middle School Communications

48.03100 Broadcast and Graphic Communications (Grade 6)  
48.03200 Introduction to Communications (Grade 7)  
48.03300 Applications of Communications (Grade 8)

#### Middle School Engineering and Technology

21.02100 Exploring Engineering and Technology (Grade 6)  
21.02200 Invention and Innovation (Grade 7)  
21.02300 Technological Systems (Grade 8)

#### Middle School Family and Consumer Science

20.01100 Family and Consumer Science (Grade 6)  
20.01200 Family and Consumer Science (Grade 7)  
20.01300 Family and Consumer Science (Grade 8)

Designed to meet the needs of young adolescents (ages 10-15), 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.

| COURSE NAME                   | Bennett's Mill | Flat Rock | JC Booth | Rising Starr | Whitewater |
|-------------------------------|----------------|-----------|----------|--------------|------------|
| Business and Computer Science | X              | X         | X        |              | X          |
| Career Development            |                |           |          | X            |            |
| Communications                | X              | X         | X        | X            |            |
| Computer Literacy             |                |           |          | X            |            |
| Engineering and Technology    | X              | X         | X        | X            | X          |
| Family and Consumer Science   |                |           | X        | X            | X          |

# Georgia's **HOT** Careers to 2026

The careers in this chart have it all!

**Skills and Abilities**

- advanced skills required
- moderate skills required

**Work Activities**

- frequently found
- occasionally found

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

- Critical Thinking/Problem Solving
- Judgment & Decision Making
- Service Oriented/Instructing
- Listening/Reading
- Oral Expression/Comprehension
- Dexterity/Arm-Hand Steadiness
- Reasoning
- Written Expression/Comprehension
- Assisting & Caring for Others
- Coaching/Training & Teaching Others
- Communicating Outside Organization
- Control Machines/Inspect Equipment
- Interacting With Computers
- Monitor Processes, Materials, Surroundings
- Physical Act/Handle-Move & Objects
- Process/Analyze Data or Information
- Schedule/Organiz. Plan, & Prioritize Work
- Thinking Creatively
- 2017 Edition - Georgia Wage Survey
- 2016-26 Annual Openings

| Occupational Characteristics                    | Fast job growth | Above average wages | At least 400 expected annual job openings |
|---|-----------------|---------------------|---|
| <b>Doctoral or professional degree</b>          |                 |                     |   |
| Physical Therapists                             | ○               | ●                   | ●   |
| Physicians & Surgeons, All Other                | ○               | ●                   | ●   |
| Postsecondary Teachers, All Other               | ●               | ●                   | ●   |
| <b>Master's degree</b>                          |                 |                     |   |
| Education Administrators, Elem & Sec            | ●               | ●                   | ●   |
| Educational, Guidance, School, & Voc Counselors | ●               | ●                   | ●   |
| Healthcare Social Workers                       | ●               | ●                   | ●   |
| Instructional Coordinators                      | ●               | ●                   | ●   |
| Nurse Practitioners                             | ●               | ●                   | ●   |
| Physician Assistants                            | ●               | ●                   | ●   |
| <b>Bachelor's degree</b>                        |                 |                     |   |
| Accountants & Auditors                          | ●               | ●                   | ●   |
| Administrative Services Managers                | ●               | ●                   | ●   |
| Airline Pilots, Copilots, & Flight Engineers    | ●               | ●                   | ●   |
| Business Operations Specialists, All Other      | ○               | ●                   | ●   |
| Civil Engineers                                 | ●               | ●                   | ●   |
| Coaches and Scouts                              | ●               | ●                   | ●   |
| Compliance Officers                             | ○               | ●                   | ●   |
| Computer & Information Systems Managers         | ●               | ●                   | ●   |
| Computer Occupations, All Other                 | ●               | ●                   | ●   |
| Construction Managers                           | ●               | ●                   | ●   |
| Cost Estimators                                 | ●               | ●                   | ●   |
| Elementary School Teachers, Exc Spec Ed         | ●               | ●                   | ●   |
| Financial Analysts                              | ●               | ●                   | ●   |
| Financial Managers                              | ●               | ●                   | ●   |
| Financial Specialists, All Other                | ●               | ●                   | ●   |
| General & Operations Managers                   | ●               | ●                   | ●   |
| Health Educators                                | ●               | ●                   | ●   |
| Human Resources Managers                        | ○               | ●                   | ●   |
| Human Resources Specialists                     | ○               | ●                   | ●   |
| Industrial Engineers                            | ●               | ●                   | ●   |
| Kindergarten Teachers, Exc Spec Ed              | ●               | ●                   | ●   |
| Loan Officers                                   | ●               | ●                   | ●   |

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

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



# Georgia's HOT Careers to 2026

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- Assisting & Caring for Others
- Coaching/Training & Teaching Others
- Communicating Outside Organization
- Control Machines/Inspect Equipment
- Interacting With Computers
- Monitor Processes, Materials, Surroundings
- Physical Arts/Handy-Move Objects
- Process/Analyze Data or Information
- Schedule/Organiz. Plan, & Prioritize Work
- Thinking Creatively
- 2017 Edition - Georgia Wage Survey
- 2016-20 Annual Openings

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

| Bachelor's degree continued                                 |   |   |   |   |   |   |   |   |   |   |   |   |           |       |
|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-------|
| Logisticians  | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$73,400  | 580   |
| Management Analysts   | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$96,900  | 2,650 |
| Market Research Analysts & Marketing Spec                   | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | \$64,200  | 2,500 |
| Marketing Managers  | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$138,600 | 730   |
| Mechanical Engineers  | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● | ● | ● | \$83,700  | 430   |
| Medical & Health Services Managers                          | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$109,100 | 840   |
| Middle Schl Teachers, Exc Spec & Career/Tech Ed             | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$57,100  | 2,420 |
| Personal Financial Advisors                                 | ○ | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | \$124,000 | 680   |
| Producers & Directors                                       | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$77,000  | 550   |
| Public Relations Specialists                                | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$58,200  | 620   |
| Registered Nurses   | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ● | ● | ● | \$65,600  | 5,410 |
| Sales Managers  | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$130,800 | 1,580 |
| Secondary Schl Teachers, Exc Spec & Career/Tech Ed          | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$57,100  | 2,220 |
| Software Developers, Applications                           | ● | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ○ | ● | \$103,000 | 2,300 |
| Training & Development Specialists                          | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$62,300  | 1,120 |
| Associate's degree  |   |   |   |   |   |   |   |   |   |   |   |   |           |       |
| Dental Hygienists   | ○ | ● | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ○ | \$66,100  | 540   |
| Paralegals & Legal Assistants                               | ○ | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$53,600  | 1,060 |
| Postsecondary non-degree award                              |   |   |   |   |   |   |   |   |   |   |   |   |           |       |
| Aircraft Mechanics & Service Technicians                    | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$70,000  | 800   |
| Some college, no degree                                     |   |   |   |   |   |   |   |   |   |   |   |   |           |       |
| Computer User Support Specialists                           | ● | ● | ● | ● | ○ | ● | ○ | ○ | ● | ● | ● | ○ | \$54,200  | 1,930 |
| High school diploma or equivalent                           |   |   |   |   |   |   |   |   |   |   |   |   |           |       |
| Automotive Body & Related Repairers                         | ○ | ● | ○ | ● | ● | ● | ● | ○ | ● | ● | ● | ● | \$51,500  | 620   |
| Electrical Power-Line Installers & Repairers                | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ● | \$51,000  | 630   |
| Supvrs of Construction Trades & Extraction Workers          | ● | ● | ○ | ● | ● | ● | ○ | ● | ● | ● | ● | ● | \$62,400  | 1,590 |
| Supvrs of Helpers, Laborers, & Material Movers, I Land      | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$51,600  | 1,010 |
| Supvrs of Mechanics, Installers, & Repairers                | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$63,500  | 1,460 |
| Insurance Sales Agents                                      | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$67,800  | 1,630 |
| Production, Planning, & Expediting Clerks                   | ● | ● | ● | ● | ● | ● | ○ | ○ | ● | ● | ● | ● | \$48,900  | 1,290 |
| Property, Real Estate, & Community Assoc Mgrs               | ● | ● | ○ | ● | ● | ● | ● | ○ | ● | ● | ● | ● | \$86,700  | 700   |
| Sales Reps, Services, All Other                             | ● | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● | \$58,800  | 4,050 |
| Sales Reps, Wholesale & Mfg, Exc Tech & Scientific Products | ○ | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$63,600  | 6,590 |

