

Kathy Cox
State Superintendent of Schools

Making Connections to Career Pathways

The Essential Question:

“What Do You Want To Be When You Grow Up?”

Vivian Snyder, GDOE

vsnyder@doe.k12.ga.us/404-657-8331

Career, Technical and Agriculture Educational Division

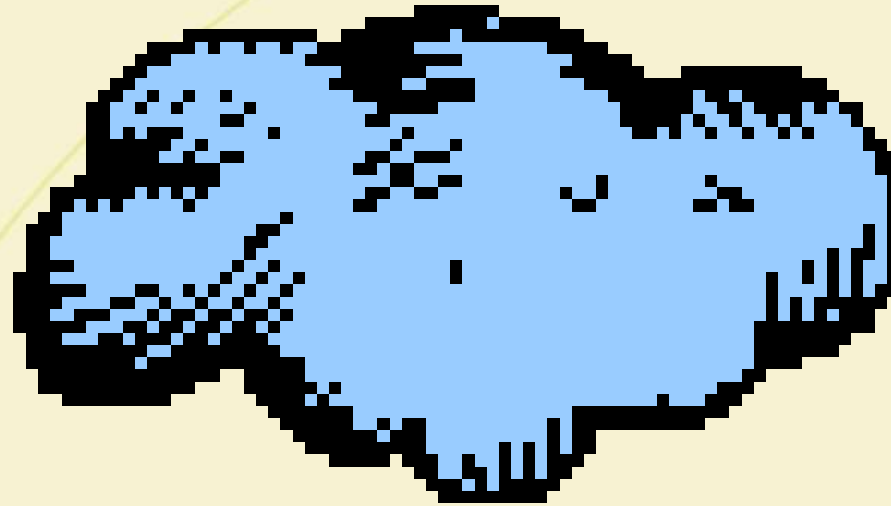
Counselor Training/April, 2009

South Georgia Technical College/ENERGE



Goal/Objectives

- **Participants will understand the critical importance of the educational and career planning process.**
 - To provide rationale for planning
 - To understand the process
 - To understand the critical nature of transition from middle to high school
 - To understand the relationship between nontraditional employment and local school counselors (Perkins legislation/Office for Civil Rights)
 - To provide tools, materials and resources for delivery



The Perfect STORM...

Perkins IV Legislation

New Graduation Rule

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

National Legislation/Perkins IV/National Trend

Incorporate and align secondary and postsecondary education

+

Include academic & CTE content in a coordinated, non-duplicative progression of courses

+

Lead to an industry-recognized credential or diploma at the postsecondary level, or an associate or baccalaureate degree

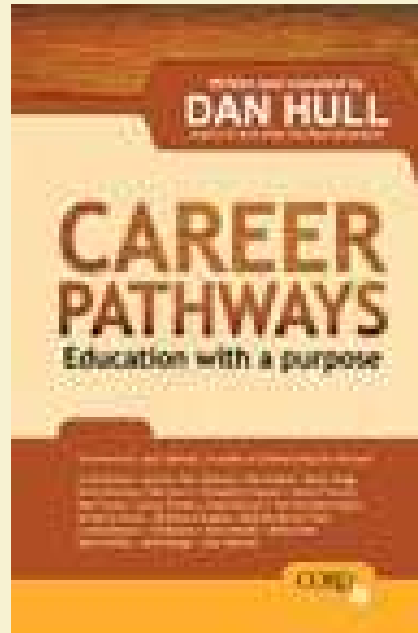
+

May include the opportunity for secondary students to acquire postsecondary credits



Perkins Programs
of Study =
Peach State
Pathways =
Curriculum

Consider these facts...



- Far too many students graduate from high school without the skills and knowledge to compete
- Far too many young people leave high school before earning a diploma
- Far too many students fail to make the transition to postsecondary education

“Today’s students need career preparation that is both broad enough to enable them to learn and adapt quickly, and specific enough to be valuable to employers, particularly small businesses.”

Career Pathways by
Dan Hull

Resources, materials, and tools:

- New Graduation Rule at http://www.gadoe.org/ci_services.aspx

New Graduation Rule

- [Adopted Rule](#)
- [Side-by-Side Comparison](#)
- [Graduation Rule Guidance](#)
- [Directions for Accessing Recordings of SIA Graduation Rule Illuminate Conferences](#)
- [Recordings of the November 26 and 27, 2007 School Improvement Region Graduation Rule Q and A](#)
- [Illuminate Pre-Configuration Instructions](#)
- [Illuminate Administrator Sessions Winter/Spring 2007-2008](#)
- [Recordings of Counselor Support Sessions \(Illuminate sessions\)](#)
- [Graduation Rule Powerpoint](#)
- [Graduation Rule Brochure](#)

Graduation Rule Toolkit

- [Introduction Video by State Superintendent of Schools Kathy Cox](#)
- Graduation Rule Information
 - [The Need for Change](#)
 - [Frequently Asked Questions](#)
 - [Comparison \(Old vs. New\)](#)
 - [Overview PowerPoint](#)
 - [Guidance Document](#)
- Graduation Rule Resources
 - [Information Card \(English\)](#)
 - [Information Card \(Spanish\)](#)

RELATED INFORMATION

- ◀ [Georgia Performance Standards](#)
- ◀ [RESAs](#)
- ◀ [Mathematics Framework](#)
- ◀ [GA Read More](#)
- ◀ [GeorgiaMath.org](#)

RELATED MEDIA

- ◀ [Primary Media Resources](#)

USEFUL LINKS

- ◀ [NAACIS - Georgia Association of Curriculum and Instructional Supervisors](#)
- ◀ [SACD - Association for Supervision and Curriculum Development](#)

CONTACT INFORMATION

Stephen L. Pruitt
Director, Academic Standards
1754 Twin Towers East
205 Jesse Hill Jr. Drive
Atlanta, GA 30334
(404) 656-0478
spruitt@doe.k12.ga

Yohance Tucker
Secretary
(404) 656-2608

Sonji McKibben
Secretary
(404)463-1929

Katrina Smith
Secretary
(404) 656-4059

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Save a Copy Search Select 122% Sign Y!
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Resources, materials, and tools:

Parent Resources/GCIS at www.gcic.peachnet.edu

Home
About GCIC
About GCIS
Training
Newsletter
Contact Us
Technical Support
Links

The Georgia Career Information Center, through its Georgia Career Information System (GCIS), provides current and accurate occupational and educational information to schools and agencies throughout Georgia in order to help young people and adults make informed career choices.

CLICK HERE TO ENTER
Georgia Career Information System

CAREER PROFILES

- [Animal Trainer](#)
- [Pastry Chef](#)
- [Piano Tuner](#)

PROGRAM PROFILES

- [Advertising](#)
- [Court Reporting](#)
- [Interior Design](#)

Activity
Spanish Version Available

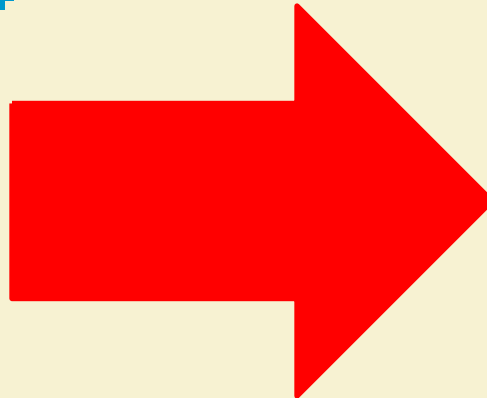
Introducing GCIS Junior

- Information Parents Can Use (IPCU)
- *New Grad Rule brochure
- *Old Grad Rule brochure
- *Alignment of Federal 16 Career Cluster to Georgia's Program Concentrations



The old question is...

**WHAT
COLLEGE
WILL YOU
ATTEND?**



The new question is...

**WHAT DO YOU
WANT TO BE
WHEN YOU
GROW UP?**

The New Three Rs... nothing new!

RIGOR – curriculum revised to performance standards; recognized by the Ford Foundation

RELEVANCE – curriculum including both academic and technical standards relative to future education and career plans

RELATIONSHIP – teacher-as-advisor program to assist with delivery of education and career planning



Why is education and career planning important? Did you know...

- We will compete with workers from other countries like Brazil, India, China, Indonesia and Russia.

CHINA ★ INC. Now the rise of the next superpower challenges America and the world.

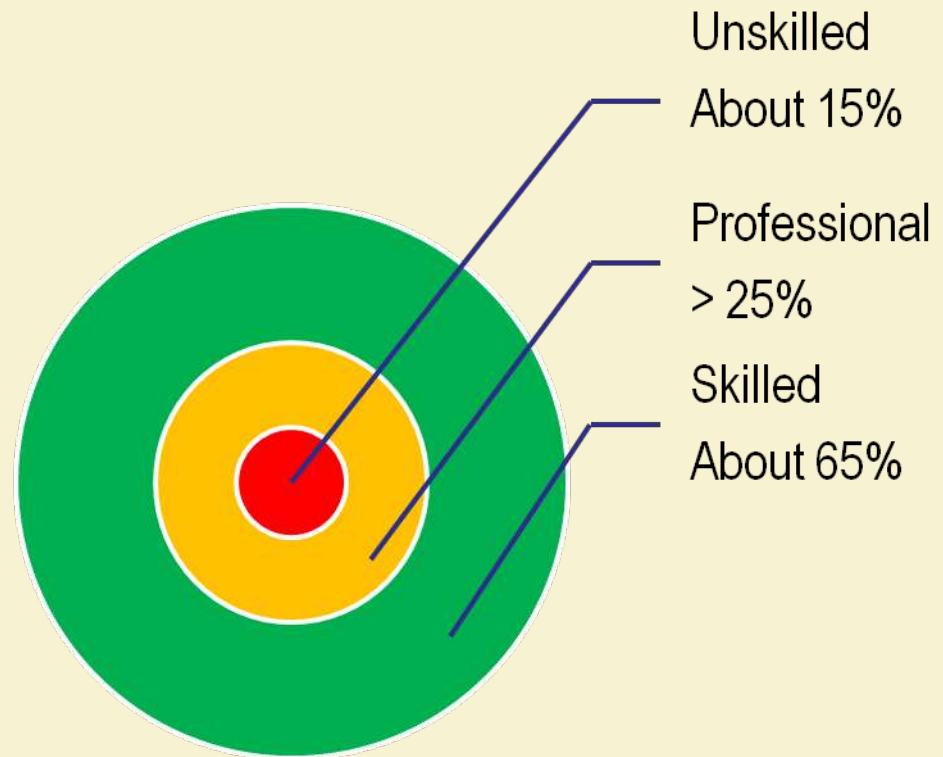
- China has 220 M “surplus workers”; US has a total of 140 M
- China has more people that speak ENGLISH as a 2nd language than the US has population

We will compete with workers from other countries like Brazil, India, China, Indonesia and Russia.

More people use the INTERNET in China than US

Why is education and career planning important? Did you know...

- The skills and knowledge required in the workplace are no longer very different from those needed for success in college. (Somerville and Yi, 2002)



Why is education and career planning important? Did you know...

- **Nationally, 70% of the 30 fastest-growing jobs will require an education beyond high school, 40 percent of all new jobs will require at least an associate's degree. (Somerville and Yi, 2002)**



Why is education and career planning important? Did you know...

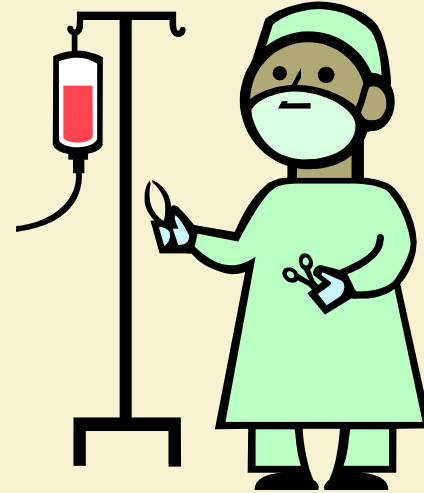
- Workers in occupations requiring a bachelor's or higher degree will hold 21.4 percent of all jobs for a total of almost 1.1 million jobs. (Georgia Workforce, 2014)



WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Why is education and career planning important? Did you know...

- In Georgia, 6 of the 20 fastest growing occupations will be in healthcare; five will be computer-related. (Georgia Workforce, to 2014)



Basic assumptions are...

- **ALL educators are career developers—“Teachers make all other professions possible”**
- **ALL students are expected to work, therefore, ALL students need career development—“The future of work is LEARNING a living”**
- **Parents are the greatest influence in a students career decision-making process. *“Many studies show that young people cite their parents most frequently as the main influence in their occupational plans. No other group even comes close.”***
--Sarah M. Shoffner and Richard H. Klemmer, 1973

Career Development is...

A lifelong process by which individuals define and redefine career-related choices and outcomes. (NOICC, March 1994)



#1

- Divide your chart paper into two columns.
- At your tables or in groups of 4 or 5, on your chart paper list 15 career-related pieces of information including *transitional information like “finding my locker” 8th graders and their parents needs to know prior to making decisions about the classes he/she will take in the 9th grade.
- Then put them in priority order.

Examples:

1. Graduation requirements
- 2.Appropriate study skills for high school courses

15 minutes

Students need answers...

Who Am I?

