

## A.S. Computer Programming and Analysis (60 Credits)

### Guided Pathway: Associate of Science, Computer Programming and Analysis (CPVM)

For more information, visit [www.fgc.edu](http://www.fgc.edu) and your academic advisor.

Meta-major: STEM

The Associate in Science in Computer Programming and Analysis prepares students for employment in a variety of computer science fields. These include computer programming, computer applications, entry-level-analysis, computer sales and more. This Computer Programming and Analysis program can be taken entirely online.

This is the sequence of courses for students interested in a Computer Programming and Analysis Degree. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an AS degree<sup>ii</sup>. Courses that complete the degree are listed below. As always, visit your academic advisor each semester to help you keep on track for graduation.

All AS degrees must satisfy the statewide Civic Literacy requirement for graduation. