

# Specialized Work Ready Program of Choice

## Student Plan of Study-Ag Mechanics (LCCA) / with Welding Certifications (LT)

Draft



This full time PLAN OF STUDY should serve as a guide for the next four years. Courses listed in this plan are only recommended coursework and should be individualized to meet each student's educational and career goals. All plans will meet minimum high school graduation requirements. Applicants to the University System of Georgia should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.

Grade Level	English – 4 units (*specific course required for graduation)	Math – 4 Units (*specific course required for graduation)	Science – 4 Units (*specific course required for graduation)	Social Studies – 3 Units (*specific course required for graduation)	Industrial Electrician Certificate Program	Zero or 7th Period
9th Grade	9th Literature & Composition* Or World Literature	GSE Coord. Algebra* Or GSE Analytic Geometry*	Physical Science/Physics* Or Biology*	World History*	<b>1st Semester:</b> Basic Agricultural Science <b>2nd Semester:</b> Agricultural Mechanics 1  ~10 hrs Industry Experience per Semester	Health* & PE* (*specific course required for graduation)
10th Grade	World Literature Or American Literature/Composition*	GSE Analytic Geometry* Or GSE Adv. Algebra	Biology* Or Chemistry / Environmental Science / Forensic Science	US History*	<b>1st Semester:</b> Agricultural Mechanics 2 <b>2nd Semester:</b> DE WELD 1000 Intro. To Welding  ~20 hrs Industry Experience per Semester	
11th Grade	American Literature/Composition* Or TCR English	GSE Adv. Algebra Or TCR Math	Environmental Science / Forensic Science Or Dual Enrollment	Econ* / Gov* (High School) Or Dual Enrollment Econ or Government	<b>WBL - Youth Apprenticeship (possible 2 periods WBL)</b> Or <b>1st Semester:</b> DE WELD 1010 Oxy Fuel Cutting <b>2nd Semester:</b> DE WELD 1040	<b>DE EMPL 1000 Interpersonal Relations</b>
12th Grade	DE ENGL 1010 Or DE ENGL 1101	DE MATH 1012 Or DE Math 1111	Environmental Science Or Forensic Science		<b>WBL - Youth Apprenticeship (possible 3 periods of WBL)</b> And/Or <b>1st Semester</b> DE WELD 1090 <b>2nd Semester</b> DE WELD 1110	

Sample High Demand Careers in Georgia				
Occupation Specialties	Level of Education Needed	Georgia Average Salary	Annual Average Openings in Georgia	Employment Outlook
Welders, Cutters, & Welder Fitters	Postsecondary Certificate	\$36,175	371	High Demand, High Skill
Sheet Metal Workers	Postsecondary Certificate	\$43,460	142	High Demand, High Skill
Structural Iron & Steel Workers	High School Diploma	\$38,523	33	High Demand, High Skill

Related Pathway Occupations	Other Related Occupations
<ul style="list-style-type: none"> <li>Welders</li> <li>Cutters &amp; Welder Fitters</li> <li>Assemblers &amp; Fabricators</li> <li>Sheet Metal Workers</li> <li>Boilermakers</li> <li>Layout Workers, Metal &amp; Plastic</li> <li>Pipe Fitters &amp; Steamfitters</li> <li>Reinforcing Iron &amp; Rebar Workers</li> <li>Structural &amp; Steel Workers</li> <li>Tool &amp; Die Workers</li> </ul>	<ul style="list-style-type: none"> <li>Plumbers</li> <li>Electricians</li> <li>Machinists</li> <li>Carpenters</li> <li>Stone Masons</li> </ul>

Job Outlook Welders, Cutters, Solderers	
Total Jobs in 2016	11,380
Expected Growth	16.7% (Faster than average)
New Jobs to Be Added from 2016-2026	1,900
Median Pay	\$44,880



**FFA** is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education. FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success.

Members are future chemists, veterinarians, government officials, entrepreneurs, bankers, international business leaders, teachers and premier professionals in many career fields. FFA is an intracurricular student organization for those interested in agriculture and leadership. It is one of the three components of agricultural education.

The official name of the organization is the **National FFA Organization**. The letters "FFA" stand for Future Farmers of America. These letters are a part of our history and our heritage that will never change.



The Hall County Board of Education is an equal opportunity employer and does not discriminate on the basis of race, color, national origin, age, religion, handicapping condition, or sex in its education programs or employment.

### Agricultural Mechanics / Industrial Electrician Pathway Description

Welders and solderers use heat to permanently join pieces of metal. Because of its strength, welding is important to the manufacture of ships, automobiles, and aircraft. In addition, welders work in the construction industry, joining beams in buildings and other structures. Solderers use similar processes on electronic and other small equipment.

The outlook for welders and solderers varies by industry. Workers are required to complete extensive on-the-job-training, apprenticeships, and/or technical college programs. Employment of welders, cutters, solderers, and brazers is expected to grow 15 percent from 2010 to 2020, about as fast as the average for all occupations. This employment growth reflects the need for welders in manufacturing because of the importance of welding as part of the manufacturing process.

Welders can easily move from one industry to another because basic welding skills are the same across industries. Welders who work in the automotive manufacturing industry can find work in the oil and gas industry. Growth in the defense industry as well as the need to rebuild bridges, highways and aging building will contribute to employment growth.

Overall job prospects will vary by skill level. Job prospects should be good for welders trained in the latest technologies. Welding schools report that graduates have little difficulty finding work, but many welding employers report difficulty finding properly skilled welders. However, welders who do not have up-to-date training may face competition for jobs. For all welders, job prospects should be better for those willing to relocate.

Student Name \_\_\_\_\_ Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_ Counselor \_\_\_\_\_ Date \_\_\_\_\_