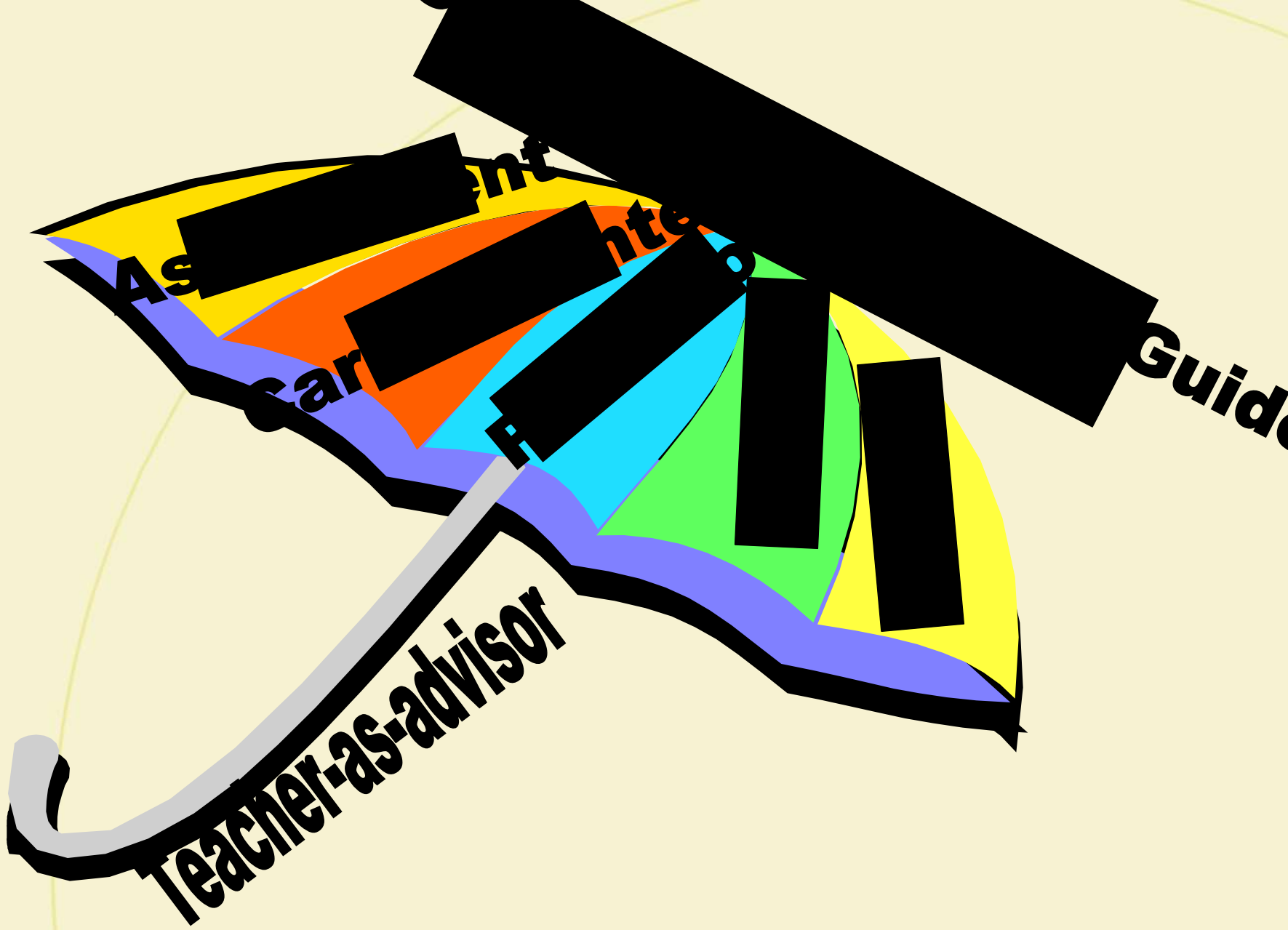
Interest
Aptitudes
Values
Personality

Where Am I Going?

Exploration
Work-based learning
Career Centers
Labor Market
Information (LMI)
Classroom/TAA
Activities

How Am I Going to Get There?

Portfolio
Peach State Pathways:
Education and Career
Planning Tool
Financial Aid
Graduate
Postsecondary
Education
Job Skills



WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Resources, materials, and tools:

- Teachers-as-Advisors at <http://www.georgiastandards.org/>

The screenshot shows the Georgia Standards website. At the top, there is a navigation bar with the GaDOE logo and the text 'GeorgiaStandards.Org | Kathy Cox, State Superintendent of Schools'. To the right of the logo is an 'Advanced Search' box with a 'Search' button. Below the navigation bar are several menu items: 'Home', 'Georgia Performance Standards', 'Frameworks', 'Programs', 'Resources & Videos', 'Training', and 'GSO Builder'. The 'Programs' menu item is highlighted in orange, and a red arrow points from it to the 'Educational Programs' section on the left. The 'Educational Programs' section is a large orange box containing a list of programs: 'AP, ACT, SAT and PSAT', 'English to Speakers of Other Languages (ESOL)', 'Gifted Education', 'Library Media', 'Special Education Services & Support', and 'Teachers-As-Advisors'. A red arrow points from the 'Teachers-As-Advisors' item to the right. The main content area on the right is white and contains the text: 'sustains several educational initiatives and curriculum areas that support K-12 instruction. improve the academic achievement of diverse learners through a variety of creative and'. Below this text is a 'Related Links' section with a link to 'Georgia Department of Education'. At the bottom of the page, there is a footer with links for 'Privacy Policy', 'Terms of Use', and 'Site Requirements', and a copyright notice: 'Copyright © 2008 Georgia Department of Education - Atlanta, GA'.



Educational Programs

- AP, ACT, SAT and PSAT
- English to Speakers of Other Languages (ESOL)
- Gifted Education
- Library Media
- Special Education Services & Support
- **Teachers-As-Advisors**

Teachers-As-Advisors

The Georgia Teachers-As-Advisors Framework represents a series of collaborative efforts between the Georgia Department of Education, Georgia educators representing Grades 6-12, Georgia students and parents representing Grades 6-12, Georgia postsecondary education systems, and representatives from Georgia business and industry.

Strongly linked to the National Career Development Guidelines, the Georgia Teachers-As-Advisors Framework serves as a structure for developing, implementing, and evaluating both district and school-level programs that are laser-focused on the educational and career planning process for ALL Georgia students

Further evidenced in the framework, is the overarching emphasis on the acquisition and development of 21st Century Skills that will lead ALL Georgia students to high-skill, high-demand, and high-wage jobs. These jobs will have a significant impact on, not only individuals, but growing a healthy state economy

The framework will serve, as well, as the structure from which an online repository of teachers-as-advisor lessons will be available from the Georgia Department of Education. Practitioners from across the state will be able to contribute to and draw from the repository as the Georgia Teachers-As-Advisors Initiative matures.

Explore the unlimited ways Teachers-As-Advisors can:

- create student opportunity



Teachers-as-Advisors Materials

- Framework and Advisement Sessions
- Teachers-as-Advisors Orientation and Awareness Presentation
- Advisement Plan Lesson Template
- Video Links (Training Modules)

Who Am I?

Self-Awareness



- **Occupation Sort (GCIS)**
- **IDEAS (additional GCIS cost)**
- **Armed Services Vocational Aptitude Battery (ASVAB) (10th and above) FREE**
- **O* Net Interest Profiler (GCIS/FREE)**
- **O* Net Work Importance Locator (GCIS)**
- **SKILLS (GCIS)**
- **PSAT (9th, 10th, 11th)**
- **PLAN (10th)**
- **GACollege411 (Career Keys) FREE**

Resources, materials, and tools:

- Career Keys assessment at www.GACollege411.org under the tab “Career Info”

The screenshot shows the GACollege411 website interface. At the top, the logo reads "GACollege411" with the tagline "Helping Students Plan, Apply, and Pay for College". A navigation bar contains several tabs: "Career Info", "Student Planner", "GA Colleges", "Applications & Transcripts", "Paying for College", "Path2College Savings Plan", and "Adult Learner". Below the navigation bar, there is a search box and a "go" button. A sidebar on the left lists various options: "Create an Account", "Log On", "My 411", "Introduction to Career Info", "Career Key", "Student-Career Matching Assistant", "Career Change", "List of Careers", "Fastest Growing Careers", and "Ask an Expert". The main content area is titled "Career Information" and contains a list of links with descriptions:

- [Introduction to Career Info](#) — Learn how the GACollege411 Career Info module can help you find your dream job.
- [Career Key](#) — Find a career that matches your abilities and personality.
- [Student-Career Matching Assistant](#) — Take an interactive test to discover which careers match your goals.
- [Career Change](#) — Comprehensive information on making a "mid-career" change.
- [List of Careers](#) — Find detailed information on specific careers and where to get the necessary education.
- [Fastest Growing Careers](#) — Discover Georgia's fastest growing careers.
- [Career Highlight Archive](#) — Ever thought about becoming a teacher, police officer, or a dental assistant? In our career highlight section you will find information about these and many other exciting careers.
- [Career Portfolio](#) — Create your own individual career portfolio.
- [Résumé Builder](#) — Create and print your own résumé.

- XAP, Inc. has purchased Bridges.com as the career planning component
- Career Keys results in Holland Codes



Georgia Pathways Aligned with Holland Codes: Students should take the Career Keys Assessment located on GACollege411 (www.GACollege411.org) under the “Career Info” tab on the homepage. Holland Codes are personality types created by psychologist John L. Holland as part of his theory of career choice. After taking the assessment match your Holland Codes with those pathways that might “fit” you as an individual. “Do what you love!”

Realistic people are “Doers” (R)	Social people are “Helpers” (S)
Investigative people are “Thinkers” (I)	Enterprising people are “Persuaders” (P)
Artistic people are “Creators” (A)	Conventional people are “Organizers” (C)

CONCENTRATION	PATHWAY	PRIMARY/SECONDARY HOLLAND CODE
Agriculture (R)	Agribusiness Management	(C) Conventional (E) Enterprising
	Agricultural Mechanics	(R) Realistic (I) Investigation



Kathy Cox, State Superintendent of Schools

Improving student achievement.

Georgia Department of Education



AskDOE

Search

http://www.gadoe.org/ci_cta.aspx?PageReq=CICTACareer

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Standards, Instruction and Assessment Career, Technical and Agricultural Education

Creating a world-class workforce for Georgia in the 21st Century.

DIVISIONS

- ◀ [Career, Technical and Agricultural Education](#)
- ◀ [Curriculum and Instructional Services](#)
- ◀ [Special Education Services and Support](#)
- ◀ [Innovative Academic Programs](#)
- ◀ [Testing](#)

Career Development

Vision

The Georgia Department of Education's Career Development Initiative will provide the necessary tools, knowledge, and resources for systematic, developmental, and comprehensive career planning for all students in grades K-12.

- [Education and Career Planning Tools New Rule](#)
- [Education and Career Planning Tools Old Rule](#)

Career development is a vital part of one's educational career and is a school wide initiative. Individuals define and re-define career-related choices and outcomes in a life-long process. In general labor trends indicate that many workers will change jobs an average of 7-10 times in their career, will work in teams, and will need more education and training to be competitive in their

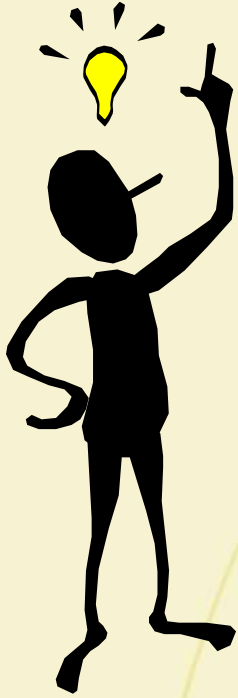
GEORGIA CONNECTIONS

- ◀ [Crosswalk Georgia 11 Concentrations to Federal 16 Clusters](#)
- ◀ [CTAE Program Concentrations](#)
- ◀ [GCIS Georgia Career Clusters to Federal Clusters](#)
- ◀ [Holland Code Alignment to Georgia Pathways](#)

CONTACT INFORMATION



- ◀ [Graduation Coach Training presentation 2008](#)
- ◀ [Education and Career Planning Tool Guidance](#)



Where Am I Going?

Exploration

- Materials, knowledge, tools and resources (CAREER CENTERS)
- www.GeorgiaCRN.org
- Labor Market Information (LMI)
- Georgia Department of Labor <http://www.dol.state.ga.us/>
- Career Voyages <http://www.careervoyages.gov/>
- Work-Based Learning (Career-Related Education-CRE)
- Classroom/TAA activities

How Am I Going To Get There?