**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.

# GEORGIA'S STEM Careers to 2026

## Science | Technology | Engineering | Mathematics

| <b>Knowledge</b><br>Understanding of principles and facts of subject matter<br>● full knowledge required<br>○ some knowledge required<br><br><b>Education</b><br>Typical education needed to enter an occupation<br><br><b>Hot</b> jobs have faster than state annual average job growth, above the state annual average wage, and have at least 400 annual openings. | Knowledge                     |                   |                               |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         | Education                             |                    | Occupational Characteristics    |                 |                   |                                      |                                    |                         |
|---|-------------------------------|-------------------|-------------------------------|------------------------------------|----------------------------------|---------------------------|--------------------------|------------------------|----------------------------|------------------|---|-------------|--------------------------------------|------------------------|-------------------------------|---------|---------------------------------------|--------------------|---------------------------------|-----------------|-------------------|--------------------------------------|------------------------------------|-------------------------|
|   | Administration and Management | Biology/Chemistry | Design/Build and Construction | Clerical/Customer and Personal Svc | Telecom/Communications and Media | Computers and Electronics | Economics and Accounting | Education and Training | Engineering and Technology | English Language | Law and Govt/Public Safety and Security | Mathematics | Mechanical/Production and Processing | Medicine and Dentistry | Personnel and Human Resources | Physics | Psychology/Sociology and Anthropology | Therapy/Counseling | Doctoral or Professional Degree | Master's Degree | Bachelor's Degree | HS Diploma/Assoc Degree/Some College | 2017 Edition - Georgia Wage Survey | 2016-26 Annual Openings |
| <b>Life and Physical Science, Engineering, Mathematics, and Information Technology Occupations</b>  |                               |                   |                               |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 |                   |                                      |                                    |                         |
| Aerospace Engineers   |                               |                   | ○                             |                                    |                                  | ●                         |                          | ●                      | ●                          |                  | ●                                       | ●           |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$112,400                          | 240                     |
| Civil Engineering Technicians   |                               |                   | ●                             |                                    |                                  | ●                         |                          | ●                      | ○                          |                  |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$47,800                           | 190                     |
| Civil Engineers <b>Hot</b>  | ●                             |                   | ○                             |                                    | ●                                | ●                         |                          | ●                      | ○                          | ●                |   |             |                                      | ●                      | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$90,200                           | 880                     |
| Computer & Information Systems Managers <b>Hot</b>  | ●                             |                   | ○                             |                                    |                                  |                           | ●                        | ●                      | ●                          |                  | ●                                       |             |                                      | ●                      |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$138,800                          | 1,040                   |
| Computer Network Architects   |                               |                   | ○                             | ○                                  | ○                                | ●                         |                          | ●                      | ●                          |                  | ●                                       |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$117,200                          | 350                     |
| Computer Network Support Specialists  | ●                             |                   | ○                             | ●                                  | ●                                | ●                         |                          | ●                      | ●                          |                  |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$73,100                           | 580                     |
| Computer Occupations, All Other <b>Hot</b>  | ●                             |                   | ○                             | ○                                  | ●                                | ●                         | ●                        |                        | ●                          | ●                |   | ●           |                                      |                        |                               |         | ○                                     |                    |                                 |                 | ✓                 |                                      | \$88,200                           | 920                     |
| Computer Systems Analysts   | ●                             |                   |                               | ○                                  |                                  | ●                         |                          | ●                      |                            |                  | ●                                       |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$93,500                           | 1,150                   |
| Computer User Support Specialists <b>Hot</b>  |                               |                   |                               | ○                                  | ●                                | ●                         | ●                        |                        | ●                          | ●                |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$54,200                           | 1,930                   |
| Database Administrators   |                               |                   |                               | ○                                  | ●                                | ●                         |                          |                        | ●                          | ●                |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$89,600                           | 350                     |
| Electrical & Electronics Engineering Techs  |                               |                   | ○                             | ○                                  |                                  |                           |                          | ●                      | ●                          |                  | ●                                       | ●           |                                      |                        | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$60,200                           | 360                     |
| Electrical Engineers  |                               |                   | ○                             |                                    |                                  |                           |                          | ●                      | ●                          | ●                |   | ○           |                                      |                        | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$90,400                           | 340                     |
| Electronics Engineers, Exc Computer   |                               |                   | ○                             | ○                                  | ○                                | ●                         |                          | ●                      | ●                          |                  | ●                                       | ●           |                                      |                        | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$93,700                           | 400                     |
| Engineers, All Other  | ●                             | ●                 | ○                             | ○                                  | ○                                | ●                         |                          | ●                      | ●                          | ○                | ●                                       | ●           |                                      |                        | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$92,100                           | 230                     |
| Environmental Engineers   | ●                             | ●                 | ○                             | ○                                  |                                  | ●                         |                          | ●                      | ●                          | ●                | ●                                       | ○           |                                      |                        | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$68,200                           | 140                     |
| Industrial Engineers <b>Hot</b>   | ●                             |                   | ○                             | ○                                  |                                  | ●                         |                          | ●                      | ●                          |                  | ●                                       | ●           |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$82,800                           | 580                     |
| Information Security Analysts   | ●                             |                   |                               | ○                                  | ●                                | ●                         |                          | ●                      | ●                          | ○                |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$91,000                           | 210                     |
| Mechanical Engineers <b>Hot</b>   | ●                             | ○                 | ○                             | ●                                  |                                  |                           |                          | ●                      | ●                          | ●                |   | ●           |                                      |                        | ●                             |         |                                       |                    |                                 |                 | ✓                 |                                      | \$83,700                           | 430                     |
| Medical Scientists, Exc Epidemiologists   | ●                             | ●                 |                               |                                    |                                  | ●                         |                          | ●                      |                            | ●                | ●                                       | ●           |                                      |                        |                               |         |                                       | ✓                  |                                 |                 |                   |                                      | \$64,000                           | 150                     |
| Network & Computer Systems Administrators   | ●                             |                   |                               |                                    |                                  | ●                         |                          |                        | ●                          | ●                |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$88,200                           | 750                     |
| Operations Research Analysts  | ●                             |                   |                               |                                    |                                  | ●                         |                          | ●                      | ●                          |                  | ○                                       |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$64,300                           | 240                     |
| Sales Reps, Wholesale & Mfg, Tech & Scientific Products   | ●                             |                   |                               | ○                                  |                                  | ●                         |                          |                        | ●                          | ●                | ○                                       |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$88,000                           | 1,040                   |
| Software Developers, Applications <b>Hot</b>  |                               |                   | ○                             | ○                                  |                                  | ●                         |                          | ●                      | ●                          |                  | ●                                       |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$103,000                          | 2,300                   |
| Software Developers, Systems Software   |                               |                   | ○                             | ○                                  | ○                                | ●                         |                          | ●                      | ●                          |                  | ●                                       |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$98,600                           | 970                     |
| Statisticians   |                               |                   |                               |                                    |                                  | ●                         |                          |                        | ●                          | ●                |   |             |                                      |                        |                               |         |                                       | ✓                  |                                 |                 |                   |                                      | \$87,200                           | 100                     |
| Surveying & Mapping Technicians   |                               |                   | ●                             | ○                                  |                                  | ●                         |                          | ●                      | ●                          | ●                |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$41,100                           | 240                     |
| Web Developers  |                               |                   | ○                             | ○                                  | ○                                | ●                         |                          |                        | ●                          | ●                |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 | ✓                 |                                      | \$78,200                           | 350                     |
| <b>Health Occupations</b>   |                               |                   |                               |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         |                                       |                    |                                 |                 |                   |                                      |                                    |                         |
| Dental Hygienists <b>Hot</b>  |                               | ○                 | ○                             |                                    |                                  |                           |                          | ●                      | ●                          |                  |   |             | ●                                    |                        |                               | ○       |                                       |                    |                                 |                 | ✓                 |                                      | \$66,100                           | 540                     |
| Dentists, General   | ●                             | ○                 | ○                             |                                    |                                  |                           | ●                        | ●                      | ●                          |                  |   |             | ●                                    | ●                      | ○                             |         |                                       | ✓                  |                                 |                 |                   |                                      | \$176,100                          | 160                     |
| Diagnostic Medical Sonographers   |                               | ○                 | ●                             |                                    | ●                                | ●                         |                          | ●                      | ●                          |                  |   |             | ●                                    |                        | ○                             | ○       |                                       |                    |                                 |                 | ✓                 |                                      | \$63,400                           | 140                     |
| Emergency Medical Techs & Paramedics  | ●                             | ●                 | ●                             | ○                                  |                                  |                           | ●                        | ●                      | ●                          | ●                |   |             | ●                                    |                        | ○                             | ●       |                                       |                    |                                 |                 | ✓                 |                                      | \$33,400                           | 780                     |
| Family & General Practitioners  |                               | ●                 | ○                             |                                    |                                  |                           |                          | ●                      | ●                          | ●                |   |             | ●                                    |                        | ○                             | ●       |                                       | ✓                  |                                 |                 |                   |                                      | \$213,800                          | 180                     |
| Health Diagnosing & Treating Practitioners, All Other   | ●                             | ●                 | ●                             |                                    |                                  |                           | ●                        | ●                      |                            |                  |   |             | ●                                    |                        | ●                             | ●       |                                       | ✓                  |                                 |                 |                   |                                      | \$103,500                          | 190                     |

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



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# GEORGIA'S STEM Careers to 2026

## Science | Technology | Engineering | Mathematics

| <b>Knowledge</b><br>Understanding of principles and facts of subject matter<br>● full knowledge required<br>○ some knowledge required<br><br><b>Education</b><br>Typical education needed to enter an occupation<br><br><span style="color: red;">Hot</span> Jobs have faster than state annual average job growth, above the state annual average wage, and have at least 400 annual openings. | Knowledge                     |                   |                              |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         |                                       | Education         |                                 |                 | Occupational Characteristics |                                      |                                    |                         |
|---|-------------------------------|-------------------|------------------------------|------------------------------------|----------------------------------|---------------------------|--------------------------|------------------------|----------------------------|------------------|---|-------------|--------------------------------------|------------------------|-------------------------------|---------|---------------------------------------|-------------------|---------------------------------|-----------------|------------------------------|--------------------------------------|------------------------------------|-------------------------|
|   | Administration and Management | Biology/Chemistry | Design/Bldg and Construction | Clerical/Customer and Personal Svc | Telecom/Communications and Media | Computers and Electronics | Economics and Accounting | Education and Training | Engineering and Technology | English Language | Law and Govt/Public Safety and Security | Mathematics | Mechanical/Production and Processing | Medicine and Dentistry | Personnel and Human Resources | Physics | Psychology/Sociology and Anthropology | Theory/Counseling | Doctoral or Professional Degree | Master's Degree | Bachelor's Degree            | HS Diploma/Assoc Degree/Some College | 2017 Edition - Georgia Wage Survey | 2016-26 Annual Openings |
| <b>Health Occupations Continued</b>   |                               |                   |                              |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         |                                       |                   |                                 |                 |                              |                                      |                                    |                         |
| Health Technologists & Technicians, All Other   | ●                             | ○                 |                              | ●                                  | ●                                | ●                         | ●                        | ●                      | ○                          | ●                | ●                                       | ●           | ●                                    | ●                      |                               | ○       |                                       |                   |                                 |                 |                              | ✓                                    | \$42,200                           | 340                     |
| Internists, General   | ●                             | ●                 | ●                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    | ●                      |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$255,200                          | 90                      |
| Licensed Practical & Licensed Vocational Nurses   | ●                             | ○                 | ●                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ●                                     |                   |                                 |                 |                              | ✓                                    | \$40,700                           | 2,250                   |
| Med & Clinical Laboratory Technicians   |                               | ●                 | ●                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          | ○                | ●                                       | ●           | ●                                    |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$36,700                           | 430                     |
| Med & Clinical Laboratory Technologists   |                               | ●                 | ●                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          | ●                |   | ○           | ●                                    |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$58,600                           | 370                     |
| Med Records & Health Information Techs  |                               |                   | ●                            |                                    | ●                                |                           |                          | ●                      |                            |                  |   |             |                                      |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$38,900                           | 450                     |
| Nurse Practitioners <span style="color: red;">Hot</span>  |                               | ●                 | ●                            | ○                                  | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$101,900                          | 420                     |
| Nursing Instructors & Teachers, Postsec   | ●                             | ●                 | ●                            | ○                                  | ●                                | ●                         | ●                        | ●                      | ○                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$65,400                           | 110                     |
| Occupational Therapists   |                               | ○                 | ○                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          |                  |   | ●           | ●                                    |                        |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$83,100                           | 240                     |
| Pharmacists   | ●                             | ●                 | ●                            | ●                                  | ●                                |                           |                          | ●                      | ○                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ○       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$117,600                          | 510                     |
| Pharmacy Technicians  |                               |                   | ●                            |                                    |                                  |                           |                          | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$29,400                           | 1,170                   |
| Physical Therapists <span style="color: red;">Hot</span>  | ●                             |                   | ●                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          | ●                |   |             | ●                                    |                        |                               | ○       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$86,800                           | 410                     |
| Physician Assistants <span style="color: red;">Hot</span>   |                               | ●                 | ○                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$100,800                          | 400                     |
| Physicians & Surgeons, All Other <span style="color: red;">Hot</span>   | ●                             | ●                 | ○                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    | ●                      | ●                             | ○       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$224,200                          | 440                     |
| Radiologic Technologists  |                               | ○                 | ●                            |                                    | ●                                | ●                         | ●                        | ●                      | ○                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ○                                     |                   |                                 |                 |                              | ✓                                    | \$52,600                           | 360                     |
| Registered Nurses <span style="color: red;">Hot</span>  |                               | ○                 | ○                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ○       | ●                                     |                   |                                 |                 |                              | ✓                                    | \$65,600                           | 5,410                   |
| Respiratory Therapists  |                               | ●                 | ○                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ○       |                                       |                   |                                 |                 |                              | ✓                                    | \$55,200                           | 310                     |
| Speech-Language Pathologists  |                               |                   | ○                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          | ●                |   | ●           | ●                                    |                        |                               | ○       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$74,100                           | 260                     |
| Surgical Technologists  |                               |                   | ○                            |                                    |                                  | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$41,900                           | 350                     |
| Veterinarians   | ●                             | ●                 | ○                            |                                    |                                  |                           |                          | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               |         |                                       | ✓                 |                                 |                 |                              |                                      | \$86,900                           | 120                     |
| Veterinary Technologists & Technicians  |                               | ○                 | ●                            |                                    |                                  |                           |                          | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$31,000                           | 310                     |
| <b>Architecture Occupations</b>   |                               |                   |                              |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         |                                       |                   |                                 |                 |                              |                                      |                                    |                         |
| Architects, Exc Landscape & Naval   | ●                             |                   | ○                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    | ●                      |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$98,300                           | 250                     |
| Architectural & Civil Drafters  |                               |                   | ○                            |                                    | ●                                |                           | ●                        | ●                      | ○                          | ●                |   |             |                                      |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$53,800                           | 300                     |
| Architectural & Engineering Managers  | ●                             |                   | ○                            | ○                                  | ●                                |                           | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    | ●                      |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$138,100                          | 370                     |
| Landscape Architects  | ●                             | ○                 | ●                            | ○                                  | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$71,400                           | 90                      |
| <b>Social Science Occupations</b>   |                               |                   |                              |                                    |                                  |                           |                          |                        |                            |                  |   |             |                                      |                        |                               |         |                                       |                   |                                 |                 |                              |                                      |                                    |                         |
| Clinical, Counseling, & School Psychologists  | ●                             |                   | ●                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$83,400                           | 230                     |
| Economists  |                               |                   |                              |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               |         |                                       | ✓                 |                                 |                 |                              |                                      | \$105,100                          | 30                      |
| Political Science Teachers, Postsec   | ●                             |                   | ○                            | ○                                  | ●                                | ●                         | ●                        | ●                      | ○                          |                  |   |             |                                      |                        |                               | ●       |                                       | ✓                 |                                 |                 |                              |                                      | \$76,400                           | 40                      |
| Psychology Teachers, Postsec  |                               |                   |                              |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       | ●                                     | ✓                 |                                 |                 |                              |                                      | \$68,700                           | 70                      |
| Social Science Research Assistants  | ●                             |                   | ●                            |                                    | ●                                | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ●       |                                       |                   |                                 |                 |                              | ✓                                    | \$46,400                           | 100                     |
| Social Scientists & Related Workers, All Other  | ●                             | ●                 | ○                            |                                    |                                  | ●                         | ●                        | ○                      | ●                          |                  |   |             |                                      |                        |                               |         |                                       |                   |                                 |                 |                              | ✓                                    | \$68,000                           | 130                     |
| Urban & Regional Planners   | ●                             |                   | ○                            | ○                                  |                                  | ●                         | ●                        | ●                      | ●                          | ●                | ●                                       | ●           | ●                                    |                        |                               | ○       |                                       | ✓                 |                                 |                 |                              |                                      | \$56,800                           | 50                      |

