**Student Plan of Study – Forest/Renewable Energy**

Name____________________________ Date______________

Parent/Guardian Signature____________________________ Date_____________

Advisor/Counselor Signature____________________________ Date_____________

### Current Area of Interest: Agriculture, Food & Natural Resources/Forest/Renewable Energy

- This 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 and the Technical College System of Georgia institutions should be advised that meeting minimum requirements will not guarantee admission. Postsecondary institutions may set additional requirements.

### I. English/Language Arts

**Grade Level** | **9th Literature & Composition or Approved Dual Enrollment Course** | **10th Literature & Composition or Approved Dual Enrollment Course** | **11th American Literature/Composition or AP English Language & Composition/Atelier Lit or Approved Dual Enrollment Course** | **Total Credits**
---|---|---|---|---
**Total 4 credits** | 1 CCGPS Cord Algebra | 1 CCGPS Pre-Calculus | 1 CCGPS Adv Algebra | **Total 4 credits**
1 credit | 2 CCGPS Analytic Geometry | 2 CCGPS Pre-Calculus | 2 CCGPS Pre-Calculus | 1 credit
**Credit Earned [ ]** | 3 CCGPS Accel Cord Algebra | 3 CCGPS Accel Cord Algebra | 3 CCGPS Accel Cord Algebra | **Credit Earned [ ]**
| 4 CCGPS Accel Analytic Geometry | 4 CCGPS Accel Analytic Geometry | 4 CCGPS Accel Analytic Geometry | **Credit Earned [ ]**
| 1 credit | 1 credit | 1 credit | 1 credit | 1 credit *
| **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]**

### II. Math

**Grade Level** | **9th Literature & Composition or Approved Dual Enrollment Course** | **10th Literature & Composition or Approved Dual Enrollment Course** | **11th American Literature/Composition or AP English Language & Composition/Atelier Lit or Approved Dual Enrollment Course** | **Total Credits**
---|---|---|---|---
**Total 4 credits** | 1 CCGPS Cord Algebra | 1 CCGPS Pre-Calculus | 1 CCGPS Adv Algebra | **Total 4 credits**
1 credit | 2 CCGPS Analytic Geometry | 2 CCGPS Pre-Calculus | 2 CCGPS Pre-Calculus | 1 credit
**Credit Earned [ ]** | 3 CCGPS Accel Cord Algebra | 3 CCGPS Accel Cord Algebra | 3 CCGPS Accel Cord Algebra | **Credit Earned [ ]**
| 4 CCGPS Accel Analytic Geometry | 4 CCGPS Accel Analytic Geometry | 4 CCGPS Accel Analytic Geometry | **Credit Earned [ ]**
| 1 credit | 1 credit | 1 credit | 1 credit | 1 credit *
| **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]**

### III. Science

**Grade Level** | **9th Literature & Composition or Approved Dual Enrollment Course** | **10th Literature & Composition or Approved Dual Enrollment Course** | **11th American Literature/Composition or AP English Language & Composition/Atelier Lit or Approved Dual Enrollment Course** | **Total Credits**
---|---|---|---|---
**Total 3 credits** | **Total 3 credits** | **Total 3 credits** | **Total 3 credits** | **Total 4 credits**
1 credit | 1 credit | 1 credit | 1 credit | 1 credit
**Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]**

### IV. Social Studies

**Grade Level** | **9th Literature & Composition or Approved Dual Enrollment Course** | **10th Literature & Composition or Approved Dual Enrollment Course** | **11th American Literature/Composition or AP English Language & Composition/Atelier Lit or Approved Dual Enrollment Course** | **Total Credits**
---|---|---|---|---
**Total 3 credits** | **Total 3 credits** | **Total 3 credits** | **Total 4 credits**
1 credit | 1 credit | 1 credit | 1 credit
**Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]**

### V. Health/Personal Fitness

**Grade Level** | **9th Literature & Composition or Approved Dual Enrollment Course** | **10th Literature & Composition or Approved Dual Enrollment Course** | **11th American Literature/Composition or AP English Language & Composition/Atelier Lit or Approved Dual Enrollment Course** | **Total Credits**
---|---|---|---|---
**Total 1 credit** | **Total 1 credit** | **Total 1 credit** | **Total 4 credits**
1 credit | 1 credit | 1 credit | 1 credit
**Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]**

### VI. CTAE Pathway

**Grade Level** | **9th Literature & Composition or Approved Dual Enrollment Course** | **10th Literature & Composition or Approved Dual Enrollment Course** | **11th American Literature/Composition or AP English Language & Composition/Atelier Lit or Approved Dual Enrollment Course** | **Total Credits**
---|---|---|---|---
**Total 3 credits** | **Total 3 credits** | **Total 3 credits** | **Total 4 credits**
1 credit | 1 credit | 1 credit | 1 credit
**Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]** | **Credit Earned [ ]**

### Advanced Academic Pathways

- English/Language Arts, Math, Science, Social Studies

An advanced academic pathway may be followed in any one of the content subjects listed above. Upon graduation, students earn an advanced academic pathway when they complete the required coursework to include at least one AP or one IB or one Dual Enrollment course. An advanced academic pathway should also include at least two credits in one world language. AP, Dual Enrollment and Georgia Virtual School courses may be available.