Planning

Peach State Pathway: Education and Career Plans at
http://www.gadoe.org/ci_cta.aspx?PageReq=CICTAPlanningNew

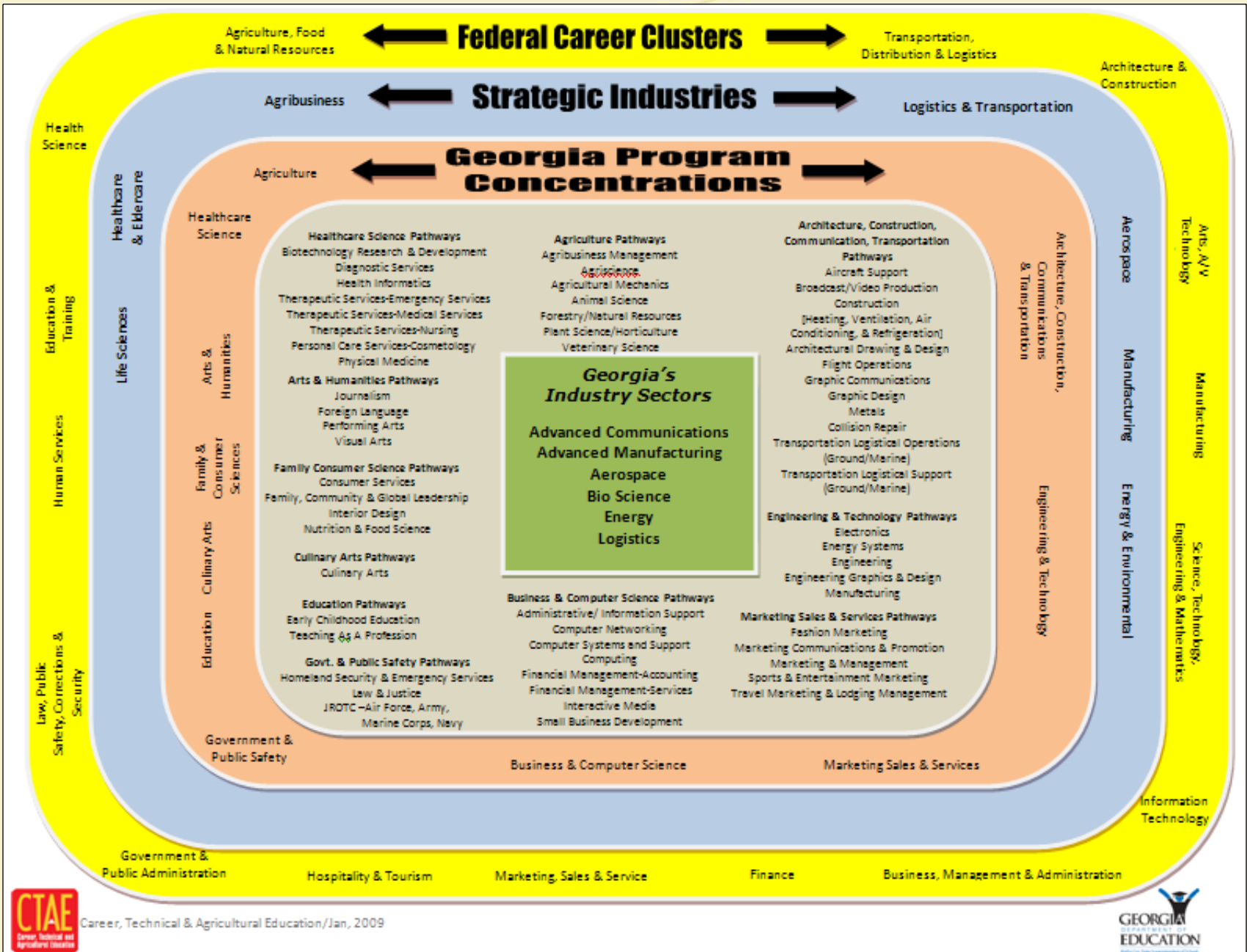
Portfolios/Student Planner (GCIS/GACollege411)



Georgia's 11 Program Concentrations

- **Represent a grouping of occupations according to common knowledge and skills for the purpose of organizing educational programs and curricula**

<http://www.gadoe.org/>



Career, Technical & Agricultural Education/Jan, 2009



WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Agriculture

Architecture, Construction, Communications & Transportation

Arts & Humanities

Business & Computer Science

Culinary Arts

Education

Engineering & Technology

Family & Consumer Sciences

Healthcare Science

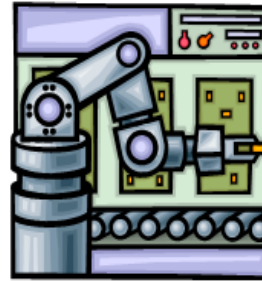
Government & Public Safety

Marketing, Sales & Services

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Engineering & Technology

The **ENGINEERING & TECHNOLOGY CONCENTRATION** prepares students for occupations such as engineering in various fields such as civil, electrical, textile, nuclear, mechanical and chemical, engineering technicians, mechanical drafter, numerical control tool programmers, and industrial production supervisors. The Engineering & Technology concentration is further divided into **PATHWAYS** that are more specialized areas of study with an identified sequence of courses in that area. Educational levels, salaries, and demand vary within the concentration. [Click here](#) for sample Peach State Pathways: [Program of Study in Engineering](#).



Would I enjoy occupations in the Engineering & Technology concentration?

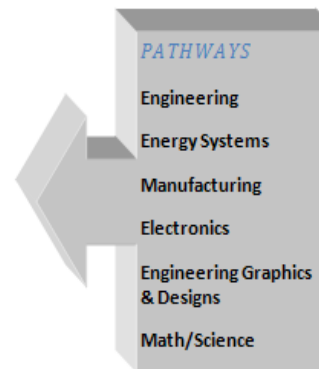


Check your career assessments for any match to occupations in the Engineering & Technology field. The primary [Holland Codes](#) vary within the concentration. For Engineering the code is (I) Investigative or Technology the code is Realistic (R). Secondary codes vary with specific occupations. Go to [GACollege411](#), [Career Keys](#) to discover all your Holland Codes. Or answer these questions. Are you curious about the way things work? Do you enjoy using tools, problem solving and designing? Are you creative? Can you picture an idea in your mind? Do you like math? If so, this may be the field of study for you.

What is Engineering & Technology education in Georgia?

This program allows students the opportunities to experience:

- Classroom and laboratory components combine hands-on projects with a rigorous curriculum to prepare students for the most challenging programs.
- Work-based learning opportunities through the Youth Apprenticeship Program (YAP) and other career related activities.
- And membership in the Georgia Technology Student Association [www.gatsa.org](#) in which students participate in co-curricular activities with the technology education program to develop communication, leadership, and competitive skills.



Career Pathway

- **Is a coherent, articulated sequence of rigorous academic and career/technical courses, usually beginning in the 9th grade and leading to a diploma, associate degree, baccalaureate degree and beyond.**

Pathways	Engineering
-----------------	--------------------

*SAMPLE Career Occupations	Aerospace Engineer • Aeronautical Engineer • Aircraft Engineer • Agricultural Technician • Application Engineer • Architectural Engineer • Automotive Engineer • Biotechnology Engineer • Chemical Engineer • Civil Engineer • Communications Engineer • Computer Engineer • Computer Hardware Engineer • Computer Programmer • Computer Science Technician • Computer Software Engineer • Construction Engineer • Control Development Engineer • Drafter • Electrical Engineering Technician • Electronics Technician • Energy Transfer Engineer • Environmental Engineer • Facilities Technician • Fire Protection Engineer • Geothermal Engineer • Hazardous Waste Engineer • Hazardous Waste Technician • Human Factors Engineer • Industrial Engineer • Industrial Engineering Technician • Lineman • Manufacturing Engineer • Manufacturing Technician • Manufacturing Processes Engineer • Materials Engineer • Materials Lab & Technician • Mechanical Engineer • Metallurgical Engineering • Mining Engineer • Naval Engineer • Network Technician • Nuclear Engineer • Ocean Engineer • Operations Engineer • Packaging Engineer • Packaging Technician • Petroleum Engineer • Pharmaceutical Engineer • Power Systems Engineer • Product Design Engineer • Project Engineer • Project manager • Quality Engineer • Quality Technician • Radio/TV Broadcast Technician • Radiology Engineering Researcher • Safety Engineer • Software Engineering Technician • Structural Engineer • Survey Technician • Systems Design Engineer • Technical Sales Manager • Technical Writer • Telecommunications Engineering Technician • Transportation Engineer •
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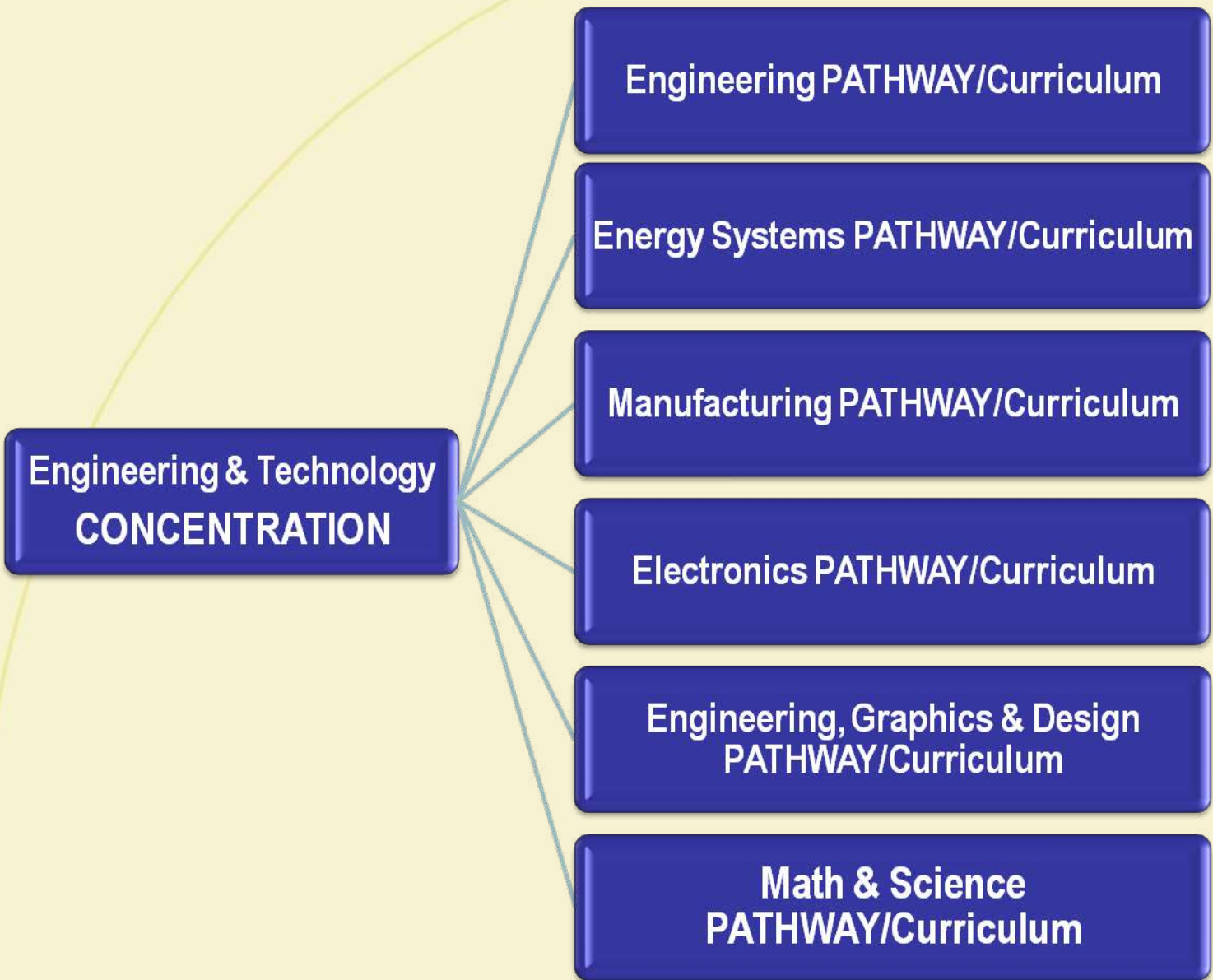
Technical Skills • Academic Foundation • Environment •

Energy System
For more information:
<http://www.getintoenergy.com/skills.asp>

- Telecommunication Technicians
- Equipment, Cable, Line Repairers/Installers
- Computer Programmers, and Systems Analysts
- Electrician
- Boilermaker
- Electronics Technician
- Power Plant Operator
- Electrical, Mechanical, Aeronautical, Geothermal, Chemical Engineers
- Electronics Engineering Technician
- Engineering Technician
- Mining Engineer
- Petroleum Engineer
- Hazardous Waste Technician
- Pipfitters/Pipelayers
- Value/Regulator Repairers
- Greenpower Marketing
- Meteorologist
- Windsmiths
- Geologist