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

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

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



## ADDITIONAL OPPORTUNITIES

# INDUSTRY CERTIFICATION, NON-TRADITIONAL AND RESOURCES



## CTE INDUSTRY CERTIFICATION

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

This formal process strengthens all program components, including:

- *Classrooms and labs which are equipped with state-of-the-art equipment and technology;*
- *CTE 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.*

The following Fayette County CTE Programs are industry certified: SMHS's Early Childhood Education Program is nationally certified & MHS's Graphic Arts Program is PrintEd certified. 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.

## NON-TRADITIONAL 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*

## CAREER PLANNING RESOURCES

### **[www.GeorgiaCRN.org](http://www.GeorgiaCRN.org)**

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

### **[www.GAfutures.org](http://www.GAfutures.org)**

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

### **[www.careervoyages.gov](http://www.careervoyages.gov)**

Career Voyage is a national web-site for emerging industries and high demand occupations.

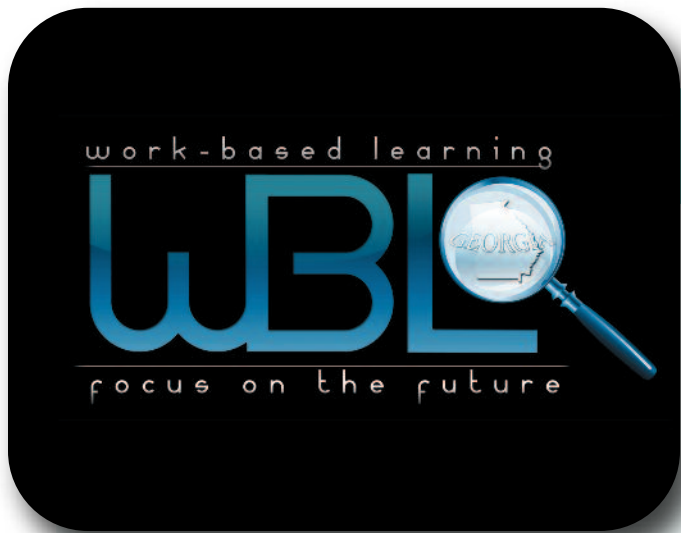
### **[www.bls.gov/oco/](http://www.bls.gov/oco/)**

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

### **[www.Myplan.com](http://www.Myplan.com)**

MyPlan.com is a career database which allows visitors to search, browse or query through over 900 different careers, read career profiles, job descriptions, and educational requirements, and explore career outlooks.





## ADDITIONAL OPPORTUNITIES

# WORK-BASED LEARNING

*The Work-Based Learning (WBL) program is designed to provide student internships and apprenticeships that support a school to career transition. 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 application requirements for WBL, the WBL Coordinator will determine the correct WBL placement for the student. The students will earn one unit of elective credit for each completed WBL course.*

### REQUIREMENTS FOR WBL

- Students who have completed or are completing any Pathway can apply for the Work-Based Learning Program
- Students must be at least 16 years of age
- Students must have good attendance, discipline, and teacher recommendations

### EMPLOYABILITY SKILL DEVELOPMENT (ESD)

- Paid entry level work
- Limited to one year
- May or may not be linked to a specific pathway
- Must have completed or be currently enrolled in any related pathway courses

### INTERNSHIP

- Can be paid or unpaid work experience
- Must have earned one credit in a CTE pathway or closely related academic course related to the placement

### COOPERATIVE EDUCATION (CO-OP)

- Paid work experience
- Directly related to student's career pathway
- Currently enrolled in a course that is directly related to job placement

### YOUTH APPRENTICESHIP (YAP)

- Paid work in a job classified as highly skilled in business and industry
- Work in chosen career area
- Student must have post-secondary education plans in chosen career area (earning a degree, licensing, or certification depending on career requirement)
- For completion of YAP program students must have 720 hours on-the-job training

### WBL IS RELATED TO THE FOLLOWING

- Advanced Academic Pathways
- Architecture and Construction
- Arts, A/V Technology, & Communications
- Business Management and Administration
- Education and Training
- Finance
- Fine Arts Pathways
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- JROTC
- Law, Public Safety, Corrections & Security
- Marketing
- Science, Technology, Engineering & Mathematics
- Transportation Distribution & Logistics
- World Language Pathways

### SCHOOL KEY SYSTEM

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

- Fayette County High School
- McIntosh High School
- Sandy Creek High School
- Starr's Mill High School
- Whitewater High School

## DECA

DECA prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe. DECA is a co-curricular marketing organization for students who have a career interest in marketing, finance, hospitality and tourism, entrepreneurship, management, or business administration. DECA allows students to compete and learn about marketing skills needed to be successful in today's business world. DECA currently operates in the over 4,000 high schools in many different countries including Mexico, Germany, Puerto Rico, and Canada. As an organization, DECA holds an annual Fall Leadership Conference that sharpens the skills and techniques of the attendees. At the annual state conference, students are also allowed to compete in a range of areas including Sports and Entertainment Marketing, Apparel and Accessories, Automotive, Restaurant Management, Accounting and many more. There is over \$300,000 of scholarship money from DECA's corporate sponsors available to its members. DECA gives students the chance to work with real business partners and can open the door for future employment opportunities. DECA allows its members to grow as leaders who can positively impact their community.

## FBLA

### Future Business Leaders of America

Georgia FBLA is a nonprofit business and computer science student organization committed to preparing today's students for success in business leadership. With over 50 years of experience, Georgia FBLA is the premiere organization for student leaders.

Georgia FBLA is an affiliate of Future Business Leaders of America-Phi Beta Lambda, Inc., the largest student business organization in the world with more than 250,000 members. Georgia is also the largest FBLA chapter in the nation with over 20,000 members.

FBLA is an important partner in the success of school-to-work programs, business education curriculums, and student leadership development. FBLA is recognized by the U.S. Department of Education and Labor as an integral part of a co-curricular approach to business and leadership education.

The FBLA mission is to bring business and education together in a positive working relationship through innovative leadership and career development programs. We bring our mission to life through the application of our motto: Service, Education, and Progress.

## ADDITIONAL OPPORTUNITIES

# CAREER AND TECHNICAL STUDENT ORGANIZATIONS

### CTSO CORE VALUES

*Career and Technical Student Organizations (CTSO) are designed to build character and develop leadership abilities of high school students. CTSO's promote active community involvement, providing service to others, and participation in competitive events with other high school students across the state. Involvement in CTSO's provide valuable life lessons and educational experiences to prepare students for success in today's society.*

**Commitment** *To create among members, educators and business and industry an adherence and appreciation for all Career, Technical and 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.*

## ADDITIONAL OPPORTUNITIES - CTSO

### SCHOOL KEY SYSTEM

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

- Fayette County High School
- McIntosh High School
- Sandy Creek High School
- Starr's Mill High School
- Whitewater High School



### FCCLA

#### Family, Career, and Community Leaders of America Family and Consumer Science Education

FCCLA is a national family and consumer science education student organization that helps young men and women become leaders and address important personal, family, work, and social issues through family and consumer sciences education. Through cooperative and competitive programs, FCCLA members develop skills for life including character development, creative and critical thinking, interpersonal communication, practical knowledge, and career preparation. Participation in national programs and co-curricular chapter activities enables FCCLA members to learn cooperation, take responsibility, develop leadership, and give service.



### HOSA

#### Health Occupations Students of America

Health Science Technology Education (HSTE) is a national student organization that provides a unique program of leadership development, motivation, and recognition exclusively for secondary, post-secondary, collegiate, and adult students enrolled in health occupations education courses or instructional programs. HOSA is an integral part of approved health occupation programs. Health Science Technology Education (HSTE) students who become active members in a local HOSA chapter are eligible for membership in state and national HOSA.

The mission of HOSA is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health occupations education students, therefore helping the students to meet the needs of the health care industry. For more information, go to [www.hosa.org](http://www.hosa.org) or [www.georgiahosa.org](http://www.georgiahosa.org).



