**Student Plan of Study – Architectural Drawing & Design**

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>I. English/Language Arts</th>
<th>II. Math</th>
<th>III. Science</th>
<th>IV. Social Studies</th>
<th>V. Health/Personal Fitness</th>
<th>VIII. Possible electives in additional pathways (students should check the local course description catalog for these and other electives)</th>
</tr>
</thead>
</table>
| 9th         | 1 CCGPS Cord Algebra     | 1 credit | 1 credit    | American          | ½ credit                 | **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. |
|             | 2 CCGPS Analytic Algebra |         | 2 credit *  | Government/Civics | Credit Earned            | **World Language Pathways**  
**Two credits are required for admissions to University System Institutions.**  
For a listing of world language courses offered at your high school, please check with your advisor, counselor, or local course description catalog. A world language pathway may be followed in any of the world language areas included in the state list of approved courses. Upon graduation, students earn a world language pathway when they complete three credits in one language. The third course may reflect an AP, IB or Dual Enrollment designation.  
Georgia Virtual School and ACCEL courses may be available. |
|             | 3 CCGPS Accel Algebra    |         | 1 credit *  | Government/Politics | Credit Earned            | **Fine Arts/Performing Arts Pathways**  
A fine arts pathway may be followed in any one of the five areas listed above. Upon graduation, students complete a fine arts/performing 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.  
AP, Dual Enrollment and Georgia Virtual School courses may be available. |
|             | 4 CCGPS Accel Analytic Geometry |       | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Additional Electives**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 5 CCGPS Pre-Calculus     |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 6 CCGPS Pre-Calculus     |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 7 CCGPS Pre-Calculus     |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 8 CCGPS Pre-Calculus     |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 9 CCGPS Pre-Calculus     |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 10 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 11 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 12 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 13 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 14 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 15 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |
|             | 16 CCGPS Pre-Calculus    |         | 1 credit *  | Approved Dual Enrollment Course | Credit Earned          | **Other CTAE Elective Courses:**  
Any of the previous courses or any required Advanced Placement or Dual Enrollment course  
Econ/Business/Free Enterprise or AP Micro Econ or AP Macro Econ or IB Econ or Approved Dual Enrollment Course  
½ credit | Credit Earned |

**Legend:**  
*Science: Approved 4th Sciences may be used to meet both the required science and required elective in a Career, Technical and Agricultural Education (CTAE) sequence of courses; see Four 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>Landscape Architects</td>
<td>Bachelor's Degree</td>
<td>$59,300</td>
<td>10</td>
</tr>
<tr>
<td>Architectural &amp; Civil Drafters</td>
<td>Associate's Degree</td>
<td>$49,700</td>
<td>40</td>
</tr>
<tr>
<td>Surveyors</td>
<td>Bachelor's Degree</td>
<td>$44,200</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Georgia Department of Labor/ONET

*Related Pathway Occupations:*
- Architects
- Architectural and Civil Drafters
- Landscape Architects
- Surveyors
- Computer Aided Drafters (CAD)
- Renderers

*Other Related Architecture & Construction Occupations:*
- Civil Engineers
- Electrical Engineers
- Environmental Designers
- Regional and Urban Planner/Designers

*ONET Online

### Architecture & Construction/Draw and Design

Drawing and design is the process of turning ideas of how things should be constructed into technical drawings. These drawings are based on sketches and calculations made by engineers, surveyors, architects and/or scientists. The drawings provide visual guidelines such as dimensions, materials to be used, and procedures to be followed to build everything from manufactured products such as spacecraft, automobiles, and industrial machinery to structures such as homes, office buildings, and oil and gas pipelines.

Opportunities will be best for those who have at least two years of postsecondary training in a drafting program that provides strong technical skills and for those who have considerable skill and experience using CADD systems. As technology continues to advance, employers will look for drafters who have a strong background in fundamental drafting principles with a higher level of technical sophistication and an ability to apply this knowledge to a broader range of responsibilities. Although employers usually do not require drafters to be certified, certification demonstrates an understanding of nationally recognized practices and standards of knowledge. Jobs in this field may be found in construction, architecture, engineering and related service firms, and manufacturing industries.

Drafters can expect slower than average employment growth, with the best opportunities expected for those with at least 2 years of postsecondary training. Employment of drafters is expected to grow 6 percent from 2010 to 2020. Developments in software programs used by drafters and other professionals they work with are changing the nature of drafters’ work and how this work will have to be done. Growth will vary by specialty and competition will be keen.

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</td>
<td>3</td>
</tr>
<tr>
<td>III. *Science</td>
<td>4</td>
<td>and/or ***World Languages, and/or Fine Arts</td>
<td>4</td>
</tr>
<tr>
<td>IV. Social Studies</td>
<td>3</td>
<td>VII. Electives</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 language 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 the University System of Georgia institutions should prepare to take the ACT or SAT for admissions. Tests for admissions may vary from institution to institution. Students should 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)

- 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.

Richard Woods, Georgia’s School Superintendent
"Educating Georgia’s Future"