Manufacturing	Electronics	Engineering Graphics & Design	Math/Science
Repairer ves s y Mechanics ers ment Mechanics ntists an s ted Teller, pairs nce and Protection ng Tech ol Setters, d Plastic Repairs dustrial Designers ronics Drafters	<ul style="list-style-type: none"> ● Production Worker ● Electrical Maintenance ● Industrial Electrician ● Electronics Technician ● Electrical Engineer ● Electronics Engineering Technician ● Engineering Technician ● Refurbish Technician ● Electronics Test Technician, Engineering Aide ● Failure Analysis Technician (FA Technician) ● Field Engineer 	<ul style="list-style-type: none"> ● Industrial Engineer ● Materials Engineer ● Mechanical Drafter ● Mechanical Engineer ● Electrical Engineer ● Environmental Engineer (hydro engineering) ● Modeler 	Analytical Chemist* Anthropologist* Archeologist* Astronomer* Astrophysicist* Atmospheric scientist* Biologist* Botanist* CAD Operator* Cartographer* Chemist* Communications technologist* Conservation scientist* Cryptographer* Crystallographer* Demographer* Dye chemist* Ecologist* Economist* <u>Electromicroscopist*</u> Environmental Scientist* Expert systems Scientist* Geneticist* Geologist* Geophysicist* Geochemist* Herpetologist* Hydrologist* Ichthyologist* Inorganic Chemist* Laboratory Technician* <u>Mammalogist*</u> Marine scientist* Materials Analyst* Materials Scientist* Mathematician* Metallurgist* Meteorologist* Microbial Physiologist* Mycologist* Nano-biologist* Nuclear Chemists* Nuclear Technician* Numerical Analyst* Nutritionist* Oceanographer* Organic Chemist* Ornithologist* Paleontologist* Physicist* Polymer Scientist* Programmer* Protein Scientist* <u>Protozoologist*</u> Quality-control Scientist* Radio Chemist* Research Chemist* Research Technician* Science Teacher * Lab Technician* Scientific visualization / Graphics Expert* <u>Spectroscopist*</u> Statistician* Technical writer* Toxicologist* Zoologist*

S
 nking • Information Technology Applications • Systems • Safety, Health and
 abilities • Career Development • Entrepreneurship



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graph LR; A[Energy Pathway] --- B[21.42500 Foundations of Engineering & Technology]; A --- C[21.45100 Energy & Power Technology]; A --- D[21.45700 Appropriate & Alternative Energy Technologies];
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Energy Pathway

21.42500

**Foundations of
Engineering &
Technology**

21.45100

**Energy & Power
Technology**

21.45700

**Appropriate &
Alternative Energy
Technologies**

Program Concentration	Architecture, Construction & Transportation	Engineering & Technology	Business & Computer Science	Marketing, Sales & Services	Family & Consumer Sciences	Healthcare Science	Agriculture	Government & Public Safety	Education	Culinary Arts	Arts & Humanities
Related Governor's Strategic Industries	Aerospace Energy & Environmental Logistics & Transportation	Aerospace Agribusiness Energy & Environmental Healthcare & Eldercare Life Sciences Logistics & Transportation	Aerospace Agribusiness Energy & Environmental Healthcare & Eldercare Life Sciences Logistics & Transportation	Aerospace Agribusiness Energy & Environmental Healthcare & Eldercare Life Sciences Logistics & Transportation	Healthcare & Eldercare Agribusiness	Healthcare & Eldercare Life Sciences	Agribusiness Energy & Environmental	Aerospace Agribusiness Energy & Environmental Healthcare & Eldercare Life Sciences Logistics & Transportation			

CAREER PATHWAY	Phase I Implementation 07-08	Transportation									
		Logistical Operations (Ground/Marine)	Engineering	Small Business Development	Marketing & Management		Therapeutic Services-Nursing	Agriscience			
	Phase II Implementation 08-09	Transportation Logistical Support (Ground/Marine)		Computing							
		Flight Operations	Energy Systems	Financial Management - Accounting	Fashion Marketing	Nutrition & Food Science	Therapeutic Services-Emergency Services	Forestry/ Natural Resources		Early Childhood Education	Culinary Arts
		Aircraft Support	Manufacturing	Financial Management - Services	Marketing Communications & Promotion		Therapeutic Services-Medical Services	Plant Science/ Horticulture		Teaching As A Profession	
		Engineering, Drawing & Design	Electronics	Interactive Media			Health Informatics				
	Phase III Implementation 09-10	Construction									
		Metals		Administrative/ Information Support	Travel Marketing & Lodging Management	Consumer Services	Biotechnical Research & Development	Animal Science	Homeland Security & Emergency Services		Visual Arts
		Graphic Communications		Computer Network Systems	Sports & Event Marketing	Family/Community Services	Diagnostic Services	Agricultural Mechanics	Law & Justice		Performing Arts
		Visual Communications				Interior Design		Agribusiness Management	JROTC		Journalism
		Broadcasting & Digital Media									Foreign Language

Centers of Innovation (<http://www.georgia.org/Business/Innovation>)
 Designed to enhance long-term economic opportunities for Georgians, nourish the state's homegrown industries, and encourage new companies to invest and build in the state.
 Life Sciences Innovation Center - Augusta, GA Maritime Logistics Innovation Center - Savannah, GA Information Technology Center - Columbus, GA
 Manufacturing Excellence Innovation Center - Gainesville, GA Agriculture Innovation Center - Tifton, GA Aerospace Innovation Center - Warner Robins, GA

Governor's Strategic Industries (<http://www.newgeorgia.org/taskforces/strategicind.shtml>)
 Aerospace Healthcare & Eldercare Agribusiness Life Sciences Energy & Environmental Logistics & Transportation

1/9/2008

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Peach State Pathways: Program of Study



Engineering & Technology

Learner Name _____

Date _____

Learner Signature _____

Adv _____

Parent/Guardian Signature _____

This plan of study should serve as a guide, along with other career plans listed within this plan are only recommended coursework and should be individualized.

All plans will meet minimum high school graduation requirements as well.

Applicants to Board of Regents institutions should be advised that meeting minimum requirements will not guarantee admission.

Energy Systems

High School Education and Career Plan Graduation Rules for 9 th grade enrolling 2008-2009	I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)
	English 9 English 10 English 11 English 12 AP Lit and Comp AP Lang and Comp IB English SL (Am Lit) IB English HL (World Lit)	Math 1 Math 2 Math 3 Math 4 OR Accelerated Math 1 Accelerated Math 2 Accelerated Math 3	Biology Physical Science OR Physics Chemistry OR Environmental Science OR Earth Systems OR an AP/IB course	Am Gov/Civics (1/2 unit) World History US History Economics (1/2 unit)
<u>Sample Additional English Courses:</u> Literary Types/Composition Oral/Written Communication	<u>Sample Additional Math Courses:</u> TBA	<u>Sample Additional Science Courses:</u> Environmental Science AP Environmental Science Aviation Meteorology Astrophysics Energy & Power Technology	<u>Sample Additional Social Studies Courses:</u> Current Issues The Humanities Technology and Society Sociology AP Macroeconomics AP Microeconomics	
Career Enhancement Opportunities	Career-Related Education Activities		Postsecondary Options:	
	<input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • <u>Clinicals</u> 		<ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Special Purpose Schools • On-the-Job Training • Military 	

This document represents an individual education and career planning tool including both secondary and postsecondary elements for students and their parents. For more information go to http://www.gadoe.org/ci_cta.aspx?PageRe

[g=CICTACareer](#)

ASCA Standards & Competencies: Career Domain

- A:1—Develop Career Awareness
- A:2—Develop Employment Readiness
- B:1—Acquire Career Information
- B:2—Identify Career Goals
- C:1—Acquire Knowledge to Achieve Career Goals
- C:2—Apply Skills to Achieve Career Goals

*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.

Peach State Pathways: Program of Study

Engineering & Technology



Learner Name _____
 Learner Signature _____
 Parent/Guardian Signature _____

This plan of study should serve as a guide, along with other career plans listed within this plan are only recommended coursework and should be individualized. All plans will meet minimum high school graduation requirements as well as college entrance requirements. Applicants to Board of Regents institutions should be advised that meeting minimum requirements will not guarantee admission.

Energy Systems

High School Education and Career Plan Graduation Rules for 9 th grade enrolling 2008-2009	I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)
	English 9 English 10 English 11 English 12 AP Lit and Comp AP Lang and Comp IB English SL (Am Lit) IB English HL (World Lit) <u>Sample Additional English Courses:</u> Literary Types/Composition Oral/Written Communication	Math 1 Math 2 Math 3 Math 4 OR Accelerated Math 1 Accelerated Math 2 Accelerated Math 3 <u>Sample Additional Math Courses:</u> TBA	Biology Physical Science OR Physics Chemistry OR Environmental Science OR Earth Systems OR an AP/IB course <u>Sample Additional Science Courses:</u> Environmental Science AP Environmental Science Aviation Meteorology Astrophysics Energy & Power Technology	Am Gov/Civics (1/2 unit) World History US History Economics (1/2 unit) AP World History AP US History AP Government AP Macroeconomics AP Microeconomics IB Economics SL IB History of the Americas (SL) <u>Sample Additional Social Studies Courses:</u> Current Issues The Humanities Technology and Society Sociology AP Macroeconomics AP Microeconomics
Career Enhancement Opportunities	Career-Related Education Activities		Postsecondary Options:	
<input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • <u>Clinicals</u> 	<input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • <u>Clinicals</u> 		<ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Special Purpose Schools • On-the-Job Training • Military 	
				Possible postsecondary credit opportunities may include: <ul style="list-style-type: none"> • *Advanced Placement • *Articulated Credit (Technical Colleges) • *Dual Enrollment/ACCEL (Degree Programs) • *Dual Enrollment/HOPE (Certificate and Diplomas) • Joint Enrollment (postsecondary credit only) <p><small>*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.</small></p>

Healthcare Science is the Program Concentration that represents a grouping of occupations according to common knowledge and skills for the purpose of organizing educational programs and curricula. Georgia's eleven concentrations can be aligned with the State's 16 Career Cluster Initiative (www.careercluster.org)

(C:B1.4 Know the various ways in which occupations can be classified)

Peach State Pathways: Program of Study

Engineering & Technology



Learner Name _____
 Learner Signature _____
 Parent/Guardian Signature _____

Date _____
 Advisor/Counselor Signature _____

This plan of study should serve as a guide, along with other career planning materials, as you continue your education. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. All plans will meet minimum high school graduation requirements as well as minimum college entrance requirements.

Applicants to Board of Regents institutions should be advised that meeting minimum requirements will not guarantee admission at any institution. Institutions may set additional and/or higher requirements.

Energy Systems

High School Education and Career Plan 2009	I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)	V. Required Electives (3 units) and Other Electives (4 units) CTAE and/or Modern Language/Latin and/or Fine Arts	VI. Health & Physical Edu. (1 unit)
	English 9 English 10 English 11	Math 1 Math 2 Math 3	Biology Physical Science OR Physics	Am Gov/Civics (1/2 unit) World History	<p>Career Pathway Sequence of Courses:</p> <p>21.42500 Foundations of Engineering and Technology 22.45000 Energy and Power Technology Appropriate and Alternative Energy Technologies</p> <p>CAREER PATHWAY RELATED COURSES:</p> <p>Foundations of Electronics ADD Solid Modeling Entrepreneurship Principles of Accounting I Energy Systems Internship</p> <p>Modern Language/Latin</p> <p>Required for admissions to Georgia University System Colleges/Universities If Modern Language/Latin courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p> <p>Fine Arts</p> <p>Visual Arts Performing Arts</p> <p>If other Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p> <p>VII. Other Electives</p> <p>If other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p>	Health Physical Education
Career Enhancement Opportunities	Career-Related Education Activities		Technology	AP Macroeconomics AP Microeconomics	Possible postsecondary credit opportunities may include:	
	<ul style="list-style-type: none"> <input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • <u>Clinicals</u> 		Postsecondary Options: <ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Special Purpose Schools • On-the-Job Training • Military 		<ul style="list-style-type: none"> • *Advanced Placement • *Articulated Credit (Technical Colleges) • *Dual Enrollment/ACCEL (Degree Programs) • *Dual Enrollment/HOPE (Certificate and Diplomas) • Joint Enrollment (postsecondary credit only) <p><small>*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.</small></p>	

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Peach State Pathways: Program of Study

Engineering & Technology



Learner Name _____
 Learner Signature _____
 Parent/Guardian Signature _____

This plan of study should serve as a guide, along with other career courses listed within this plan are only recommended coursework and should be used as a guide. All plans will meet minimum high school graduation requirements.

Applicants to Board of Regents institutions should be advised that meeting minimum requirements will not guarantee admission.

This icon represents the Career and Technical Student Organizations (CTSO) logo aligned with the pathway.

Energy Systems

High School Education and Career Plan Graduation Rules for 9 th grade enrolling 2008-2009		I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)	VI. Health & Physical Education (1 unit)
		English 9 English 10 English 11 English 12 AP Lit and Comp AP Lang and Comp IB English SL (Am Lit) IB English HL (World Lit)	Math 1 Math 2 Math 3 Math 4 OR Accelerated Math 1 Accelerated Math 2 Accelerated Math 3	Biology Physical Science OR Physics Chemistry OR Environmental Science OR Earth Systems OR an AP/IB course	Am Gov/Civics (unit) World History US History Economics (1/2 unit) AP World History AP US History AP Government AP Microeconomics AP Macroeconomics IB Economics SL IB History of the Americas (SL)	Health Physical Education
		<u>Sample Additional English Courses:</u> Literary Types/Composition Oral/Written Communication	<u>Sample Additional Math Courses:</u> TBA	<u>Sample Additional Science Courses:</u> Environmental Science AP Environmental Science Aviation Meteorology Astrophysics Energy & Power Technology	<u>Sample Additional Social Studies Courses:</u> Current Issues The Humanities Technology and Society Sociology AP Macroeconomics AP Microeconomics	<u>Sample Additional Health & PE courses:</u> Team Sports Flag Games Aerobics
Career Enhancement Opportunities	Career-Related Education Activities		Postsecondary Options:		Possible postsecondary credit opportunities may include:	
	<input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • <u>Clinicals</u> 		<ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Special Purpose Schools • On-the-Job Training • Military 		<ul style="list-style-type: none"> • *Advanced Placement • *Articulated Credit (Technical Colleges) • *Dual Enrollment/ACCEL (Degree Programs) • *Dual Enrollment/HOPE (Certificate and Diplomas) • Joint Enrollment (postsecondary credit only) 	
	<p>21.45100 Energy and Power Technology 21.45700 Appropriate and Alternative Energy Technologies CAREER PATHWAY RELATED COURSES: 21.45200 Foundations of Electronics 48.54300 CADD Solid Modeling 06.41700 Entrepreneurship 07.41100 Principles of Accounting I 21.44800 Energy Systems Internship</p> <p>Modern Language/Latin 2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p> <p>Fine Arts Visual Arts Performing Arts</p> <p>For a listing of Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p> <p>VII. Other Electives</p> <p>For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p>		<p>*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.</p>			

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

This part of the document represents a visual interpretation of the new graduation rule for students enrolling 2008-2009; high school suggested coursework highlights core academics and career-related electives that are recommended for continued education and/or the workforce.