### SKILLSUSA

#### Students Taking Action with Recognition

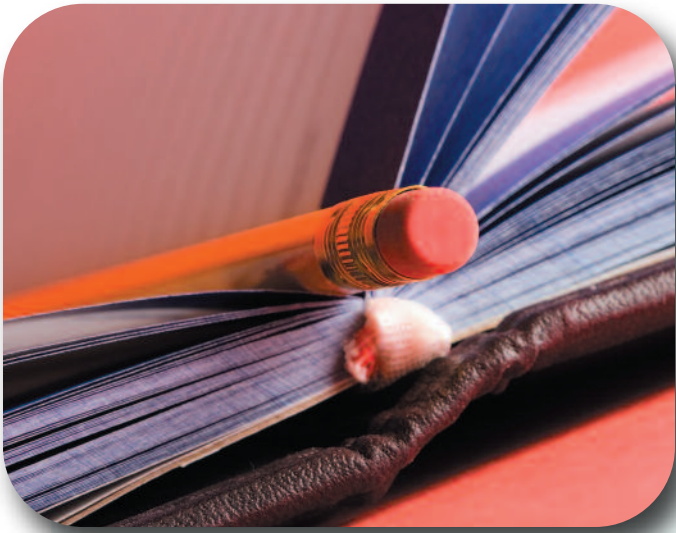
Georgia SkillsUSA members participate in local, state, and national activities provided through trade and industrial, technical, and health occupations courses and programs. This include drama, communication, broadcasting and graphic arts students. The mission of SkillsUSA is to develop leadership skills and workplace competencies that students will need to success in a constantly changing global workplace. The organization provides many opportunities for leadership development and skills training. Competition in over 70 leadership, health occupations, occupationally related, and trade, industrial, and technical contests is offered at the region and state levels, culminating with the SkillsUSA Championships in Kansas City, Missouri, in June.



### TSA

#### Technology Student Association

Georgia Technology Student Association (GA TSA) is committed to providing students with opportunities to excel and advance as part of their instruction in engineering and technology education. Georgia TSA promotes technology education as a means of preparing students for a dynamic world, inviting them to become critical thinkers, problem solvers, and technologically literate leaders. The mission of GA TSA is to prepare its members to be successful leaders and responsible citizens in a technological society through co-curricular activities with the technology education program, thereby developing communication, leadership, and competitive skills.



## CTE FOURTH SCIENCE OPTIONS



The following courses are typically considered Career, Technical, and Education (CTE) Courses. The State Department of Education along with the University System of Georgia have determined that these courses may also be used to fulfill certain graduation and college admission requirements. If you have any questions, please talk with your student's high school counselor.

| COURSE NAME                                      | Counts as<br>4th Science<br>for Graduation | Counts as<br>4th Science to<br>a 4 yr. College | Counts as<br>4th Math<br>for Graduation | World Language<br>Credit for<br>Graduation<br>Electives ONLY |
|--|--|--|---|--|
| * Advanced Placement Computer Science            | X  | X  | X                                       | X  |
| * Advanced Placement Computer Science Principles | X  | X  | X                                       | X  |
| * Computer Science Principles                    | X  | X  | X                                       | X  |
| * Embedded Computing                             | X  | X  | X                                       | X  |
| Essentials of Healthcare                         | X  | X  |   |  |
| Food for Life                                    | X  | X  |   |  |
| Food Science                                     | X  | X  |   |  |
| Forensic Science and Criminal Investigation      | X  | X  |   |  |
| * Programming, Games, Apps and Society           | X  | X  | X                                       | X  |
| * Web Development                                | X  | X  | X                                       | X  |

\* Two computer science sequenced courses will satisfy the two year world language requirement for graduation electives but may not be accepted for world language credit by the colleges and universities.



### INFORMATION REGARDING DUAL ENROLLMENT AT FAYETTE COUNTY SCHOOLS

The Dual Enrollment Program (formerly known as Move On When Ready or MOWR) provides Fayette County students the opportunity to take post secondary coursework for credit towards both high school graduation and post secondary requirements. The program is offered during all terms of the school year; fall, spring, and summer semesters or fall, winter, spring, and summer quarters.

#### There are several benefits for students who participate in Dual Enrollment:

- *Introduces students to college-level coursework.*
- *Earning college credits while still in high school may enable students to graduate early and/or possibly even earn an associate degree, diploma or certificate.*
- *Helps students adjust to certain aspects of the college experience (e.g., classes, coursework, instruction, being on a college campus) so the transition from high school to college may be easier.*
- *Students who participate in a dual enrollment program are more likely to go to college and get a college degree.*
- *Students may be able to take classes that are not offered at their high school, especially in subject areas they are interested in for a potential career.*
- *Participating in a dual enrollment program demonstrates a student's ability to handle more difficult coursework which is something college admissions officers may look upon favorably during admissions and recruiting.*
- *Taking college-level classes while still in high school may build confidence and encourage those students who may not be thinking about college to reconsider.*

The DE program allows students to pursue post secondary study at approved public and private colleges and technical colleges while receiving dual high school and college credit for courses successfully completed. Courses pursued by students under this program must come from the approved course directory available at the Georgia Futures website [www.gafutures.org](http://www.gafutures.org).

## DUAL ENROLLMENT

All Fayette County students who wish to participate in Dual Enrollment must attend one of the Dual Enrollment Mandatory Information sessions each year. These sessions serve as the advisement conference which is required by the law. Fayette County's main Dual Enrollment partners include:

- **Clayton State University**
- **Georgia Military College**
- **Point University**
- **Southern Crescent Technical College**
- **University of West Georgia**

### CENTER OF INNOVATION

Fayette County School System's Board of Education has partnered with Clayton State University and Southern Crescent Technical College to offer Dual Enrollment opportunities at the Center of Innovation. See pages 25 (film), 38-41 (health science), and 42 (culinary) for SCTC's DE health science and culinary course offerings. See page 45 for Clayton State University's Information Technology DE course offerings.





# DUAL ENROLLMENT

Students interested in more information regarding GA Dual Enrollment program should visit [gafutures.org](http://gafutures.org). To participate in this program as a Fayette County student see the Eligibility and Requirements below:

## ELIGIBILITY AND REQUIREMENTS

The Dual Enrollment opportunity is available to all students in 9th -12th grade. These are the important steps to follow:

- Must attend a Mandatory Dual Enrollment Information session designated for the school year in which the student plans to participate in the Dual Enrollment program.
  - *Both student and parent (guardian) must attend each year the student plans to participate*
  - *To review/update requirements and procedures*
- Apply and receive admission into the college
  - *Admissions requirements vary from college to college*
    - *Take the ACT/SAT or Accuplacer (if required by college)*
    - *Know the admission's minimum age requirements*
    - *Follow the admissions deadlines*
    - *Apply early to ensure meeting Fayette County's May 1st deadline*
- Complete the online DE application on [gafutures.org](http://gafutures.org) (it's the funding application NOT admission to the college)
- Schedule a meeting with School Counselor once college acceptance is received and funding application is complete
  - *At this meeting,*
    - *Return signed Fayette County School District Dual Enrollment Contract and Advisement form with a copy of your college acceptance notice*
    - *School counselor will discuss/approve DE courses options*
- Register for DE courses (only those approved by the school counselor) at the college
- Provide the school counselor with a copy of your final DE college schedule (must reflect those approved course)

## IMPORTANT CONSIDERATIONS

### Admission into the college/university

- *Meet the requirement for admission*
- *Required SAT/ACT or Accuplacer testing has been completed or is scheduled.*
- *Submit a completed application to the college/university.*

### Academic Rigor

- *Understanding the Dual Enrollment courses will be rigorous courses.*

### Attendance

- *Recognizing the importance of attending all classes.*

### Communication Skills

- *Knowing when to ask for the professor's help and learning early each semester how to contact each professor.*
- *Understanding that communication from the professor will be with the student and NOT the parent(s)/guardian(s).*

### Syllabus

- *Being familiar with each college professor's syllabus which will be the road map for the course and include all important deadlines.*

### Transportation and Additional Expenses

- *Making certain that student and parent know that they must provide their own transportation for classes taken on the college campus.*
- *Items OTHER THAN tuition, mandatory fees, and books are the responsibility of the student and parent/guardian under the Dual Enrollment Program.*
- *Provided only to some dual enrollment courses offered at the Center of Innovation.*

### Satisfactory Academic Progress (SAP)

- *It is the responsibility of the student to know what the SAP is at the postsecondary institution the student is attending.*

**DEADLINE: May 1, 2019**





## CAREER CLUSTERS

These are the 14 Career Clusters currently offered in the Fayette County School System.

### ARCHITECTURE AND CONSTRUCTION

Careers with common knowledge and skills related to the designing, planning, managing, and building structures.

### 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.

### 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.

### 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.



*Career Pathways are state-approved career enhancement programs defined as a coherent, articulated sequence of rigorous academic and career-related courses starting in the ninth grade and leading to an associate degree, and/or an industry-recognized certificate or licensure, and/or a baccalaureate degree and beyond.*

*Career, Technical, and Education (CTE) provides students with the opportunity to select at least three sequenced courses in a career pathway.*

**CTE CONCENTRATOR:** A concentrator is defined as a student who takes at least three CTE courses in a specific program area during their high school career.

**PATHWAY COMPLETER:** A pathway completer is a concentrator who completes the requirements for the Georgia Milestones Assessment System and also completes the requirements for CTE pathway concentrators.

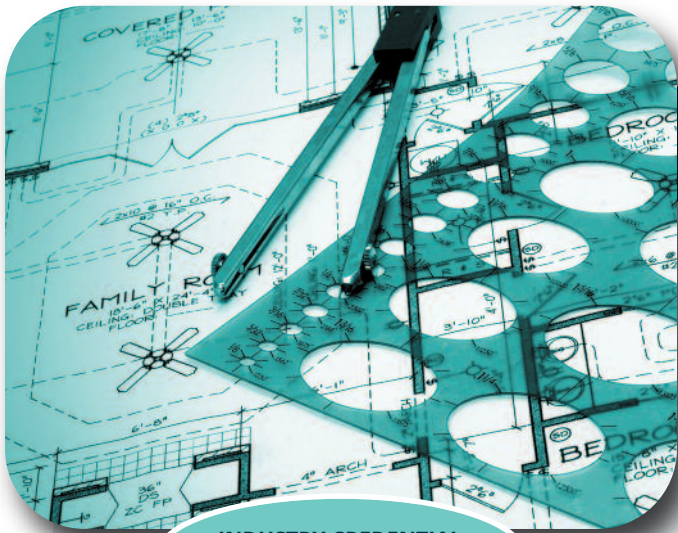
Selection of a pathway is based on self-awareness and the investigation of occupations plus related educational levels aligned with the pathway. Most high-demand, high-skilled, high-wage occupations in all concentrations still require education beyond high school.

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

## CAREER PATHWAYS

### OVERVIEW OF CAREER CLUSTERS PATHWAYS

- Georgia's 17 Career Cluster/Pathways provide a structure for organizing and delivering quality Career, Technical and Education (CTE) 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.
- The Fayette County Public Schools offers 14 of the 17 Career Clusters.



