## Peach State Pathways: Program of Study

## Agriculture

Learner Name

Learner 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.						
reer   2008-;	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	
ol Education and Ca Rules for <sup>®</sup> grade enrolling	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 2 Accelerated Math 3 AP Statistics Calculus AP Calculus AB AP Calculus BC IB Math Methods IB Math SL IB Math SL IB Math HL	Biology Physical Science OR Physics Chemistry OR Environmental Science OR Earth Systems OR an AP/IB course AP Biology AP Physics AP Chemistry IB Biology SL/HL IB Chemistry SL/HL IB Physics SL/HL Forensic Science	Am Gov/Civics (1/2 unit) World History US History Economics (1/2 unit) AP World History AP US History AP Government AP Microeconomics IB Economics SL IB History of the Americas (SL)	Career Pathway Sequence of Courses: 02.47100 Basic Agricultural Science and Technology (AG – BAS) 01.42100 Agricultural Mechanics I (AG-AMI) 01.42200 Agricultural Mechanics II (AG-AMII) CAREER PATHWAY RELATED COURSES: 01.42300 Agricultural Mechanics III (AG-AMIII) 01.42600 Agricultural Electricity and Electrical Controls (AG-AME) 01.42700 Agricultural Construction (AG-AGC) 01.42400 Agricultural Metal Fabrication (AG-AGF) 01.42500 Agricultural Power and Machinery (AG-AGF) 01.42500 Agricultural Power and Machinery (AG-AGP) 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 consult your advisor, counselor, or curriculum handbook.	Physical Edu (1 unit) Health & Personal Fitness Sample Additional Health & PE <u>courses:</u> Team Sports Rec Games Aerobics	
High Scho Graduation	Sample Additional English Courses: Literary Types/Composition Oral/Written Communication	Sample Additional <u>Math Courses:</u> 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	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.		



Date

## Advisor/Counselor Signature \_\_\_\_\_

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

S	EORGIA Graduation Rule for student entering the rade in fall of 2008-2009 Areas of Study:	Credits	Postsecondary Programs of Study Technical College	Postseco Programs University o Syste	of Study of Georgia	
I. Engl	lish/Language Arts	4	Select the following link for a list of Technical College System of		owing link will list Board is institutions offering	
II. Math	h	4	Georgia (TCSG) institutions offering programs in Agricultural	degrees in <u>Agricultural</u> Mechanics. In the first box titled		
III. *Sci	ence	4	Mechanics. Each technical	"Major," type "Agricu	ulture	
IV. Soci	ial Studies	3	college varies in the specific degrees (AAS), diplomas, and	Engineering," "Agric Science," or "Agricu	ing," "Agriculture " or "Agriculture." Then	
Educ and/o	areer, Technical and Agricultural cation (CTAE), /or Modern Language/Latin, /or Fine Arts	3	certificates offered. <u>https://kms.dtae.org/portal/tcsg/TC</u> <u>SGProgramOfferings.aspx</u>			
VI. Heal	Ith & Physical Education	1	Step 1: Use the drop-down box to select the term you plan to enter a	of study that align w pathway.		
	ctives (4 units)	4	TCSG institution; Step 2: From the Specific Program drop-down box select <u>Agricultural</u> Technology, Diesel Mechanics,			
TOTAL UNIT	S	23				
required elective **Student <u>must</u> pathway and tak complete 2 years	hay be used to meet both the required sci e in CTAE sequence of courses (V) complete 3 units in a pathway to complete e end of pathway assessment. Student <u>1</u> s of the same Modern Language/Latin for corgia Board of Regents colleges/universe	lete CTAE <u>must</u> for	or <u>Heavy Diesel Service</u> <u>Technician</u> . You can then view a list of TCSG institutions that offer this program as well as the specific campus and awards (degree, diploma or certificate) offered.			
Career Enhancement Opportunities	Career-Related Education A Career Awareness Career Exploration Instructional Related Connecting Work-Based Learning Employability Skill Dev. Cooperative Education Internship Youth Apprenticeship Clinicals	Activities	Postsecondary Op 4-Year Universities/Colleges 2-Year Colleges Technical Colleges State Registered Apprentice Special Purpose Schools On-the-Job Training Military	s	Possible postsec	

The sample AGRICULTURAL MECHANICS PATHWAY occupations listed below meet two out of three of GDOE definitions for high-demand, high-wage and high-skilled. <u>www.occsupplydemand.org</u>

Level of	Average	Annual Average Openings in

## AGRICULTURAL MECHANICS

Because workers in the Agricultural Mechanics pathway are responsible for the efficient operation of farm machinery, opportunities in the farm equipment industry will grow as farms merge and grow larger. Agricultural and farm equipment mechanics are responsible for the maintenance, repair, and installation of machines that increase the efficiency of farming activities, such as planting, harvesting, and irrigating crops. Agricultural mechanics also service and repair smaller lawn and garden equipment operated by suburban homeowners.

Important skills for this pathway include the ability to maintain and repair farm machines, such as large tractors or combines. Dairy equipment repairers maintain and repair milking machines and other equipment used by dairy farmers. Modern farm equipment utilizes computers, electronics, and hydraulics, which means that workers need to continually update their skills. In fact, what was once a general repairer's job has become a more specialized technical field in the farm industry. As a result, many farmers rely on farm equipment dealers to maintain and repair their machinery because the equipment is more complex than in the past. Another occupation in this pathway is agricultural engineer—someone who designs equipment and technology to meet farmer needs.

Some agricultural mechanics receive formal training in professional/technical schools and two-year colleges, where they learn the basics of diesel engines, transmissions, and hydraulics. Other mechanics learn their skills on the job, receiving training from more experienced mechanics and from training sessions conducted by heavy equipment manufacturers. Competition for workers is keen because of the scarcity of qualified people to fill agricultural mechanic positions.

For more information, visit the following websites: AED Foundation (Associated Equipment Dealers affiliate)

Occupation Specialties	Education Needed	Salary	Georgia
Agricultural Engineer	Bachelor Degree	\$57,762	0
Farm Equipment Mechanic	Postsecondary Vocational Award	\$30,618	20
Industrial Machinery Mechanic	Long-Term On-the- Job Training	\$38,522	290
Industrial Truck & Tractor	Short-Term On-the-	\$26,894	1,030
Operator	Job Training		