(C:B1.1 Apply decision-making skills to career planning, course selection, and career transition
 C:B2.1 Demonstrate awareness of education and training needed to achieve career goals)

Energy Systems

All plans will meet minimum high school graduation requirements as well as minimum college entrance requirements. Applicants to Board of Regents institutions should be advised that meeting minimum requirements will not guarantee admission at any institution. Institutions may set additional and/or higher requirements.

	I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)	V. Required Electives (3 units) and Other Electives (4 units) CTAE and/or Modern Language/Latin and/or Fine Arts	VI. Health & Physical Edu. (1 unit)
High School Education and Career Plan Graduation Rules for 9 th grade enrolling 2008-2009	English 9 English 10 English 11 English 12	Math 1 Math 2 Math 3 Math 4 OR Accelerated Math 1 Accelerated Math 2 Accelerated Math 3	Biology Physical Science OR Physics Chemistry OR Environmental Science OR Earth Systems OR an AP/IB course	Am Gov/Civics (1/2 unit) World History US History Economics (1/2 unit)	<p>Career Pathway Sequence of Courses:</p> 21.42500 Foundations of Engineering and Technology 21.45100 Energy and Power Technology 21.45700 Appropriate and Alternative Energy Technologies CAREER PATHWAY RELATED COURSES: 21.45200 Foundations of Electronics 48.54300 CADD Solid Modeling 06.41700 Entrepreneurship 07.41100 Principles of Accounting I 21.44800 Energy Systems Internship	Health Physical Education
	AP Lit and Comp AP Lang and Comp IB English SL (Am Lit) IB English HL (World Lit)	AP Statistics Calculus AP Calculus AB AP Calculus BC IB Math Methods IB Math Studies SL IB Math SL IB Math HL	AP/IB course AP Biology AP Physics AP Chemistry IB Biology SL IB Biology HL IB Biochemistry IB Chemistry SL/HL	AP World History AP US History AP Government AP Microeconomics AP Macroeconomics IB Economics SL IB History of the Americas (SL)	<p>Modern Language/Latin</p> 2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.	<p>Fine Arts</p> Visual Arts Performing Arts
<p>Sample Additional English Courses:</p> Literary Types/Composition Oral/Written Communication	<p>Sample Additional Math Courses:</p> TBA	<p>Sample Additional Science Courses:</p> Environmental Science AP Environmental Science Aviation Meteorology Astrophysics Energy & Power Technology	<p>Sample Additional Social Studies Courses:</p> Current Issues The Humanities Technology and Society Sociology AP Macroeconomics AP Microeconomics	<p>For a listing of Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p> <p>VII. Other Electives</p> <p>For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p>		
Career Enhancement Opportunities	Career-Related Education Activities		Postsecondary Options:		Possible postsecondary credit opportunities may include:	
	<input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • <u>Clinicals</u> 		<ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Special Purpose Schools • On-the-Job Training • Military 		<ul style="list-style-type: none"> • *Advanced Placement • *Articulated Credit (Technical Colleges) • *Dual Enrollment/ACCEL (Degree Programs) • *Dual Enrollment/HOPE (Certificate and Diplomas) • Joint Enrollment (postsecondary credit only) <p><small>*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.</small></p>	

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.

Peach State Pathways: Program of Study

Engineering & Technology



Learner Name _____
 Learner Signature _____
 Parent/Guardian Signature _____

Date _____
 Advisor/Counselor Signature _____

This part of the document represents the Career Pathway CTAE sequence of courses and suggested related coursework (highlighted in BLUE) for students who have chosen the nursing field as a career goal. These students will have multiple entry levels and options upon graduation to continue their education to the baccalaureate level and beyond.

(C:B2.4 Select course work that is related to career interests)

Career Pathway Sequence of Courses:

21.42500 Foundations of Engineering and Technology
 21.45100 Energy and Power Technology
 21.45700 Appropriate and Alternative Energy Technologies

CAREER PATHWAY RELATED COURSES:

21.45200 Foundations of Electronics
 48.54300 CADD Solid Modeling
 06.41700 Entrepreneurship
 07.41100 Principles of Accounting I
 21.4480 Energy Systems Internship

<p>long w ursewo duation minimum req Ill. Science (4 units)</p>	<p>AP Microeconomics AP Macroeconomics IB Economics SL IB History of the Americas (SL)</p>	<p>2 units required for admissions to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p>	
<p>Additional Courses: Environmental Science Environmental Science Meteorology Physics Energy & Power Biology</p>	<p>Sample Additional Social Studies Courses: Current Issues The Humanities Technology and Society Sociology AP Macroeconomics AP Microeconomics</p>	<p>Fine Arts Visual Arts Performing Arts</p> <p>For a listing of Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p> <p>VII. Other Electives</p> <p>For a listing of other elective courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p>	<p>Sample Additional Health & PE courses: Team Sports Chess Games Aerobics</p>
<p>Postsecondary Options: 4-Year Universities/Colleges 2-Year Colleges Technical Colleges State Registered Apprenticeships Special Purpose Schools On-the-Job Training Military</p>	<p>Possible postsecondary credit opportunities may include:</p> <ul style="list-style-type: none"> *Advanced Placement *Articulated Credit (Technical Colleges) *Dual Enrollment/ACCEL (Degree Programs) *Dual Enrollment/HOPE (Certificate and Diplomas) *Joint Enrollment (postsecondary credit only) <p><small>*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.</small></p>		

Peach State Engineering

Learner Name _____
 Learner Signature _____
 Parent/Guardian Signature _____

This plan of study should serve as a guide. Plans listed within this plan are only recommendations. All plans will meet minimum high school graduation requirements. Applicants to Board of Regents institutions should be aware of their institution's requirements.

Study



Counselor Signature _____

Materials, as you continue your education. Courses are designed to meet each learner's educational and career goals. All plans will meet minimum college entrance requirements.

<p>Required Electives (3 units) and Other Electives (4 units) TAE and/or Modern Language/Latin and/or Fine Arts</p>	<p>VI. Health & Physical Edu. (1 unit) Health Physical Education</p>
<p>Career Pathway Sequence of Courses: Foundations of Engineering and Technology Energy and Power Technology Appropriate and Alternative Energy Technologies</p> <p>PATHWAY RELATED COURSES: Foundations of Electronics ADD Solid Modeling Entrepreneurship Principles of Accounting I Energy Systems Internship</p>	
<p>Modern Language/Latin Required for admissions to Georgia University System Colleges/Universities Modern Language/Latin courses offered at your high school, please check with your advisor, counselor, or curriculum handbook.</p>	
<p>Fine Arts Visual Arts Performing Arts</p>	
<p>For a listing of Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p>	
<p>VII. Other Electives</p>	
<p>For a listing of other elective courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p>	

These arrows point to value added information considered to be important to the education and career planning process:
 work-based learning;
 postsecondary options and postsecondary credit opportunities.

(C:B2.2 Assess and modify one's educational plan to support career goals)

Energy Systems

<p>High School Education and Career Plan Graduation Rules for 9th grade enrolling 2008-2009</p>	<p>I. English Language Arts (4 units) English 9 English 10 English 11 English 12</p> <p>AP Lit and Comp AP Lang and Comp IB English SL (Am Lit) IB English HL (World Lit)</p> <p>Sample Additional English Courses: Literary Types/Context Oral/Written Communication</p>	<p>II. Mathematics (4 units) Math 1 Math 2 Math 3 Math 4 OR Accelerated Accelerated Accelerated</p> <p>AP Statistics Calculus AP Calculus IB Math IB Math IB Math IB Math</p> <p>Sample Additional Math Courses: TBA</p>	<p>Sample Additional Science Courses: Environmental Science AP Environmental Science Aviation Meteorology Astrophysics Energy & Power Technology</p>	<p>Sample Additional Social Studies Courses: Current Issues The Humanities Technology and Society Sociology AP Macroeconomics AP Microeconomics</p>	<p>For a listing of Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook.</p>	<p>Sample Additional Health & PE courses: Team Sports Rec Games Aerobics</p>
	<p>Career-Related Education Activities</p> <p><input type="checkbox"/> Career Awareness <input type="checkbox"/> Career Exploration <input type="checkbox"/> Instructional Related <input type="checkbox"/> Connecting <input type="checkbox"/> Work-Based Learning • Employability Skill Dev. • Cooperative Education • Internship • Youth Apprenticeship • Clinicals</p>	<p>Postsecondary Options:</p> <ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Special Purpose Schools • On-the-Job Training • Military 	<p>Possible postsecondary credit opportunities may include:</p> <ul style="list-style-type: none"> • *Advanced Placement • *Articulated Credit (Technical Colleges) • *Dual Enrollment/ACCEL (Degree Programs) • *Dual Enrollment/HOPE (Certificate and Diplomas) • Joint Enrollment (postsecondary credit only) <p><small>*Postsecondary credit opportunities allow high school students to earn both college and high school credit simultaneously while in high school. Check with your counselor/advisor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College which serves both middle and high school students.</small></p>			

Go to GACollege411 at www.GACollege411.org for more information about your education and career planning, including valuable financial information, grants and scholarship information including HOPE Program, loans, FAFSA and CSS forms.

Current GEORGIA Graduation Rule for student entering the 9 th grade in fall of 2008-2009 Areas of Study:	Credits	Postsecondary Programs of Study Technical College	Postsecondary Programs of Study University of Georgia System
I. English/Language Arts	4	<p>The following links will list Department of Technical and Adult Education institutions offering programs in Energy Systems. Each technical college varies in the specific degrees (AAS) and diplomas offered. Search the drop-down boxes for a specific program OR school in the following areas:</p> <ul style="list-style-type: none"> *Electrical/Electronics *Electromechanical Engineering *Environmental Engineering Technology <p>Associate Degree and Diploma Programs</p> <p>Certificate Programs (short training programs from one to four quarters in preparation for employment)</p>	<p>The following link will list Board of Regents institutions offering degrees in Energy Systems. In the first box titled "Major," type "Electrical Engineering," "Renewable Resources," or "Environmental Engineering." Then click the button at the bottom "View Matching Campuses" for a list. It will not be necessary to fill in all the other boxes. Further research will be required for specific programs of study that align with the pathway.</p> <p>http://www.gacollege411.org/Select/MatchAsst/default.asp</p>
II. Math	4		
III. *Science	4		
IV. Social Studies	3		
V. **Career, Technical and Agricultural Education (CTAE), and/or Modern Language/Latin, and/or Fine Arts	3		
VI. Health & Physical Education	1		
VII. Electives (4 units)	4		
TOTAL UNITS	23		
<p>* 4th Science may be used to meet both the required science and required elective in CTAE sequence of courses (V) **Student <u>must</u> complete 3 units in a pathway to complete CTAE pathway and take end of pathway assessment. Student <u>must</u> complete 2 years of the same Modern Language/Latin for admission to Georgia Board of Regents colleges/universities.</p>			

ENERGY SYSTEMS PATHWAY

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

This block represents the graduation rule and the postsecondary programs of study aligned to the pathway at the technical college and the University System of Georgia; a reference to GACollege411 for additional postsecondary information and financial aid is also included

(C:C1.1 Understand the relationship between educational achievement and career success)

The sample ENERGY SYSTEMS PATHWAY occupations listed below meet two out of three of GDOE definitions for high-demand, high-wage and high-skilled. www.occsupplydemand.org

Occupation Specialties	Level of Education Needed	Average Salary	Annual Average Openings in Georgia
Environmental Engineering Technician	Associate Degree	\$34,112	40
Electrical Engineer	Bachelor Degree	\$74,547	110
Environmental Engineer	Bachelor Degree	\$65,749	50
Nuclear Engineer	Bachelor Degree	\$103,272	10
Electro-Mechanical Technician	Associate Degree	\$36,629	20

Go to GACollege411 at www.GACollege411.org for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, loans, FAFSA and CSS forms).