**INDUSTRY CREDENTIAL**  
**Autodesk Revit**

*People with careers in Architectural, 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
- World Language
- Introduction to Animation and 3D Design
- Physics
- Work-Based Learning

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

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

**TECHNICAL COLLEGES**

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

**COLLEGES/UNIVERSITIES**

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

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- SkillsUSA

**ARCHITECTURE AND  
CONSTRUCTION**

**ARCHITECTURAL  
DRAWING AND  
DESIGN PATHWAY**

**TOP CAREER CHOICES**

**Architect**

Bachelor Degree 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  
\$29,099 annual salary  
110 annual average openings in Georgia

**Surveyor**

Bachelor Degree needed  
\$42,349 annual salary  
110 annual average openings in Georgia

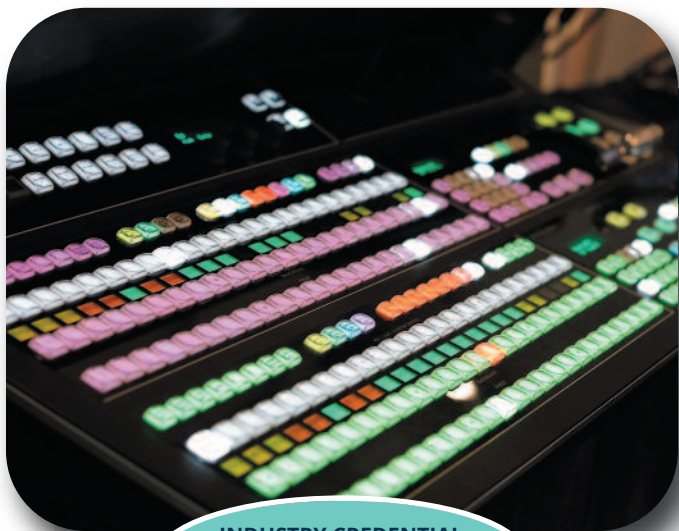
**ADDITIONAL CAREER CHOICES**

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



Source: GADOE Plans of Study

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



**INDUSTRY CREDENTIAL**  
*Adobe Premiere Pro*

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

**AUDIO/VIDEO TECHNOLOGY AND FILM I AND II PATHWAYS**



*The Audio-Video Technology and Film classes teach all aspects of video/film production from pre-production, to production, to post-production. Working cooperatively and independently students will have the opportunity to participate in a variety of hands-on productions where they will learn about topics such as advanced camera techniques, audio production, scriptwriting, producing, directing, and editing.*

**PATHWAY I COURSES**

- Audio and Video Technology and Film
- Audio and Video Technology and Film II
- Audio and Video Technology and Film III
- Georgia Film Academy and SCTC Film DE Courses

**PATHWAY II COURSES**

- Audio and Video Technology and Film
- Audio and Video Technology and Film II
- Broadcast Video Production Application
- Georgia Film Academy and SCTC Film DE Courses

**RECOMMENDED COURSES**

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

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES**  
See [www.GAFutures.org](http://www.GAFutures.org) for additional information

**TECHNICAL COLLEGES**

- Technical Studies
- Telecommunications Arts

**COLLEGES/UNIVERSITIES**

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

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- SkillsUSA

**TOP CAREER CHOICES**

**Audio and Video Equipment Technician**

Some College  
\$37,000 annual salary  
80 annual average openings in Georgia

**Camer Operators, Television, Video and Motion Picture Graphic Designers**

Bachelor Degree needed  
\$47,300 annual salary  
30 annual average openings in Georgia

**Film and Video Editors**

Bachelor Degree needed  
\$45,600 annual salary  
10 annual average openings in Georgia

**ADDITIONAL CAREER CHOICES**

- Artist and Related Workers
- Assistant Director
- Audio and Video Equipment Techs
- Broadcast Technician
- Camera and Photographic Equipment Repairers
- Computer Programmers
- 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>





**INDUSTRY CREDENTIAL**  
*Georgia Film Academy*



## GEORGIA FILM ACADEMY AND SCTC FILM OPTION

The film industry in Georgia is booming - currently ranked third in the nation and fifth in the World for number of productions (behind Hollywood and New York). Industry growth over the next 3-5 years is projected to generate 3,000 - 5,000 new jobs in Georgia, most of which are on the set. The average earnings in these jobs are \$84,000 a year. However, getting into the industry is not easy. On-set film workers need a very specific set of skills attained by working on industry-standard equipment as well as experience on professional productions.

Students will be introduced to the skills used in on-set film production, including all forms of narrative media which utilize film-industry standard organizational structure, professional equipment and on-set procedures. The courses will also include demonstrations of equipment, set operations, as well as hands-on learning experiences. Students will learn: film production organizational structure, job descriptions and duties in various film craft areas, names, uses and protocols related to various pieces of professional on-set film equipment, about scheduling and budgeting, crew responsibilities and location logistics and organizational expectations. In addition, students will learn skills related to networking and self-marketing.

### FALL SCTC DUAL ENROLLMENT COURSES FILM AND TV PRODUCTION

Learn about on-set production protocols, the pre-production/production/post-production process and crew responsibilities.

- Georgia Film Academy Course 1 - Introduction to On-Set Film Production

### SPRING SCTC DUAL ENROLLMENT COURSES ADVANCED SKILLS FOR FILM AND TV

Students will broaden their understanding of the scheduling and budgeting process that are intrinsic to the success of any type of production. Advanced rigorous exposure to crew responsibilities, location logistics and organizational expectations are also included.

- FILM 2010 - Advanced Skills for Film and TV Production I - Prerequisite - a "C" or better in GFA 1
- FILM 2020 - Advanced Skills for Film and TV Production II - Prerequisite - a "C" or better in GFA 1

### HIGH DEMAND CAREERS

- Animator
- Artist
- Background Artist
- Best Boy electric
- Best Boy Grip
- Cinematographer
- Costume Designer/Tailor
- Film Department Head
- Flash Animator
- Fork Lift Operator
- Mobile Application Developer
- Painter
- Plasterer
- Set Builder
- Special Effects Technician
- Specialty Technician
- Story Boarder
- Stunt Team Member

*\* It is recommended the courses listed above be taken in one's senior year after completion of the Audio/Video Technology and Film I or II pathway or after completion of a Fine Arts pathway in Theater/Drama.*





**INDUSTRY CREDENTIAL**  
**ToonBoom Storyboard**  
**Pro and Harmony**

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

**PATHWAY COURSES**

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

**RECOMMENDED COURSES**

- Computer Science Principles
- Graphic Design
- Business Communications
- Intro to Animation and 3D Design
- Intro to Business and Technology
- Marketing Principles
- Web Page Design
- Work-Based Learning

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

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

**BACHELOR'S DEGREE**

- Animation School - Varying Certificates available
- Intern experience

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- SkillsUSA

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

**ANIMATION AND DIGITAL MEDIA PATHWAY**

**TOP CAREER CHOICES**

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

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

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

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

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

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

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

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

**ADDITIONAL CAREER CHOICES**

- Animation Producers
- Artistic Director
- Graphic Designer
- Film and Video Editors
- 3D Animator
- TV Director
- TV Producer





**INDUSTRY CREDENTIAL**  
*Adobe InDesign*

*Graphic Communications allows the students to perform a variety of tasks. Students will experience basic introduction to graphic communications. Activities include making notepads, business cards, brochures, postcards, cover designs and promotional materials, invitations, and more. Many students will be a part of the ever increasing need for work used by local schools and businesses.*

**PATHWAY COURSES**

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

**RECOMMENDED COURSES**

- Advanced Web Design
- Computing in the Modern World
- World Language
- Fundamentals of Web Design
- Introduction to Animation and 3D Design
- Legal Environment of Business
- Psychology
- Work-Based Learning
- Yearbook/Journalism

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

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

**TECHNICAL COLLEGES**

- Graphic Communications Management
- Graphic Design
- Photography
- Prepress and Production

**COLLEGES/UNIVERSITIES**

- Graphic Design
- Industrial Design
- Product Design

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- SkillsUSA

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

**GRAPHIC  
COMMUNICATION  
PATHWAY**

**TOP CAREER CHOICES**

**Prepress Technicians and Workers**

Post-Secondary Vocational Award needed  
\$35,443 annual salary  
40 annual average openings in Georgia

**Printing Machine Operators**

Moderate On-the-Job Training needed  
\$33,509 annual salary  
220 annual average openings in Georgia

**Public Relations Specialist**

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

**ADDITIONAL CAREER CHOICES**

Bindery and Finishing Technician

Customer Service Representative

Graphic Designer

Prepress Imaging Specialist

Press Operator

Screen Printing

Shipping and Distribution Manager



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



### INDUSTRY CREDENTIAL Adobe Illustrator

*Graphic Design is the art and practice of visually communicating ideas and experiences that have visual and contextual content. The form of communication can be physical (printed) or virtual (screen); and, may include images, words, and/or graphic forms. Intro to Graphics and Design is an introduction to the principles and processes of graphic design using creative problem solving skills. Graphic Design and Production explores printing processes including digital printing, screen printing, and offset printing. For the third level of the pathway, students decide between one of two courses: Advanced Graphic Design or Advanced Graphic Output Processes.*

#### PATHWAY COURSES

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

#### RECOMMENDED COURSES

- Art
- Intro to Business and Technology
- Marketing

#### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES See [www.GAFutures.org](http://www.GAFutures.org) for additional information

##### TECHNICAL COLLEGES

- Graphic Communications Management
- Graphic Design
- Photography
- Prepress and Production

##### COLLEGES/UNIVERSITIES

- Graphic Design
- Industrial Design
- Product Design

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA

#### TOP CAREER CHOICES

##### Art Director

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

##### Creative Designer

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

##### Junior Designer

College Degree needed  
\$31,000 annual salary

##### Senior Designer

College Degree needed, plus  
3 years experience  
\$35,000 annual salary

#### ADDITIONAL CAREER CHOICES

Advertising

Fashion Design

Illustration

Marketing

Multimedia

Photography

3D Animation

Web Design



Source: GADOE Plans of Study

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



**INDUSTRY CREDENTIAL**  
**Microsoft Word, Excel and PowerPoint**

## BUSINESS MANAGEMENT AND ADMINISTRATION

# BUSINESS AND TECHNOLOGY PATHWAY

*Pathway of social, ethical, and human issues related to technology. Courses will provide an introduction to computer technology, decision making, productivity, communications, and problem-solving skills. Areas of instruction include integration of word processing, desktop publishing, spreadsheet, database, and presentation software as well as the use of emerging technologies.*

### PATHWAY COURSES

- Introduction to Business and Technology
- Business and Technology
- Business Communications

### RECOMMENDED COURSES

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

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

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

#### TECHNICAL COLLEGES

- Administrative Support Assistant
- Business Administrative Assistant
- Business Administrative Technology
- Certification in Microsoft Applications (MOAC)
- Data Entry Clerk
- General Office Assistant
- Microsoft Excel Application User
- Microsoft Office Application Professional
- Microsoft Word Application Professional

#### COLLEGES/UNIVERSITIES

- Business
- Business Administration

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA
- SkillsUSA

### TOP CAREER CHOICES

#### Administrative Services Manager

Bachelor Degree needed  
 \$68,016 annual salary  
 420 annual average openings in Georgia

#### Executive Secretary and Administrative Assistant

Moderate On-the-Job Training needed  
 \$37,378 annual salary  
 1,620 annual average openings in Georgia

#### Legal Secretary

Post-Secondary Vocational Award needed  
 \$36,338 annual salary  
 270 annual average openings in Georgia

#### Medical Transcriptionist

Post-Secondary Vocational Award needed  
 \$30,514 annual salary  
 130 annual average openings in Georgia

