



Peach State Pathways: Program of Study

Business & Computer 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.

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.

High School Education and Career Pathways Graduation Rules for 9th grade enrolling 2008-2010	I. English Language Arts (4 units)	II. Mathematics (4 units)	III. Science (4 units)	IV. Social Studies (3 units)	V. Required Electives (3 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 (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)	Career Pathway Sequence of Courses: 11.41400 Information Technology Essentials (BCS-ITE) 11.42000 Information Technology Support (BCS-ITS) 11.42200 Networking Systems (BCS-NTS) CAREER PATHWAY RELATED COURSES: 06.41700 Entrepreneurial Ventures (BCS – EV) 07.44100 Computer Applications 1 (BCS-CA1)	Health & Personal Fitness
	Sample Additional English Courses: Literary Types/Composition Oral/Written Communication	Sample Additional Math Courses: TBA	Sample Additional Science Courses: Microbiology Environmental Science AP Environmental Sci Aviation Meteorology Astrophysics	Sample Additional Social Studies Courses: Current Issues The Humanities Technology and Society Psychology Sociology	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 consult your advisor, counselor, or curriculum handbook.	
					Fine Arts Visual Arts Performing Arts For a listing of Fine Arts courses offered at your high school, please consult your advisor, counselor or curriculum handbook.	
				VII. Other Electives (4 units) For a listing of other elective courses offered at your high school, please consult your advisor, counselor, or curriculum handbook.		
Career Enhancement Opportunities	Career-Related Education Activities <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 • Clinicals 		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 		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>	

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	Select the following link for a list of Technical College System of Georgia (TCSG) institutions offering programs in Computer Networking . Each technical college varies in the specific degrees (AAS), diplomas, and certificates offered. https://kms.dtae.org/portal/tcsg/TCSGProgramOfferings.aspx Step 1: Use the drop-down box to select the term you plan to enter a TCSG institution; Step 2: From the Specific Program drop-down box select CISCO Networking, Computer Information Systems, Computer Networking & Service Technology, Computer Operations, or Networking Specialist. You can then view a list of TCSG institutions that offer this program as well as the specific campus and awards offered.	The following link will list Board of Regents institutions offering degrees in Computer Science . In the first box titled "Major," type in "Computer Science." 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. http://www.gacollege411.org/Select/MatchAst/default.asp
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		
* 4 th 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.			

The sample **COMPUTER NETWORKING 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 Georgia
Network and Computer Systems Administrators	Bachelor	\$62,754	440
Network Designers	Associate	\$55,640	80
Network Systems and Data Communications Analyst	Bachelor	\$62,858	690

COMPUTER NETWORKING

Computer networking is a broad pathway including occupations such as computer programmers, system analyst and database administrators. Computer networkers install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. They maintain network hardware and software; and, they monitor the network to ensure network availability to all system users and perform necessary maintenance to support network availability. Some may supervise other network support and client server specialists and plan, coordinate, and implement network security measures. Systems administrators are responsible for maintaining network efficiency. They ensure that the design of an organization's computer system allows all of the components, including computers, the network, and software, to work properly together. Furthermore, they monitor and adjust the performance of existing networks and continually survey the current computer site to determine future network needs. Administrators also troubleshoot problems reported by users and by automated network monitoring systems and make recommendations for future system upgrades.

Training requirements for computer networking positions vary, but many employers prefer to hire applicants with some formal college education. A bachelor's degree in computer science or information systems is a prerequisite for some jobs; other jobs, however, may require only a computer-related associate degree. For systems administrator jobs, many employers seek applicants with bachelor's degrees, although not necessarily in a computer-related field.

Employment of network and computer systems administrators is expected to increase by 27 percent from 2006 to 2016, which is much faster than the average for all occupations.

For more information:

Occupational Outlook Handbook <http://www.bls.gov/oco/ocos268.htm>
 Association for Computing Machinery (ACM), <http://www.acm.org>
 Institute of Electrical and Electronics Engineers <http://www.computer.org>
 Software & Information Industry Association <http://www.siiia.net>