Current GEORGIA Graduation Rule for student entering the 9th grade in fall of 2008-2009 Areas of Study:	Credits	Postsecondary Programs of Study Technical College	Postsecondary Programs of Study University of Georgia System
I. English/Language Arts			
II. Math			
III. *Science			
IV. Social Studies			
V. **Career, Technical and Agricultural Education (CTAE), and/or Modern Language/Latin, and/or Fine Arts			
VI. Health & Physical Education			
VII. Electives (4 units)			
TOTAL UNITS			
* 4 th Science may be used to meet both the required elective in CTAE sequence of courses (C) and the required science in the pathway sequence of courses (S).			
**Student <u>must</u> complete 3 units in a pathway to pathway and take end of pathway assessment. Student must complete 2 years of the same Modern Language/Latin or Fine Arts for admission to Georgia Board of Regents colleges/universities.			

Pathway labor market information assists students and their families to learn more about the pathway including additional resources for further investigation.

(C:A1.1 Develop skills to locate, evaluate and interpret career information)
(C:A1.2 Learn about the variety of traditional and nontraditional occupations)

The sample ENERGY SYSTEMS Pathway definitions for high-demand occupations

Occupation Specialties	Level of Education Needed	Average Salary	Annual Average Openings in Georgia
Environmental Engineering Technician	Associate Degree	\$34,112	40
Electrical Engineer	Bachelor Degree	\$74,547	110
Environmental Engineer	Bachelor Degree	\$65,749	50
Nuclear Engineer	Bachelor Degree	\$103,272	10
Electro-Mechanical Technician	Associate Degree	\$36,629	20

ENERGY SYSTEMS PATHWAY

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

Most of the electricity produced in the United States comes from non-renewable sources such as coal, petroleum and natural gas. Related jobs include power plant operators, power distributors and dispatchers, industrial machinery mechanics, reactor operators and engineers.

Renewable power generation, from sources such as wind, water, solar and biomass, are becoming more common. Research and development in this area is ongoing, but the job opportunities in renewable energy will increase through 2014.

Employment opportunities in the entire energy industry should be excellent through 2014. Jobs in the energy field require varying levels of education, from work experience to college and advanced degrees.

For more information, visit the following websites:
www.careerpages.gov
www.electrifyingcareers.com
www.GACollege411.org
www.dol.state.ga.us

Go to GACollege411 at www.GACollege411.org for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, loans, FAFSA and CSS forms).

Current GEORGIA Graduation Rule for student entering the 9 th grade in fall of 2008-2009 Areas of Study:	Credits	Postsecondary Programs of Study Technical College	Postsecondary Programs of Study University of Georgia System
I. English/Language Arts	4	<p>The following links will list Department of Technical and Adult Education institutions offering programs in Energy Systems. Each technical college varies in the specific degrees (AAS) and diplomas offered. Search the drop-down boxes for a specific program OR school in the following areas:</p> <ul style="list-style-type: none"> *Electrical/Electronics *Electromechanical Engineering *Environmental Engineering Technology <p>Associate Degree and Diploma Programs</p> <p>Certificate Programs (short training programs from one to four quarters in preparation for employment)</p>	<p>The following link will list Board of Regents institutions offering degrees in Energy Systems. In the first box titled "Major," type "Electrical Engineering," "Renewable Resources," or "Environmental Engineering." Then click the button at the bottom "View Matching Campuses" for a list. It will not be necessary to fill in all the other boxes. Further research will be required for specific programs of study that align with the pathway.</p> <p>http://www.gacollege411.org/Select/MatchAsst/default.asp</p>
II. Math	4		
III. *Science	4		
IV. Social Studies	3		
V. **Career, Technical and Agricultural Education (CTAE), and/or Modern Language/Latin, and/or Fine Arts	3		
VI. Health & Physical Education	1		
VII. Electives (4 units)	4		
TOTAL UNITS	23		
<p>* 4th Science may be used to meet both the required science and required elective in CTAE sequence of courses (V) **Student <u>must</u> complete 3 units in a pathway to complete CTAE pathway and take end of pathway assessment. Student <u>must</u> complete 2 years of the same Modern Language/Latin for admission to Georgia Board of Regents colleges/universities.</p>			

The sample ENERGY SYSTEMS PATHWAY occupations listed below meet two out of three of GDOE definitions for high-demand, high-wage and high-skilled. www.occsupplydemand.org

Occupation Specialties	Level of Education Needed	Average Salary	Annual Average Openings in Georgia
Environmental Engineering Technician	Associate Degree	\$34,112	40
Electrical Engineer	Bachelor Degree	\$74,547	110
Environmental Engineer	Bachelor Degree	\$65,749	50
Nuclear Engineer	Bachelor Degree	\$103,272	10
Electro-Mechanical Technician	Associate Degree	\$36,629	20

ENERGY SYSTEMS PATHWAY

This block represents the possible occupational opportunities in the pathway that meet two out of three of the GDOE definitions for high-demand, high-wage and high-skilled; reference is made to the *Occupational Supply and Demand* web site for further investigation at

www.occsupplydemand.org

(C:A1.2 Learn about the variety of traditional and nontraditional occupations)

www.electrifyingcareers.com
www.GACollege411.org
www.dol.state.ga.us

GCollege411

Career Matching Assistant

<http://www.gcollege411.org/Career/CareerMatch/default.asp>

The screenshot shows the GCollege411 website's Career Matching Assistant interface. At the top left is the logo "GCollege411" with a graduation cap icon and the tagline "Helping Students Plan, Apply, and Pay for College". To the right is a search bar with a "go" button and a "Tell a Friend" link. Below the logo is a horizontal navigation bar with buttons for "Career Info", "Student Planner", "GA Colleges", "Applications & Transcripts", "Paying for College", "Path2College Savings Plan", and "Adult Learner". On the left side, there is a vertical navigation menu with options like "Create an Account", "Log On", "My 411", "Introduction to Career Info", "Career Key", "Student-Career Matching Assistant", "Career Change", "List of Careers", "Fastest Growing Careers", and "Ask an Expert". The main content area is titled "Student-Career" and contains a form with the following fields: "Planned education level:" with a dropdown menu, "Interest area:" with a dropdown menu showing a list of 15 categories (e.g., Agriculture, Food and Natural Resources; Architecture and Construction; Arts, Audio-Video 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; Manufacturing; Marketing, Sales and Service; Science, Technology, Engineering and Mathematics; Transportation, Distribution and Logistics), "Interest 1:", "Interest 2:", "Interest 3:", and "Industry focus:" with a dropdown menu. At the bottom of the form is a "View Matching Careers" button.

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School Improvement

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Standards, Instruction and Assessment

Overseeing the development and implementation of the state curriculum.

CONTACT INFORMATION



Martha Reichrath, Ph.D.
Deputy State
Superintendent for
Standards, Instruction, and
Assessment

1766 Twin Towers East
205 Jesse Hill Jr. Drive SE
Atlanta, GA 30334

(404) 656-2804
(404) 651-8507

Office of Standards, Instruction and Assessment

Divisions

Accountability

The Accountability team serves to improve communication between all Georgia public schools and other stakeholders regarding the federal and state education accountability initiatives. They also publish the Adequate Yearly Progress (AYP) reports for all public school districts and schools as required by the No Child Left Behind Act of 2001.

Career, Technical and Agricultural Education

Career, Technical and Agricultural Education works to ensure that all students will be prepared for success in future learning, careers, and life.

Curriculum & Instructional Services

Curriculum and Instructional Services improve student achievement in Georgia by providing a

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CONTACT INFORMATION



Vivian Snyder
Program Specialist,
Career, Technical and
Agricultural Education

1752 Twin Towers East
205 Jesse Hill Jr. Drive SE
Atlanta, GA 30334

☎ (404) 657-8331

☎ (404) 651-8984

✉ vsnyder@doe.k12.ga.us

Career Development

Vision

The Georgia Department of Education's Career Development Initiative will provide the necessary tools, knowledge, and resources for systematic, developmental, and comprehensive career planning for all students in grades K-12.

- [Education and Career Planning Tools New Rule](#)
- [Education and Career Planning Tools Old Rule](#)

Career development is a vital part of one's educational career and is a school wide initiative. Individuals define and re-define career-related choices and outcomes in a life-long process. In general labor trends indicate that many workers will change jobs an average of 7-10 times in their career, will work in teams, and will need more education and training to be competitive in their selected field. Therefore, this process will be used repeatedly in one's work career. Educators in Georgia are responsible for providing the tools, knowledge and resources that young people along with their parents need to make these critical education and career-related decisions.

The Georgia Department of Education's (GaDOE) career development initiative has selected as its framework the National Career Development Guidelines (NCDG) www.acrnetwork.org. The framework identifies three major domains aligned with goals and indicators to represent the knowledge, skills and attitudes people need to be successful in the world of work. Each indicator is presented in

PEACHSTATE PATHWAYS

- ✦ [Agriscience Career Planning Tool New Rule](#)
- ✦ [Agriscience Career Planning Tool Old Rule](#)
- ✦ [Computing Career Planning Tool New Rule](#)
- ✦ [Computing Career Planning Tool Old Rule](#)
- ✦ [Engineering Career Planning Tool New Rule](#)

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FILES & PRESENTATIONS

- ✦ [Education and Career Planning Tool Guidance](#)
- ✦ [Peach State Pathway Planning Tool presentation](#)
- ✦ [Teacher As Advisor streaming video](#)
- ✦ [Peach State Pathways and Education and Career Planning Labor Market Resources](#)
- ✦ [CRE Status in Georgia](#)

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CONTACT INFORMATION



James Woodard
 Director, Career, Technical &
 Agricultural Education

1752 Twin Towers East
 205 Jesse Hill Jr. Drive SE
 Atlanta, GA 30334

☎ (404) 657-8304

☎ (404) 651-8984

✉ jwoodard@doe.k12.ga.us

Peach State Pathways: Education and Career Planning Tools New Rule

Old Rule

This page is available for students, parents, teachers, counselors, coaches and administrators advising first-time ninth grade students in Fall 2008 and will follow the New Georgia High School Graduation Rule ([IHF-6](#)). The creation and implementation of career pathways is a national trend in Career, Technical and Agriculture Education (CTAE). The concept has its roots in the over-all education and career planning process involving ALL students. Instructors, counselors and administrators will become familiar with the Education and Career Planning Tools (programs of study) in an effort to maximize opportunities for students to be better prepared for their next step in the education and career planning process—the workforce or postsecondary education.



Agriculture

Agribusiness Management Pathway	Agriscience Pathway	Agricultural Mechanics Pathway	Animal Science Pathway
Forestry/Natural Resources Pathway	Plant Science/Horticulture Pathway	Veterinary Science Pathway	

Architecture, Construction, Communications and Transportation

Aircraft Support Pathway	Broadcasting / Video Production Pathway	Construction Pathway	Engineering Drawing and Design Pathway	Flight Operations
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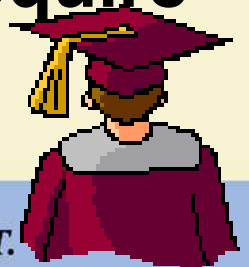
2

On the other half of your chart, list resources and/or materials you might use to convey this information to students and parents.

Peach State Pathways: Education and Career Planning

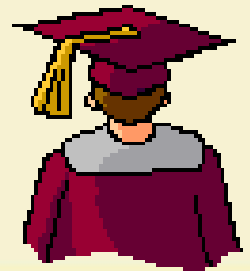
Tool possible outcomes when used effectively...

- improve student attainment of essential competencies to maximize career development
- improve student achievement
- develop a highly skilled and educated workforce which contributes to economic prosperity for the individual and the work force needs of the region/state/nation/world
- increase the number of students entering into post-secondary education who do not require remedial studies



Peach State Pathways: Education and Career Planning Tool possible outcomes when used effectively continued...

- **increase the integration of career-appropriate, academic skills and technical knowledge/skills that will ensure purposeful learning**
- **increase the number of students who graduate from high school in 4 years**
- **assist with the implementation of a comprehensive, systematic, K-16 career planning process**
- **implement a single, rigorous diploma**



***To customize the tool, the following elements
should be incorporated:***

- **secondary and postsecondary (TCSG & BOR) elements**
 - **coherent rigorous sequence of pathway courses**
 - **pathway information and additional resources**
 - **pathway postsecondary related programs of study**
- (TCSG and BOR)**
- **all academic (Language Arts, Math, Science, Social Studies) options including AP and IB if available in your system/school**

To customize the tool, the following elements may be incorporated:

- CTSO logo
- Sample high-demand, high-skill and high-wage pathway occupations
- Career-related activities (work-based learning)
- Postsecondary credit opportunities (AP, Dual Enrollment, Articulation)
- Postsecondary options
- Graduation Rule (old rule for students enrolling 2002-2003 and new rule for students enrolling 2008-2009)

To utilize the tool...



- A delivery document, when coupled with career-related information and activities, for education and career advisement in a 6-12 teacher-as-advisor program (www.Georgiastandards.org)
- A visual transitional tool as the baton is passed from the middle to high school. The document presents numerous opportunities for conversation at the 8th grade between advisor/counselor/graduation coach/student/family
- Registration document for CTAE teachers to market programs
- A part of course catalogs or student career-planner booklets

To utilize the tool continued...