### ADDITIONAL CAREER CHOICES

- Administrative Assistant
- Communications Equipment Operator
- Computer Operator
- Court Reporter
- Customer Service Assistant
- Data Entry Specialist
- Desktop Publisher
- Dispatcher
- Executive Assistant
- Information Assistant
- Office Manager
- Receptionist
- Shipping and Receiving Personnel
- Word Processors



## BUSINESS MANAGEMENT AND ADMINISTRATION

# ENTREPRENEURSHIP PATHWAY

*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
- World Language
- Marketing Principles
- Work-Based Learning
- Yearbook/Journalism

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

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

#### TECHNICAL COLLEGES

- Business Office Technology
- Entrepreneurship
- Management and Supervisory Development
- Office Administration

#### COLLEGES/UNIVERSITIES

- Business
- Business Administration

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA
- SkillsUSA

### 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 and Examiner  
Computer Support Specialist  
Computer Systems Analyst  
Cost Estimator  
Database Administrator  
Entrepreneur  
Financial Analyst and 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>





## EDUCATION AND TRAINING

# EARLY CHILDHOOD CARE AND EDUCATION II PATHWAY

*Preschool, kindergarten and elementary school teachers play a vital role in the development of children. They introduce children to math, language, science and social studies. They use games, music, artwork, films, books, computers and other tools to teach basic skills. Teachers design classroom presentations to meet students' needs and abilities. They also work with students individually. They are responsible for planning, evaluating, and creating lesson plans.*

### PATHWAY COURSES

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

### RECOMMENDED COURSES

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

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

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

#### TECHNICAL COLLEGES

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

#### COLLEGES/UNIVERSITIES

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FCCLA

### TOP CAREER CHOICES

#### Elementary School Teacher

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

#### Kindergarten Teacher

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

#### Preschool Teacher

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

#### Special Education Teacher

#### Preschool, Kindergarten or Elementary

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

### ADDITIONAL CAREER CHOICES

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



Source: GADOE Plans of Study

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



## EDUCATION AND TRAINING

# TEACHING AS A PROFESSION PATHWAY

*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

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

#### TECHNICAL COLLEGES

- Child Care Assistant and/or Child Care Manager
- Child Development Associate I and/or II
- Child Development Specialist
- Early Childhood Care and Education (Associate Degree)
- Early Childhood Care and Education Assistant
- Early Childhood Program Administration
- Early Childhood Education or Exceptionalities
- Education of the Gifted
- Infant-Toddler Childcare Specialist

#### COLLEGES/UNIVERSITIES

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FCCLA

### 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>





## FINANCE

# BUSINESS ACCOUNTING PATHWAY

*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 II

### RECOMMENDED COURSES

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

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

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

#### TECHNICAL COLLEGES

- Accounting
- Medical Administrative Assistant
- Office Accounting Specialist

#### COLLEGES/UNIVERSITIES

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA

### TOP CAREER CHOICES

#### Accountants and Auditors

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

#### Bookkeeping/Accounting/Auditing Clerks

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

#### Budget Analysts

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

#### Tax Examiner, Collector and Revenue Agent

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

### ADDITIONAL CAREER CHOICES

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



Source: GADOE Plans of Study

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



## FINANCE

# FINANCIAL SERVICES PATHWAY

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

### PATHWAY COURSES

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

### RECOMMENDED COURSES

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

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

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

#### TECHNICAL COLLEGES, COLLEGES/UNIVERSITIES

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA

### TOP CAREER CHOICES

#### Auditor

Bachelor Degree needed  
\$73,910 annual salary

#### Insurance Sales Agent

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

#### Claims Adjuster

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

#### Accountant

Bachelor Degree needed  
\$73,910 annual salary

### ADDITIONAL CAREER CHOICES

Business Teacher

Financial Project Specialist

Financial Planner

Research

Sales and Service



Source: GADOE Plans of Study

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



## GOVERNMENT AND PUBLIC ADMINISTRATION

# JROTC AIR FORCE PATHWAY

*The AFJROTC program provides citizenship training and an aerospace science program for high school youth. Enrollment in the AFJROTC program is open to all young people who are in grades 9-12, physically fit, and are United States citizens. The curriculum includes Aerospace Science (AS), Leadership Education (LE) and Wellness. All students will be given academic credit towards graduation for successful completion of the AFJROTC courses provided by the Air Force.*

### PATHWAY COURSES

- Aerospace Science: A Journey Into Aviation History Leadership I
- Aerospace Science: Science of Flight and Leadership II
- Aerospace Science: Exploration of Space and Leadership III
- Aerospace Science: Management of the Cadet Corps and/or Leadership IV

### RECOMMENDED COURSES

- Any World Language Elective
- Any Math Elective
- Any Science Elective
- Computer Applications

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

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

- 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

- Air Force JROTC Drill Team (Armed)
- Air Force JROTC Drill Team (Unarmed)
- Field Trips to Aviation Museums, National Drill Competitions, Quiz Bowl, etc.

### TOP CAREER CHOICES

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

### ADDITIONAL CAREER CHOICES

Air Traffic Controller  
Aircraft Repairer  
Animal Care Specialist  
Broadcast Specialist  
Calvary Scout  
Chaplain  
Computer and Detection Repairer  
Construction Equipment Repairer  
Criminal Investigation Special Agent  
Dental Specialist  
Equipment Repairer  
Finance Officer  
Health Care Specialist  
Human Resource Specialist  
Information Technology Specialist  
Intelligence Analyst  
Interpreter and Translator  
Medical Laboratory Specialist  
Military Police Officer  
Missile Fire Control Operator  
Missile Fire Control Maintainer  
Multi Media Illustrator  
Signal Intelligence Analyst  
Special Force  
Technical Engineer  
Transportation Management Coordinator  
Visual Information Equipment Operator



Source: GADOE Plans of Study

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



## GOVERNMENT AND PUBLIC ADMINISTRATION

# JROTC ARMY PATHWAY

*The program's focus is reflected in its mission statement, "To Motivate Young People to be Better Citizens." It prepares high school students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. Army JROTC is a stimulus for promoting graduation from high school, and it provides instruction and rewarding opportunities that will benefit the student, community, and nation.*

### PATHWAY COURSES

- JROTC Army Leadership Education I
- JROTC Army Leadership Education II
- JROTC Army Leadership Education III
- JROTC Army Leadership Education IV

### RECOMMENDED COURSES

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

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

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

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

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

### TOP CAREER CHOICES

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

### ADDITIONAL CAREER CHOICES

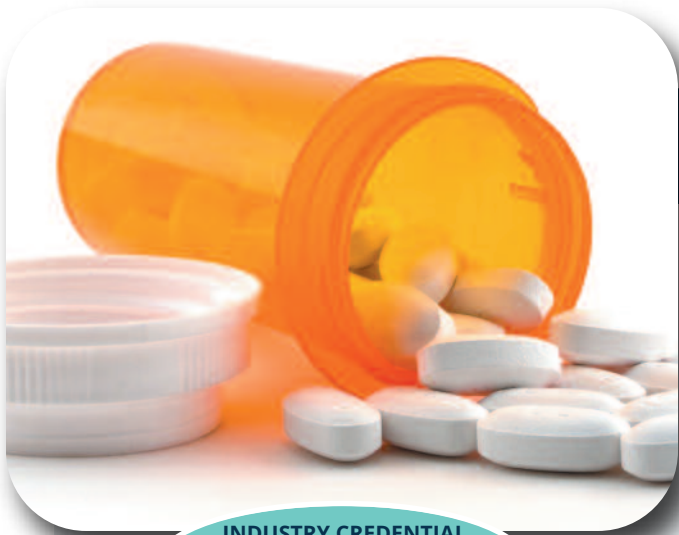
Air Traffic Controller  
Aircraft Repairer  
Animal Care Specialist  
Broadcast Specialist  
Calvary Scout  
Chaplain  
Computer and Detection Repairer  
Construction Equipment Repairer  
Criminal Investigation Special Agent  
Dental Specialist  
Equipment Repairer  
Finance Officer  
Health Care Specialist  
Human Resource Specialist  
Information Technology Specialist  
Intelligence Analyst  
Interpreter and Translator  
Medical Laboratory Specialist  
Military Police Officer  
Missile Fire Control Operator  
Missile Fire Control Maintainer  
Multi Media Illustrator  
Signal Intelligence Analyst  
Special Force  
Technical Engineer  
Transportation Management Coordinator  
Visual Information Equipment Operator



Source: GADOE Plans of Study

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





**INDUSTRY CREDENTIAL**  
**Certified Clinical Medical Assistant**

*Employment is projected to increase 27% through 2014 - more than in any other industry. 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**

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

**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**

- HOSA

**HEALTH SCIENCE**

**THERAPEUTIC SERVICES  
 ALLIED HEALTH  
 AND MEDICINE  
 PATHWAY**

**TOP CAREER CHOICES**

**Dental Hygienist**

Associate Degree needed  
 \$55,390 annual salary  
 280 annual average openings in Georgia

**Medical and Clinical Laboratory Technician**

Associate Degree needed  
 \$30,846 annual salary  
 250 annual average openings in Georgia

**Pediatrician**

First Professional needed  
 \$139,298 annual salary  
 70 annual average openings in Georgia

**Physical Therapist**

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

**Surgical Technologist**

Post-Secondary Vocational Training needed  
 \$32,157 annual salary  
 140 annual average openings in Georgia

**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





**INDUSTRY CREDENTIAL**  
**Certified Nurse Assistant**

## HEALTH SCIENCE

### THERAPEUTIC SERVICES PATIENT CARE PATHWAY

*The Patient Care pathway is appropriate for students wishing to pursue a career in the Healthcare Industry. The course will enable students to receive initial exposure to Healthcare Science skills and attitudes applicable to the healthcare industry. The concepts of health, wellness, and preventative care are evaluated, as well as, ethical and legal responsibilities of today's healthcare provider. Fundamental healthcare skills development is initiated including medical terminology, microbiology, and basic life support.*

**PATHWAY COURSES**

- Introduction to Healthcare Science
- Essentials of Healthcare
- Patient Care Fundamentals
  - Dual Enrollment Courses with SCTC (Center of Innovation)
    - ALHS 1040 Introduction to Health Care
    - ALHS 1090 Medical Terminology
    - ALHS 1060 Diet and Nutrition for AHS
    - NAST 1100 Nurse Aide Fundamentals

**RECOMMENDED COURSES**

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

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

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

**TECHNICAL COLLEGES**

- Dental Hygiene
- Orthopedic Technology
- Physical Therapist Assistant
- Radiologic Technology
- Surgical Technology

**COLLEGES/UNIVERSITIES**

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

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- HOSA

**TOP CAREER CHOICES**

**Health Educator**

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

**Medical and Health Services Manager**

Bachelor Degree needed  
 \$74,486 annual salary  
 330 annual average openings in Georgia

**Occupational Therapist**

Master Degree needed  
 \$58,427 annual salary  
 100 annual average openings in Georgia

**Registered Nurse**

Associate/ Bachelor Degree needed  
 \$53,893 annual salary  
 3,340 annual average openings in Georgia

