PROGRAM OF STUDY:
Plant and Landscape Systems

This Program of Study may serve as a graduation guide for the next four plus years, along with other career planning and educational materials. Courses listed in this model may include recommended coursework and should be individualized to students’ educational and career goals. Each graduation plan needs to meet minimum high school graduation requirements.

Dual Enrollment courses can be high school academic and/or career technical education courses.

### SECONDARY:

<table>
<thead>
<tr>
<th>COURSE/GRADE</th>
<th>NINTH</th>
<th>TENTH</th>
<th>ELEVENTH</th>
<th>TWELFTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>9th grade Lit/Composition</td>
<td>10th grade Lit/Composition</td>
<td>American Lit/Composition</td>
<td>World Lit/Composition / British Lit</td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>Coordinate Algebra / Algebra I</td>
<td>Analytic Geometry / Geometry</td>
<td>Advanced Algebra / Algebra II</td>
<td>Pre-calculus</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>Physical Science</td>
<td>Biology</td>
<td>Chemistry</td>
<td>Physics</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>World History</td>
<td>Psychology</td>
<td>US History</td>
<td>Government (½ unit) Economies (½ unit)</td>
</tr>
<tr>
<td>PATHWAY COMPLETER</td>
<td>Basic Agricultural Science</td>
<td>General Horticulture and Plant Science</td>
<td>Nursery and Landscape</td>
<td>Another course in focus area, Work-Based Learning, or Youth Apprenticeship</td>
</tr>
<tr>
<td>Industry Recognized Credential (Pathway Completer)</td>
<td>Visit the End of Pathway Assessment Page (see note below)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### POSTSECONDARY:

<table>
<thead>
<tr>
<th>TCC</th>
<th>DIPLOMA OR AAS</th>
<th>BACHELOR OF SCIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP21 – Horticulture Pesticide Applicator</td>
<td>Commercial Applicator Licensure is obtainable, but not required.</td>
<td>EH13 – Degree Horticulture</td>
</tr>
<tr>
<td>Find the campus for the TCC options</td>
<td>GGIA Plant Professional Exam</td>
<td>Horticulture Specializations</td>
</tr>
<tr>
<td>Find the campus for the Diploma, Degree options</td>
<td>Landscape Specialization – 24 credits</td>
<td>Floral Management Specialization – 24 credits</td>
</tr>
<tr>
<td></td>
<td>Find the campus for the TCC options</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Students have many options to ENTER and EXIT from their academic studies into the workforce. When a student graduates from high school, they are eligible to choose one of many ENTRANCE POINT options: 1. Enroll in either a 2 or 4 year post-secondary program; 2. Enroll in an apprenticeship program or the military; or 3. Enter the workforce using technical skills learned. When a student finishes a 2- or 4-year degree program, they may choose to EXIT and 1. Enroll in an apprenticeship program or the military; 2. Enroll in a professional university degree program; or 3. Enter the workforce using technical skills learned.

### Plant and Landscape Systems Career Pathway Completers - Industry Credentialing for High School Students

Upon completion of sequenced courses in the Plants and Landscape Systems Pathway, students are eligible to complete the Industry-Recognized student credential for fulfillment of the End of Pathway Assessment. Secondary students completing the Plants and Landscape Systems pathway will be able to sit for the National Industry Credentialed assessment offered on-line from NOCTI and Precision. Once mastery is reached, students will receive recognition for completion and use this credential in conjunction with their job or continuing training. For specific assessment information, refer to:

https://apps.ds.usg.edu/ords/?p=118:1:0
A career in plant and landscape systems offers a variety of job opportunities in the fields of education, research, golf and sports turf, landscape design, parks and gardens, public service, production management, and sales and marketing. Some jobs available include landscape designer, greenhouse manager, golf course superintendent, plant breeder, florist, agricultural chemical researcher, and garden center owner.

Educational requirements in this field vary by job. Two- and four-year programs are available in this area. Advanced degrees may be necessary for some research-related jobs. Those who are interested in this field should be able to carry out projects and work independently, have a commitment to quality and customer service, have an appreciation of our natural environment and have good communication skills, both written and verbal.

Employment opportunities in this field should be good, with more job openings than job seekers. Employment is expected to increase in response to the increasing demand for both products and services by commercial producers, landscape contractors, turf managers and the public. New avenues of research in biotechnology to develop plant and food crops that require less fertilizer, fewer pesticides and herbicides, and less water will also increase the demand for careers in plant science and horticulture.

### Sample In Demand Careers in Georgia

<table>
<thead>
<tr>
<th>Occupation Specialties</th>
<th>Level of Education Needed</th>
<th>Georgia Average Salary</th>
<th>Annual Average Openings in Georgia</th>
<th>2014 – 2024 Employment Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant and Soil Scientists</td>
<td>Bachelor's Degree</td>
<td>$68,900</td>
<td>10</td>
<td>High Skill</td>
</tr>
<tr>
<td>Pesticide Handlers, Applicators</td>
<td>Postsecondary Certificate</td>
<td>$32,353</td>
<td>38</td>
<td>In Demand, High Skill</td>
</tr>
<tr>
<td>Nursery and Greenhouse Managers</td>
<td>High School Diploma</td>
<td>$23,310</td>
<td>743</td>
<td>In Demand, High Skill</td>
</tr>
<tr>
<td>Environmental Science Technicians</td>
<td>Bachelor's Degree</td>
<td>$39,846</td>
<td>137</td>
<td>High Skill, In Demand</td>
</tr>
</tbody>
</table>

Go to GAfutures at [www.gafutures.org](http://www.gafutures.org) for more information about your education and career planning, including valuable financial information (grants and scholarships including HOPE Program, grants and loans, FAFSA, and CSS forms).

### Career Enhancement Opportunities

- **Career-Related Education Activities**
  - Career Awareness
  - Career Exploration
  - Instructional Related
  - Connecting
  - Work-Based Learning
  - Employability Skill Dev.
  - Cooperative Education
  - Internship
  - Youth Apprenticeship
  - Clinicals

- **Postsecondary Options:**
  - 4-Year Universities/Colleges
  - 2-Year Colleges
  - Technical Colleges
  - State Registered Apprenticeships
  - Special Purpose Schools
  - On-the-Job Training
  - Military

- **Earning Postsecondary Credits While in High School**
  - Dual Enrollment Program
  - Earn postsecondary credit while in high school
  - You can complete
    - Industry Credential
    - Technical Certificate of Credit (TCC)
    - Associates of Applied Science Degree
    - Bachelor’s Degree
  - Who can help?
    - Parents
    - School Counselor
    - Advisor

### Postsecondary Transition

- University System of Georgia Institutions: Admissions Testing
  - ACT or SAT
  - For More Information: Contact the institution of your choice OR
- Technical College System of Georgia
  - Placement Exam
- United States Military
  - ASVAB Assessment
- Use BRIDGE Law platform to inform decisions on postsecondary opportunities
- Dual Enrollment
  - Earning high school course credits while taking college courses

### Related Pathway Occupations

- Farm and Home Management Advisors
- Environmental Scientists
- Hydrologists
- Food Scientists and Technologists
- Agricultural Technicians
- Landscape Architect
- Nursery Workers
- Farm and Ranch Managers
- Agricultural Sciences Teachers

*ONET Online

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*Data link here.*