- An informational bulletin board per pathway when coupled with additional pathway information at the middle and high school
- An instructional tool in related pathway coursework
- A career guidance tool for graduation coaches; and/or, a tool for professional school counselors during individual career counseling or group guidance
- An addition to the system/school web site



Transition...defined as

“a process during which institutional and social factors influence which students’ educational careers are positively or negatively affected by this movement between organizations”

Schiller (1999, pp. 216-217, “Effects of feeder patterns on students’ transition to high school”.
Sociology of Education)

Educators concerns with academic, personal/social and career development...

- **Work in a team of three or four**
- **Each team should write on the sticky note knowledge and skills (exclude content skills and knowledge) that an 8th grade student should know and have prior to requesting courses at the 9th grade**
- **Place these sticky notes on the appropriate chart paper: Academic, Personal/Social, and Career**
- **The person wearing the most red should be the recorder.**
- **The person wearing the most blue should be the reporter.**

Rationale

School Improvement has identified effective transition as a best practice to increase graduation rate!

- More students fail the 9th grade than any other grade level.
What is your 9th grade retention rate?
- Georgia has one of the highest drop-out rates in the nation.
What is your drop-out rate?
- Adolescence is a confusing time for students due to the many emotional and physical changes that occur at this age.
- Transition has always been important to middle school educators; however, it is obvious better and/or more effective processes are needed.
- 8th grade in middle school is NOTHING like 9th grade in high school.

- The issue has been recognized by the National Association of Secondary School Principals (NASSP), the National Middle School Association (NMSA), and the Carnegie Council on Adolescent Development who have acknowledged the need for educators to address the gap.
- Transition is a predictor of future success in the 9th grade. (Morgan and Hertzog, 1997) **Do middle schools keep this data to determine the impact of their efforts?**
- Middle school students and their parents/guardians need more information about high school and careers so they can make more informed decisions about the classes they choose at the high school level. **Do enrolling 9th graders have a career goal based on the NEW graduation rule?**

WHEN...

Transition to high school is a systematic*, developmental* PROCESS that starts in the spring of 6th grade then moves to the 7th, to the 8th, to the 9th.

*Systematic = a planned PROCESS, not an EVENT!

*Developmental = grade level specific

Effective programs include:

- Building a sense of community between the two levels. **How?**
- Responding to the needs and concerns of students, parents/guardians and staff. **How?**
- Providing appropriate, developmental strategies to facilitate the transition process no later than the 8th grade (NOT in the 9th grade). **How?**

Provide parents and students with information about the high school...

- **Small-group sessions with high school counselors at the middle school**
- **High school teachers trade places with 8th grade teachers for one day**
- **Develop pen pal program between 8th and 9th grade students through Language Arts classes**
- **Summer “bridge” program for 8th graders**
- **Web site devoted to providing information to incoming students; a three-ring notebook about high school for each 8th grader**
- **Strong teacher-as-advisor program or mentoring program beginning in the 6th grade**

- Develop opportunities for students and parents to receive information regarding high school programs and procedures: web site, parent workshops, newsletters, emails, brochures, career fairs, teacher-as-advisor activities; senior led seminars for 8th graders; peer mentoring for freshmen
- Student Survival Guide developed by 9th graders for incoming freshmen
- Freshmen start classes a day earlier than other students to get to know the faculty and the logistics of the school day
- Create a transitional portfolio to include Self-Awareness, Exploration and Planning
- High School 101 classes

Provide opportunities for peer interaction and social support...

- **Passes or invitations to social/athletic events at the high school (supervised)**
- **High school tours conducted by current 9th grade students**
- **New comers festival a few weeks before school starts**
- **Assigning “buddies” to incoming 9th grade classes**
- **Separating lunch schedule by grade level to decrease interaction with older students**
- **Small group sessions with counselors about personal/social issues**
- **Strong teacher-as-advisor program or mentoring program to focus on personal/social issues, academic issues, and career development**
- **A summer “bridge” program regarding “going to high school” or “everything you wanted to know about high school”**
- **Provide peer tutoring/peer mentoring using high school students as mentors or tutors**

Provide opportunities for parent involvement...

- **Actively seek parent volunteers at both levels**
- **Develop a 9th grade newsletter that parents begin to receive when their child is in the second semester of the 8th grade**
- **Frequent communication with parents/guardians**
- **Spring conference at the end of the 8th grade year to determine high school classes (Peach State Pathway: Program of Study http://www.gadoe.org/ci_cta.aspx?PageReq=CICTAPlanningNew)**
- **Parent workshops regarding high school programs, career development, high school procedures, athletic eligibility, high school curriculum, extracurricular activities, college admission criteria**
- **Freshmen Orientation; discussion session with panel of high school students**
- **Create a parent brochure from the surveys on “Moving to High School” to help relieve parent anxieties**

**Provide opportunities for communication
between middle and high school teachers and
support staff...**

- **Create a transition team of teachers, counselors, parents and students from the middle and high school that meets regularly to identify issues and propose transition activities and improvements based on annual evaluations**
- **Teachers trade spaces-8th to 9th, 9th to 8th**
- **Teacher shadowing**
- **Annual joint faculty meeting to identify common concerns and opportunities**
- **Vertical teaming and vertical alignment of curriculum**
- **Professional development on the development of young adolescents to high school teachers**

- **Establish a transition protocol that can be easily replicated and updated annually with little effort.**
- **Establish a timeline (6th-8th grade) for the transition process---light in the 6th and 7th then heavy at the 8th grade; however, keep it developmental and be sure students and parents understand the term “transition” ALWAYS make reference to “going to high school” or the “Class of XXXX”.**
- **Schedule meetings between collaborative groups from sending and receiving schools and discussions for adults and students about the issues (vertical teaming; vertical curriculum alignment especially 8th grade)**
- **Assess the human and financial resources available to support the transition process.**

Suggested guidelines for establishing a program:

- Create a transition team with representatives from sending and receiving school (students, parents, instructors). **In your team, list 10 people (5 from each level) who could serve as team members. Write the email to invite these people to participate.**
- Create a survey for 6th and 7th grade students and parents to determine their concerns about the transition from middle school to high school. **In your team, discuss the types of questions that might appear on the survey. List 5 possible questions. Determine how students and parents would receive the survey. (This may confirm your own issues and concerns)**

- **Create activities that will involve students, parents, and staff from both schools in the transition process. In your team, think of 2 activities at the 6th and 7th grade and 4 activities at the 8th grade and 1 activity at the 9th grade that would involve students, parents, and staff from both schools in the process.**

Resources/Information

- Georgia DOE web site www.doe.k12.ga.us at:
 - Career Development
http://www.gadoe.org/ci_cta.aspx?PageReq=CICTACareer
- Phase I, II and III state-developed pathways are posted as PDFs; and, word documents are posted for local systems to customize. Blank templates are also located at this web site for systems to customize. Phase III will be posted in February, 2009. Phase IV will be posted when completed.
- For more information contact Vivian Snyder at vsnyder@doe.k12.ga.us



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CONTACT INFORMATION



James Woodard
 Director, Career, Technical & Agricultural Education
 1752 Twin Towers East
 205 Jesse Hill Jr. Drive SE
 Atlanta, GA 30334
 ☎ (404) 657-8304
 📠 (404) 651-8984
 ✉ jwoodard@doe.k12.ga.us

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VISION

"To create a secondary profile of career readiness for Georgia."

Career, Technical and Agricultural Education Standards

[Performance Standards](#)

Carl D. Perkins Career and Technical Improvement Act

[Public Review](#)

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Development and Transition

- [Career Development](#)
- [Educational Career Partnerships](#)
- [Career Related Education](#)
- [Career Related Education Manual \(Work-Based Learning\)](#)
- [High School Performance Standards](#)
- [High Schools That Work](#)
- [Industry Certification Standards](#)
- [JROTC & NDCC](#)
- [Middle School Performance Standards](#)
- [Youth Apprenticeship Program](#)

NEWSLETTERS

- ◆ [January 2008](#)
- ◆ [November 2007](#)
- ◆ [October 2007](#)
- ◆ [August 2007](#)
- ◆ [June 2007](#)

» [More](#)

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- ◆ [Perkins IV Public Hearing Presentation](#)
- ◆ [2007 Fall Region Updates](#)
- ◆ [CTSO and ECP Illuminate PowerPoint](#)
- ◆ [2007 GAEL](#)
- ◆ [Counselor Spring Region Meetings - "What's New in CTAE"](#)

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- ◆ [CTAE System Contact List](#)
- ◆ [Youth Apprenticeship Directory by Region Fall 2007](#)
- ◆ [Youth Apprenticeship Advisory Council Members 2007-2008](#)

Career Development...the foundation

- Programs of Study templates for Phase IV pathways posted upon Board approval. Remember these are templates and can be customized by the LEA. Other pathway resources are being posted as they are developed. For more information go to http://www.gadoe.org/ci_cta.aspx?PageReq=CICTACareer

Peach State Pathways: Program of Study
Healthcare Science



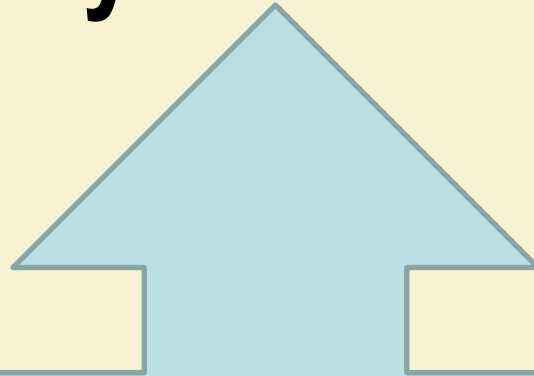
Learner Name _____ Date _____
 Learner Signature _____ Advisor/Counselor Signature _____
 Parent/Guardian Signature _____

This plan of study should serve as a guide, along with other career planning materials, as you continue your education. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. All plans will meet minimum high school graduation requirements as well as minimum college entrance requirements.

High School Education and Career Plan Graduation Rules for 9th grade enrolling 2008-2009	I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)	V. Required Electives (3 units) and Other Electives (4 units) CTAE and/or Modern Language/Latin and/or Fine Arts	VI. Health & Physical Edu. (1 unit)
	English 9 English 10 English 11 English 12 AP Lit and Comp AP Lang and Comp IB English SL (with Lit) IB English HL (World Lit)	Math 1 Math 2 Math 3 Math 4 OR Accelerated Math 1 Accelerated Math 2 Accelerated Math 3	Biology Physical Science OR Physics Chemistry OR Environmental Science OR Earth Systems OR an AP/IB course	AP/IB course AP Biology AP Physics AP Chemistry IB Biology SL IB Math Studies SL IB Math HL IB Chemistry SL/HL	AP World History AP US History AP Government AP Microeconomics AP Macroeconomics IB Economics SL IB History of the Americas (SL)	Career Pathway Sequence of Courses: 25.52100 Introduction to Health Science 26.62200 Application to Therapeutic Services 25.56100 Nursing Essentials CAREER PATHWAY RELATED COURSES: 25.59100 Application of Medical Terminology in Healthcare Science 20.41610 Nutrition and Wellness Modern Language/Latin 2 units required for admission to Georgia University System Colleges/Universities For a listing of Modern Language/Latin courses offered at your high school, please check with your advisor, counselor or curriculum handbook. FINE ARTS Visual Arts Performing Arts Dramatic Arts For a listing of Fine Arts courses offered at your high school, please check with your advisor, counselor or curriculum handbook. Other Electives For a listing of other elective courses offered at your high school, please check with your advisor, counselor or curriculum handbook.
Sample Additional English Courses: Literary Types/Composition Oral/Written Communication	Sample Additional Math Courses: TBA	Sample Additional Science Courses: Microbiology Human Anatomy & Physiology Environmental Science AP Environmental Sci Aviation/Meteorology Astrophysics	Sample Additional Social Studies Courses: Current Issues The Humanities Technology and Society Psychology Sociology AP Macroeconomics AP Microeconomics	Sample Additional Health & PE Courses: Team Sports Rec Games Aerobics		
Career-Related Education Activities: <ul style="list-style-type: none"> □ Career Awareness □ Career Exploration □ Instructional Related □ Connecting □ Work-Based Learning <ul style="list-style-type: none"> • Employability Skill Dev. • Cooperative Education Internship • Youth Apprenticeship □ CLUBS 	Postsecondary Options: <ul style="list-style-type: none"> • 4-Year Universities/Colleges • 2-Year Colleges • Technical Colleges • State Registered Apprenticeships • Social Purpose Schools • On-line Learning • Military 		Possible postsecondary credit opportunities may include: <ul style="list-style-type: none"> • *Advanced Placement • *Accredited Credit/Technical Colleges • *Dual Enrollment/ACCEL (Degree Programs) • *Dual Enrollment/HPE (Certificate and Diplomas) • *Joint Enrollment (postsecondary credit only) 			

*Postsecondary credit opportunities with high school students to earn both college and high school credit simultaneously, while in high school. Check with your counselor and Education and Career Partnership program manager for more information regarding these opportunities and others, such as Early College, which serves both middle and high school students.

What's your attitude...



- Participants-all who are wearing black shoes (optional for large groups)
- A + (plus) means you agree and – (minus) means you disagree---located on each side of the room
- You will be given a situation
- Respond to the side that best represents your attitude

Take a Stand...