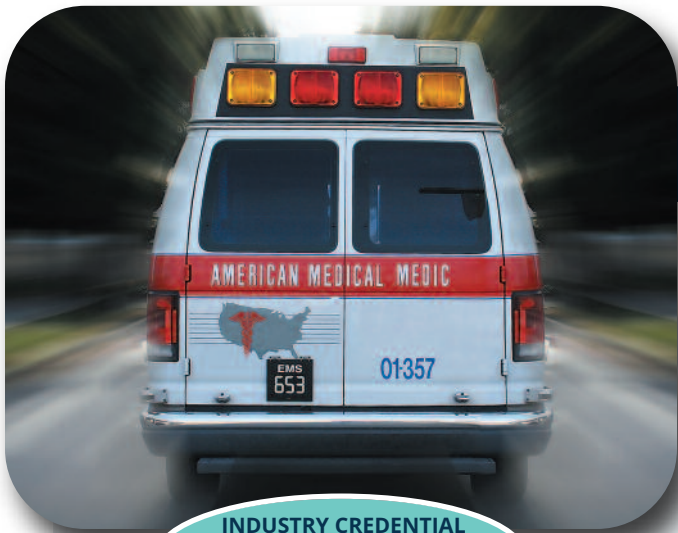
**ADDITIONAL CAREER CHOICES**

- Certified Nursing Assistant
- Dental Assisting
- Licensed Practical Nurse
- Medical Assisting
- Occupational Therapy Assistant
- Physical Therapy Assistant
- Respiratory Therapist
- Surgical Technologist



Source: GADOE Plans of Study

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



**INDUSTRY CREDENTIAL**  
**Emergency Medical Responder**

*Students are prepared to provide initial stabilizing care to the sick or injured prior to the arrival of Emergency Medical Services Professionals (EMS), and to assist EMS personnel in transporting patients for definitive care at an appropriate hospital/facility.*

**PATHWAY COURSES**

- Introduction to Healthcare Science
- Essentials of Healthcare Science
- Emergency Medical Responder
  - Dual Enrollment Courses with SCTC (Center of Innovation)
    - ALHS 1011 Anatomy and Physiology
    - ALHS 1090 Medical Terminology
    - EMSP 1010 EMR

**RECOMMENDED COURSES**

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

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

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

**TECHNICAL COLLEGES**

- Fire Science
- Firefighter EMT

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- HOSA

**HEALTH SCIENCE**

**THERAPEUTIC SERVICES  
 EMR PATHWAY**

**TOP CAREER CHOICES**

**EMT/Paramedic**

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

**Fire Fighter**

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

**Licensed Practical Nurse**

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

**Registered Nurse**

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

**ADDITIONAL CAREER CHOICES**

- Emergency Nurse
- EMT and Paramedic
- Firefighter
- Paramedic Technologist



Source: GADOE Plans of Study

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



**INDUSTRY CREDENTIAL**  
**Phlebotomy Technician**

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
  - Dual Enrollment Courses with SCTC (Center of Innovation)
  - *Please note that Articulation Exam (scoring 70 or above) or Dual Enrollment Credit for the first two courses in this pathway are required prior to enrollment.*
    - ALHS 1040 Introduction to Health Care
    - ALHS 1090 Medical Terminology
    - ALHS 1011 Anatomy and Physiology
    - PHLT 1030 Intro to Venipuncture
    - PHLT 1050 Clinical Practice

**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

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- HOSA

**HEALTH SCIENCE**

**DIAGNOSTIC SERVICES  
PHLEBOTOMY  
PATHWAY**

**TOP CAREER CHOICES**

**Phlebotomists**

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

**Cardiovascular Technologist  
and Technicians**

Associate's Degree  
\$51,600 annual salary

**Medical Lab Assistants**

Associate's Degree  
\$36,500 annual salary

**Skills**

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

**ADDITIONAL CAREER CHOICES**

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



Source: GADOE Plans of Study

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



**INDUSTRY CREDENTIAL**  
**Certified Medical**  
**Administrative Assistant**

Health information is a broad field that covers areas such as electronic medical records, access to knowledge-based information, digital libraries, digital imaging systems, telemedicine, clinical decision support, and health policy and decision making. Those employed in health informatics work closely with a variety of health professional teams and can find job opportunities in hospitals and other healthcare providers, pharmaceutical companies, medical software companies, consulting companies, public health organizations, government and non-governmental agencies, insurance companies, and academia. In Georgia, medical records and health information jobs will increase by 26% and will have 250 annual job openings.

**PATHWAY COURSES**

- Introduction to Healthcare Science
- Essentials of Healthcare
- Health Information Management - Medical Office
  - Dual Enrollment Courses with SCTC (Center of Innovation)
    - ALHS 1040 Introduction to Health Care
    - ALHS 1090 Medical Terminology
    - MAST 1010 Legal and Ethical Concerns in the Medical Office
    - MAST 1060 Medical Office Procedures

**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

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- HOSA

**HEALTH SCIENCE**

**HEALTH INFORMATICS  
 HEALTH INFORMATION  
 MANAGEMENT/  
 MEDICAL OFFICE  
 PATHWAY**

**TOP CAREER CHOICES**

**Medical Records and Health Information Technicians**

High School diploma or equivalent  
 \$30,300 annual salary  
 250 annual average openings in Georgia

**Informatics Nurse Specialists**

Bachelor's or Master's Degree  
 \$78,700 annual salary  
 National data projects 222,500 openings

**Medical Lab Assistants**

Some college, no degree  
 \$28,200 annual salary  
 850 annual average openings in Georgia

**ADDITIONAL CAREER CHOICES**

- Billing & Posting Clerks
- Epidemiologists
- Health Information Techs
- Informatics Nurse Specialists
- Medical and Health Services Managers
- Medical Information Clerks
- Medical Receptionists
- Medical Records
- Medical Secretaries
- Medical Transcriptionists







**INDUSTRY CREDENTIAL**  
**ServSafe**

The Culinary Arts pathway introduces students to fundamental food preparation, cooking techniques, and terminology. Laboratory practice will parallel class work, including knife skills, fundamental cooking techniques, organization skills with an emphasis on basic kitchen and dining room safety, equipment maintenance and proper operating procedures. Courses also provide an overview of the Hospitality Industry, professionalism and work ethics, and the different career opportunities our culinary arts pathway can offer.

**PATHWAY COURSES**

- Dual Enrollment Courses with SCTC (Center of Innovation)
- CUUL 1000 Fundamentals of Culinary Arts
- CUUL 1110 Culinary Safety and Sanitation
- CUUL 1122 Foundations of Cooking Principles
- CUUL 1124 Foundations of Cooking Techniques

**RECOMMENDED COURSES**

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

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

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

**TECHNICAL COLLEGES**

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

**COLLEGES/UNIVERSITIES**

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

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- FCCLA

**HOSPITALITY AND TOURISM**

**CULINARY ARTS PATHWAY**

**TOP CAREER CHOICES**

*Note: Salaries in the hospitality industry vary substantially depending on geographical location*

**Executive Chef, Sous-Chef, Banquet Chef, Kitchen Manager**

5 year experience minimum needed  
Atlanta annual salary \$45,000 and up  
Executive Chef Hotel/Country Club, \$60K and up

**Line Cook, Lead Cook**

Culinary Arts degree preferred  
\$12 to \$15 per hour depending on location

**Food Service Manager**

Hospital, Colleges, Assisted Living, School Systems  
5 to 10 year experience needed  
annual salary \$45,000 and up

**ADDITIONAL CAREER CHOICES**

- Baker
- Cake Decorator
- Catering
- Dining Room Manager
- Event Planner
- Food Stylist
- Food Writer and Critic
- Restaurant Owner



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





## HUMAN SERVICES

# NUTRITION AND FOOD SCIENCE PATHWAY

*Employment in this field is expected to grow faster than average 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
- World Language
- Human Growth and Development for Early Childhood
- Work-Based Learning

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

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

#### TECHNICAL COLLEGES

- Culinary Arts
- Food and Beverage Management
- Food Production Assistant, Worker, or Apprentice
- Hotel/Restaurant/Tourism Management

#### COLLEGES/UNIVERSITIES

- Dietetics/Dietician
- FACS Education
- Food, Nutrition and Wellness Studies
- Food Science and Technology

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FCCLA

### 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 and Service Manager  
Geriatric Food Designer  
Health Educator and 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>



## INFORMATION TECHNOLOGY

# COMPUTER SCIENCE PATHWAY

*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 Digital Technology
- Computer Science Principles or AP Computer Science Principles
- AP Computer Science

### RECOMMENDED COURSES

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

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

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

#### TECHNICAL COLLEGES

- Computer Engineering Technology
- Electromechanical Engineering Technology
- Telecommunications Engineering Technology
- Industrial Engineering Technology
- Electrical and Computer Engineering Technology
- Computer Engineering Technology
- Computer System Design Specialist
- Network Design Technology Specialist
- Network Specialist

#### COLLEGES/UNIVERSITIES

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA
- SkillsUSA

### TOP CAREER CHOICES

Employment of computer programmers is expected to increase 12 percent from 2010 to 2020, about as fast as the average for all occupations.

#### 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 and Information Systems Managers

Computer Hardware Engineers

Computer Network Architects

Computer System Analysts

Database Administrators

Information Security Analysts

Network and Computer Systems Administrators

Software Engineers

Video Game Designers



Source: GADOE Plans of Study

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



**INDUSTRY CREDENTIAL**  
**Axelta Certified Internet of Things Professional**

## INFORMATION TECHNOLOGY

# INTERNET OF THINGS AND WEB DEVELOPMENT PATHWAYS

These courses are rooted in discovery and hands on learning with college and business and industry partners. Students won't just read about it – they will create and do it!

**Internet of Things:** This pathway course examines how smart devices and the Internet interact.. Students will engage their creativity, demonstrate and build their problem solving all while connecting the relevance of computer science to society!

**Web Development:** This pathway course will allow students to develop and design responsive web sites through coding, testing, debugging and implementation of web-based services. Students will be provided foundational knowledge of "front-end" and "back-end" development to address the presentation and data access layers of web site development.