### World Language Pathways

- Visual Arts, Dance, Music, Journalism, Theatre

A fine arts pathway may be followed in any one of the five areas listed above. Upon graduation, students complete a fine arts/performance arts pathway when three courses have been successfully completed in any one of the five areas. A student should consult a counselor or advisor for related coursework.

### Fine Arts/Performing Arts Pathways

- Visual Arts, Dance, Music, Journalism, Theatre

A fine arts pathway may be followed in any one of the five areas listed above. Upon graduation, students complete a fine arts/performance arts pathway when three courses have been successfully completed in any one of the five areas. A student should consult a counselor or advisor for related coursework.

**At the end of the 11th grade, students planning to enter a University System of Georgia Institution or Technical College System of Georgia Institution should take the appropriate admissions test (SAT, ACT, Compass).**

### Legend:

- Science: Approved 4th Science may be used to meet both the required science and required elective in a Career, Technical, and Agricultural Education (CTAE) sequence of courses; see Fourth Science Requirements for more information. Student may take science courses in any sequence.
- Math: Select Math sequence 1, 2, 3, 4, based on 9th grade entry course.
- **Students must complete two credits of the same world language for admission to University System of Georgia institutions.
- ** Students should complete a CTAE pathway and take the related end of pathway assessment.

**NOTE:** Local systems may offer core courses in a different sequence; not all local systems offer every pathway. Students should explore all credit possibilities including Georgia’s Virtual School Program, Dual Enrollment, Advanced Placement (AP), International Baccalaureate (IB) and Work-Based Learning (WBL) to reach their educational and career goals.
SAMPLE Pathway OCCUPATIONS
See *Georgia’s HOT Careers to 2020* for more information on high-skilled, high-wage and high-demand occupations.

<table>
<thead>
<tr>
<th>Occupation Specialties</th>
<th>Entry Level of Education Needed</th>
<th>2012 Annual Wage</th>
<th>Annual Openings 2012-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest and Conservation Technicians</td>
<td>High School</td>
<td>$40,700</td>
<td>10</td>
</tr>
<tr>
<td>Energy Brokers</td>
<td>Bachelor’s Degree</td>
<td>$45,400</td>
<td>240</td>
</tr>
<tr>
<td>Wind Energy Engineers</td>
<td>Bachelor’s Degree</td>
<td>$87,300</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Georgia Department of Labor/ONET

For more information about your education and career planning, including valuable financial aid information that includes grants and scholarships, see your school counselor.

### Current Georgia Graduation Rule

<table>
<thead>
<tr>
<th>Coursework</th>
<th>Credits</th>
<th>Coursework</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. English/Language Arts</td>
<td>4</td>
<td>V. Health &amp; Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>II. Math</td>
<td>4</td>
<td>VI. **Career, Technical &amp; Agricultural Education and/or</td>
<td>3</td>
</tr>
<tr>
<td>III. *Science</td>
<td>4</td>
<td>***World Languages, and/or Fine Arts</td>
<td></td>
</tr>
<tr>
<td>IV. Social Studies</td>
<td>3</td>
<td>VII. Electives</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL</td>
<td>23</td>
</tr>
</tbody>
</table>

*Selected 4th Science courses may be used to meet both the required science and required elective in a CTAE sequence of courses.

**Students must complete three credits to complete a CTAE pathway and take the end of pathway assessment.

***Students must complete two credits of the same world languages for admission to Georgia Board of Regents colleges/universities.

**** Current graduation requirements should be met in all content areas.

NOTE: This plan represents minimum graduation requirements. Local systems may require additional coursework.

Postsecondary Transition:

- Students who will continue their education in a Program of Study at one of University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Contact the selected institution for specific testing information. Additional admissions information can be found at Staying On Course. ([www.usg.edu/student_affairs/documents/Staying_on_Course.pdf](http://www.usg.edu/student_affairs/documents/Staying_on_Course.pdf))

- Students who will continue their education in a Program of Study at one of the Technical College System of Georgia institutions should prepare to take the COMPASS test for admissions.

- Students who will continue their education and training in the US Military should take the ASVAB assessment.

- Students should utilize electronic college and career data bases to select the most appropriate postsecondary opportunities to match their selected career field, including registered apprenticeships.

- Georgia’s dual-credit programs have been combined into one program entitled Move on When Ready, in which high school students may earn their high school course credits while taking college courses.

Possible Student Pathway Credentialing Opportunities:

Students completing a pathway are eligible to take a Credentialing/End of Pathway Assessment (EOPA) upon successful completion of the three required courses in the pathway. For specific assessment information, refer to [http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx](http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/CTAE-Georgia-Assessments.aspx)

*Related Pathway Occupations:*
- Energy Auditors
- Energy Engineers
- Wind Turbine Service Technicians
- Solar Energy Installation Managers
- Fuel Cell Engineers
- Foresters
- Civil Engineers

Other Related Agriculture, Food, & Natural Resources Occupations:
- Environmental Economists
- First-Line Supervisors of Logging Workers
- Range Managers
- Soil and Plant Scientists

*ONET Online

Forest/Renewable Energy

Renewable energy sources have opened up exciting new career fields. Solar, wind, and biofuel energy sources are being used more and more as we try to move away from nonrenewable energy sources. With a career in this field, employees can help preserve the natural environment while providing renewable energy to businesses and homeowners.

Workers in this field usually have at least a bachelor’s degree and the job training experience. Workers in this area should enjoy working with their hands, planning out detailed projects, and carrying out projects independently. Workers should also be good at working with others and following instructions.