- Female airline pilot
- Young males as babysitters
- Men as kindergarten teachers
- Women as soldiers at war
- Males crying
- A woman as President of the US
- Young males playing with dolls
- Mr. Moms
- Women preachers
- Female as construction workers
- Female chefs

I. Carl Perkins Act IV

Funds shall be appropriated for services that prepare individuals for nontraditional fields of employment

- Purchased two resources: “Taking the Road Less Traveled” tool kit and “Destination Success” CD-Each high school received a tool kit and CD. Each middle school received a CD. All high schools will receive an up-dated version of “Taking the Road Less Traveled” in the summer at GACTE.
- State membership in the National Alliance for Partnerships in Equity (NAPE)
- National training for selected schools---April 23, 2009 re-delivery of training via Elluminate for all CTAE Directors

Career, Technical and Agricultural Local Plan (Grant Application)

- **Core Indicator 6S1: Participation in career and technical programs leading to nontraditional employment**
 - Addressed during local program reviews
 - Addressed during Office for Civil Rights Compliance Reviews

(Disproportionate enrollment-usually a counseling issue; however, instructors should be working with counselors to identify “problems” and develop strategies to overcome the issues; will become more important to funding formula)

Career, Technical and Agricultural Local Plan (Grant Application)

- **Core Indicator 6S2: Completion of career and technical programs leading to nontraditional employment**

Addressed only in the data but will become more important to the funding formula in the future.

II. Title IX (1972); Title VI (1964); Section 504

- Federal law to prohibit gender discrimination in education—regulations require that schools take steps to ensure that disproportionate enrollment of students of one gender in a course is not the result of discrimination
- Federal law prohibits discrimination on the basis of race, color, and national origin in any program or activity receiving federal financial assistance
- Section 504 prohibits discrimination on the basis of handicap in any program or activity receiving federal financial assistance

Addressed in Civil Rights Compliance Reviews:

- Annual notice of discrimination includes all protected groups including gender (sex)
- Continuous nondiscrimination notice includes all protected groups including gender (sex)
- Student course selection should be based on future career goals not gender (attitudes; language; all courses available to ALL students; admissions criteria the same for ALL students)
- Counseling materials and activities and promotional and recruitment efforts do not discriminate on the basis of race, color, national origin, sex or disability
- Counselors must not direct or urge any student to enroll, or measure or predict a student's

CTAE Monitoring/Accountability Process

- **5-year Program Review**
- **Office for Civil Rights Compliance Review**

Lessons learned from the federal audit, OCR Compliance Reviews and PROGRAM Reviews:

- Local grant application should contain descriptions of strategies to address nontraditional training and employment with implementation timeline and responsibilities
- Materials, tools and resources are not evaluated for equity on an annual basis
- Formal procedures do not exist for class selections; students select classes based on little or no information and no personal assessment
- Most systems/high schools do not analyze the data to determine disproportionate enrollment

Reality Check

Educators must make certain that young people get the message that career choices are a function of talent, interest and personal desires based on good current career information NOT gender.

Barriers...

- **Students' lack of awareness about nontraditional CTAE opportunities**
- **Peer pressure to avoid nontraditional CTAE classes**
- **Cultural pressure to avoid nontraditional CTAE classes**
- **Sex discrimination and internalization of sex-stereotyping**
 - Sexual harassment by peers or instructors, allowing males to monopolize equipment or instructor attention, steering females to traditionally females courses, perception that females do not have aptitude in math and science, males are not nurturing.

Techniques, tools and materials ...

- **Students are connected with role models and mentors either via the internet or in person.**
 - Identify workers in your community in nontraditional occupations.
 - Invite those persons to participate in career fairs and/or visit your classroom.
 - Consult DESTINATION SUCCESS for sample NTO career fair tools and materials.

Techniques, tools and materials...

- **Counselors/advisors talk to students about nontraditional courses including current career and salary information.**
 - Create a bulletin board to focus on NTO occupations using current career and salary information
 - Create a classroom guidance presentation on NTO for 9th grade Language Arts students
 - Create teacher-as-advisor activities to make students aware of NTO and how to overcome barriers such as sexual harassment (see DESTINATION SUCCESS)
 - Align guidance services with middle school program to ensure that middle school students are aware of all their occupational options.

Techniques, tools and materials...

- Use of non-stereotypical photographs, clip art, language and video

- course and recruitment materials are annually evaluated
- use non-discriminating materials in the labs and classrooms
- DESTINATION SUCCESS has teacher tips for non-stereotypical language



Techniques, tools and materials...

- **Program to proactively market and advertise nontraditional courses**
 - Attend middle school career fair to market CTAE pathways
 - Make presentation to students and parents at the middle school for up-coming 8th graders (All middle schools received *DESTINATION SUCCESS*; high school CTAE pathways should be recruiting at the middle school)
 - Create concentrations/pathway brochures

Techniques, tools and materials...

- **Students participate in hands-on projects to learn about nontraditional training and to apply skills--
Send the message “YOU CAN!”**
 - Summer bridge program for males and females (invite 8th, 9th and 10 graders)
 - Invite students to visit nontraditional classrooms and bring a friend; bring your girlfriend or boyfriend.

Techniques, tools and materials...

- **Collect and analyze data to define the issue and measure the outcomes of your efforts**
 - Keep accurate annual records of students enrolled in NTO
 - Keep accurate annual records of students completing NTO programs

Techniques, tools and materials...

- Institution commits itself to gender equity and non-discrimination by providing frequent and regular training for students and staff- **DESTINATION SUCCESS** teacher tips and **TAKING THE ROAD LESS TRAVELED** are resources that can be used to make a faculty aware, recruit and retain students.

Materials....

- **Middle School-- DESTINATION SUCCESS**
- **H.S. DESTINATION SUCCESS**
- **HS TAKING THE ROAD LESS TRAVELED**
- **Resource list and power points**

An Educator's Tool Kit

Each kit includes a series of four workbooks (included on the CD-ROM) with various tools and information.

- Raising Awareness
- Increasing/developing Recruitment
- Improving Retention
- Working with Employers

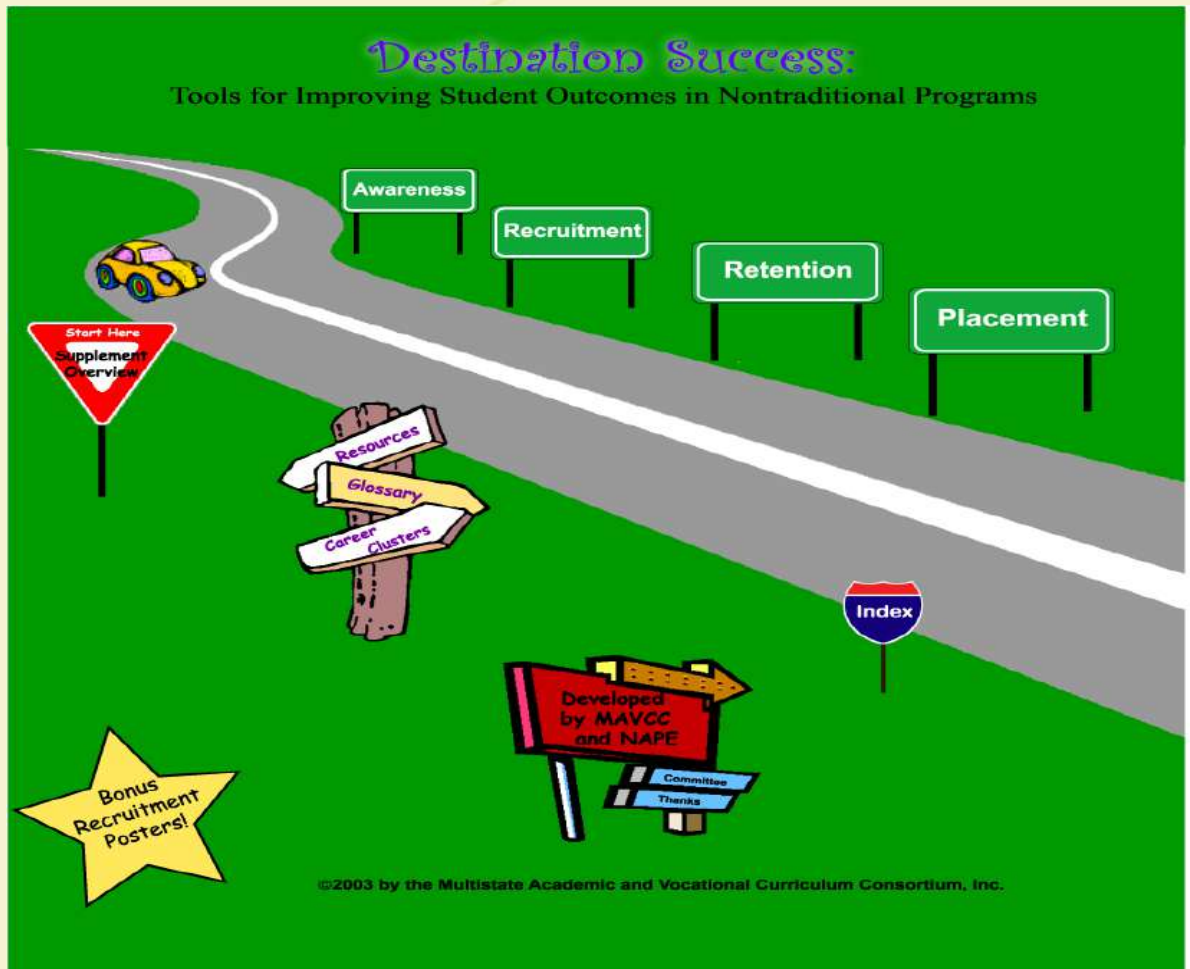
Taking the Road Less Traveled



Educator's Tool Kit
to Prepare Students for
Nontraditional Careers

[Click to Start](#)

MAVCC



This introductory window also serves as a menu for the four areas (Awareness, Recruitment, etc.). Each picture links to various resources and information.

WE WILL LEAD THE NATION IN IMPROVING STUDENT ACHIEVEMENT.



Student Career Survey

Grades 9-11/12

Completion of this survey is voluntary. There are no penalties for not completing it.

School Name _____

Directions: We would like to know what you think about careers and work. Please react to the following statements by circling the number that best describes how you feel about each statement.

Definitions: Nontraditional careers are those that were not selected by one sex or the other in the past. For example, a nontraditional career for a woman would be an electrician or mechanic. A nontraditional career for a man would be a nurse or secretary.

School Section	Agree	Uncare	Disagree
1. I have been encouraged to enroll in vocational courses based on my abilities and interests	3	2	1
2. Women and men in nontraditional careers have come to talk about their jobs to students in our school	3	2	1
3. I know someone who is in a nontraditional career	3	2	1
4. Teachers generally treat male and female students the same	3	2	1
5. Teachers actively encourage me to consider a wide range of career choices, including those that are nontraditional	3	2	1
6. In our school, there are support groups for students enrolled in nontraditional classes	3	2	1
7. Teachers expect the same achievement from males and females	3	2	1
8. Teachers point out examples of stereotyping in textbooks and other materials	3	2	1
9. My counselor suggests choices I need for my career choice	3	2	1

Here is an example of a student survey geared toward 9-11th grade students. It could be used “as is” or adapted to specific issues of that student population.

QUESTIONS and COMMENTS

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3

Homework:

- Using either your ASCA Standards or TAA Framework, align the pieces of information and assigned activities to your standards. Then begin to create a matrix of activities you can complete to address those standards to include the responsibilities of the Graduation Coach. If you see a standard, you have not covered and you believe it is important, include it.
- TIP: This is better done as a system with all levels of education (E, MS, HS) represented

Coming soon...

- **A new and enhanced GACollege411 with enhanced career planning tools to include more career assessments and an electronic portfolio (College Access Challenge Grant).**
- **Proposed Counselor Professional Learning (2 PLUs) FY 10**
 - ❖ Face-to-face meeting (N, S, C) 6 hours
 - ❖ Series of Elluminates 5 hours
 - ❖ Best Practices (ETC) 4 hours
 - ❖ Planning 5 hours
- **Proposed Teachers-as-Advisor Professional Learning (1 PLU) FY 10**
 - ❖ Face-to-face meeting (N, S) 6 hours
 - ❖ Series of Elluminates 2 hours
 - ❖ Best Practices (ETC) 4 hours

Current supporting resources, materials, and tools:

- Supporting documents at http://www.gadoe.org/ci_cta.aspx?PageReq=CICTACareer in the box labeled “Georgia Connections”
 - One-page document per Program Concentration
 - Holland Code alignment for each pathway
 - Peach State Pathways Occupational Charts
 - New and Emerging Industries aligned with concentrations/pathways

**Continue to check the web site for additional planning documents
as they are created.**

What Do You Like?

www.bls.gov/k12/index/htm

Exploring Career Information from the Bureau of Labor Statistics -- 2008-09 Edition

What Do You Like?



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Career Voyages

www.careervoyages.gov

high growth industries

- Advanced Manufacturing
- Aerospace
- Automotive
- Construction
- Education
- Energy
- Health Care
- Homeland Security
- Hospitality
- Information Technology
- Retail
- Transportation

emerging industries

- Biotechnology
- Geospatial Technology

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Start here to see just what a new future may hold!

career advisors
Start here to help them map out a plan!

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Questions and Comments

Please complete the evaluation form to assist us in the future to offer meaningful professional learning. Complete your assignment and the evaluation form.