### PATHWAY COURSES

- Introduction to Digital Technology
- Computer Science Principles or AP Computer Science Principles
- Fall Semester - Embedded Computing
  - CSCI 1100 Applied Computing Dual Enrollment course with Clayton State University (Center of Innovation)
- Spring Semester - Web Development
  - ITFN 1401 Foundations of Webmaster Dual Enrollment course with Clayton State University (Center of Innovation)

### RECOMMENDED COURSES

- Any Computer Science course
- Art
- STEAM or Engineering
- Math and/or Science classes
- Robotics
- Sociology and/or Psychology

### POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES See [www.GAFutures.org](http://www.GAFutures.org) for additional information

#### TECHNICAL COLLEGES

- Associate of Applied Science in Information Technology
- Computer Science
- Internet Specialist
- Programming
- Computer Simulation

#### COLLEGES/UNIVERSITIES

- Bachelor of Information Technology
- Bachelor of Science in Computer Science
- Computer Science
- Computational Media
- Computer Information Systems

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA

### TOP CAREER CHOICES

#### Information Analyst

Bachelor's Degree needed  
 \$100,240 Median Salary  
 9% growth from 2014 - 2017

#### Software Developer

Bachelor's degree needed  
 \$100,690 Median Salary  
 17% growth from 2014 - 2024

#### Web Developer

Associate Degree needed  
 \$82,000 Median Salary  
 27% growth from 2014 - 2017

### ADDITIONAL CAREER CHOICES

- App Developer
- Cloud Computing and Networking Associate
- Computer Programmer
- Computer Systems Analysts
- Customer Support Technician
- Cyber Security Consultant
- Data Miner
- Database Administrator
- Healthcare Information Technology
- Information Systems
- Internet of Things Technical Solutions Architect
- IT Consultant
- Multimedia
- Researcher
- Software Engineer
- Software QA Tester
- System Analyst
- Technical Writer



Source: GADOE Plans of Study

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

## INFORMATION TECHNOLOGY

PROGRAMMING  
PATHWAY

**INDUSTRY CREDENTIAL**  
**Microsoft Technology Associate**  
 HTML5 Application Developer  
 Fundamentals

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

**PATHWAY COURSES**

- Introduction to Digital Technology
- Computer Science Principles
- Programming, Apps, Games and Society

**RECOMMENDED COURSES**

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

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

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

**TECHNICAL COLLEGES**

- Business Information Systems
- Computer Forensics
- Computer Information Systems
- Computer Programming
- Computer Software Engineering
- Computer Science
- Information Science
- Information Technology
- Mathematics

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- FBLA
- SkillsUSA

**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

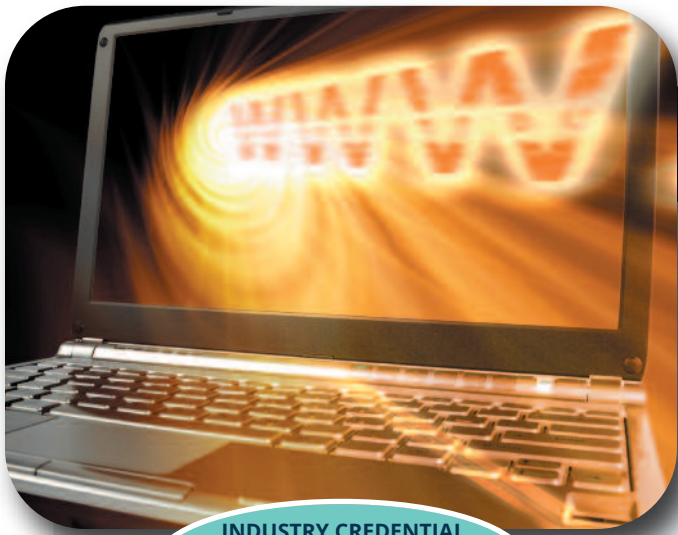
Computer Software Engineer

Computer Systems Analyst

Database Administrator

Mathematician





**INDUSTRY CREDENTIAL**  
*Certified Internet Web Professional*

The Web and Digital Design 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 Digital Technology
- Digital Design
- Web Design

#### RECOMMENDED COURSES

- Any Business and Computer Science Course
- Art
- Broadcast/Video Production
- World Language
- Introduction to Graphics and Design
- Marketing Principles
- Work-Based Learning
- Yearbook/Journalism

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

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

##### TECHNICAL COLLEGES

- Computer Animation and Multimedia
- Computer Simulation
- Digital Media
- Internet Specialist - Web Site Design
- Printing and Graphics Technology
- Web Site Designer

##### COLLEGES/UNIVERSITIES

- Animation
- Computational Media
- Computer Science
- Graphic Designer

#### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- FBLA

## INFORMATION TECHNOLOGY

# WEB AND DIGITAL DESIGN PATHWAY

### TOP CAREER CHOICES

#### Computer Specialist

Associate Degree needed  
\$55,640 annual salary  
80 annual average openings in Georgia

#### Desktop Publisher

Post-Secondary Vocational Training needed  
\$30,680 annual salary  
30 annual average openings in Georgia

#### Graphic Designer

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

#### Multi-Media Artist and Animator

Bachelor Degree needed  
\$44,554 annual salary  
40 annual average openings in Georgia

### ADDITIONAL CAREER CHOICES

Computer Service Technician

Database Developer

Graphic Designer

Help Desk Support

Illustrator

Internet Specialist

Multimedia Developer

Network Analyst

Network Engineer

Programmer

Project Manager

Video Game Developer

Web Developer

Webmaster

Website Designer

Software Trainer



Source: GADOE Plans of Study

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



## LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

# FORENSIC SCIENCE PATHWAY

### TOP CAREER CHOICES

#### Detectives and Criminal Investigators

Bachelor's Degree  
\$45,600 annual salary  
160 annual average openings in Georgia

#### Police and Sheriff's Patrol Officers

Some college, no degree required  
\$37,400 annual salary  
710 annual average openings in Georgia

#### Forensic Science Technicians

Bachelor Degree needed  
\$28,400 annual salary  
10 annual average openings in Georgia

### ADDITIONAL CAREER CHOICES

Agents  
Animal Controllers  
Bloodstain Pattern Analyst  
Criminal Investigators and Special Agents  
Detectives and Criminal Investigators  
First Line Supervisors  
Forensics Ballistics Expert  
Forensic Science Technicians  
Immigration and Customs Inspectors  
Police and Sheriff's Patrol Officers  
Polygraph Examiner  
Sheriffs and Deputy Sheriffs

*Law, Public Safety, Corrections and Security workers plan, manage, and provide legal, public safety, and security and protective services. Occupations are numerous and represent multiple levels of education and skills. The Forensic Science Pathway is designed to provide students the opportunity to study the forensic application of principles of chemistry, biology, physics and other disciplines. Students will utilize chromatography, electrophoresis, microscopic observation, and other scientific techniques in their studies. Students will also learn some investigative techniques and crime scene investigation skills through the lens of 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
- Computer Applications
- Foreign Language
- Forensics Science Elective
- Legal Environment of Business
- Spanish
- Wildlife Management
- Work-Based Learning

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

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

#### TECHNICAL COLLEGES

- Criminal Justice Technology
- Law Enforcement Technician

#### COLLEGES/UNIVERSITIES

- Criminal Justice
- Criminology
- Pre-law

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- SkillsUSA



Source: GADOE Plans of Study

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



## 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  
Airline Customer Service Agent  
Art Dealer and Director  
Barber and Salon Owner  
Brand Manager  
Cashier  
Communications Specialist  
Creative Director  
Customer Service Representative  
Demonstrator and Product Promoter  
Desktop Publisher  
Entrepreneur  
Fashion Retailer  
Floral Designer  
Funeral Director  
Insurance Agent  
Interior Designer  
Landscape Architect  
Logistics Specialist  
Market Research Analyst  
Media Buyer  
Mortgage Broker  
Product Development Management  
Public Relations Specialist  
Purchaser  
Real Estate Agent  
Retail Buyer and Salesperson  
Sales Representative  
Sports Marketer  
Travel Agent

*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 CONCENTRATION COURSES

- Marketing Principles
- Marketing and Entrepreneurship
- Marketing Management

### RECOMMENDED COURSES

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

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

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

#### TECHNICAL COLLEGES

- Business Administration
- 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

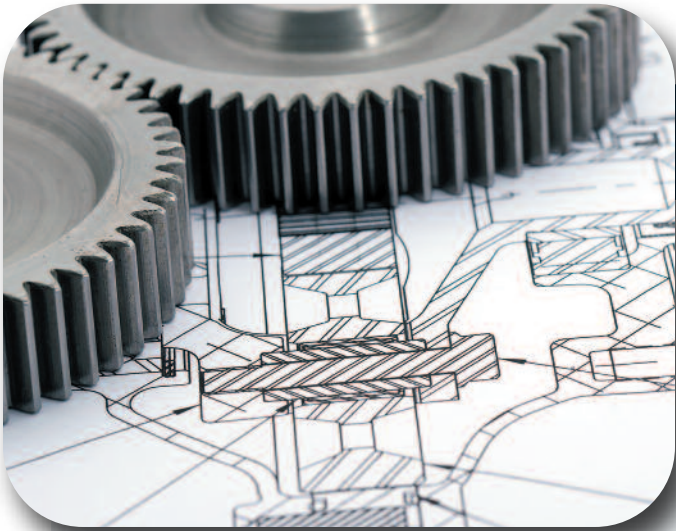
- DECA



Source: GADOE Plans of Study

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

## SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS



*The Engineering and Technology Pathway is designed for students to explore STEM-related concepts in a project-based environment. The pathway introduces students to the engineering design process and lays a strong foundation for students seeking to further their education in a STEM-related field. These courses give 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

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

#### TECHNICAL COLLEGES

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

### CAREER AND TECHNICAL STUDENT ORGANIZATIONS

- TSA

## ENGINEERING AND TECHNOLOGY PATHWAY

### TOP CAREER CHOICES

#### Civil Engineer

Bachelor Degree needed  
\$56,259 annual salary

#### Electrical Engineer

Bachelor Degree needed  
\$52,990 annual salary

#### Industrial Engineer

Bachelor Degree needed  
\$47,720 annual salary

#### Materials Engineer

Bachelor Degree needed  
\$51,420 annual salary

#### Mechanical Engineer

Bachelor Degree needed  
\$47,900 annual salary

### ADDITIONAL CAREER CHOICES

Civil Engineer  
Designer  
Drafter  
Machinist  
Manufacturing  
Mechanical Engineer  
Quality Control Inspector



Source: GADOE Plans of Study

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**INDUSTRY CREDENTIAL**  
Automotive Service  
Excellence (ASE)

*The auto mechanics of the past were self-taught, learning from local auto shops or dealerships. Employers are now hiring employees with good people skills and backgrounds in electronics, computers and communications, along with math and problem-solving skills. This program will teach "head skills" and "hand skills" to prepare the student for the world of automotive technology careers and to meet the needs of prospective employers.*

#### **PATHWAY COURSES**

- Basic Maintenance and Light Repair
- Maintenance and Light Repair 2
- Maintenance and Light Repair 3

#### **RECOMMENDED COURSES**

- Advanced Algebra/Trigonometry
- Business Essentials
- Computer Applications
- Engine Performance Concepts
- Entrepreneurship
- World Language
- Heating Ventilation and Air Conditioning Concepts
- Money Management
- Physics
- Preventative Maintenance Inspection
- Work-Based Learning

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

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

##### TECHNICAL COLLEGES

- ASE
- Automotive Technology/Technician
- Welding

##### COLLEGES/UNIVERSITIES

- Education
- Business Management
- Automotive Engineering

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

- SkillsUSA

## **TRANSPORTATION, DISTRIBUTION AND LOGISTICS**

# **AUTOMOBILE MAINTENANCE AND LIGHT REPAIR PATHWAY**

#### **TOP CAREER CHOICES**

##### **Automotive Service Technician and Mechanics**

Post-Secondary Vocational Award needed  
\$34,549 annual salary  
1,000 annual average openings in Georgia

##### **Bus and Truck Mechanic/Diesel Engine Specialist**

Post-Secondary Vocational Award needed  
\$36,504 annual salary  
380 annual average openings in Georgia

##### **Electrical and Electronics Repairers, Commercial and Industrial Equipment**

Post-Secondary Vocational Award needed  
\$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 and Body Technician  
Automotive Engineer and Mechanist  
Automotive Parts Sales and Sales  
Body Shop Manager  
Dealership and Shop Owner  
DOT Salvage Inspector  
Insurance Adjuster  
Parts Professional  
Quality Control Technician  
Retail  
Service Advisor and Director Dealership  
Specialized Technician Teacher  
Technician (ASE Certified)  
Warranty Clerk  
Waste Management (EPA)



Source: GADOE Plans of Study

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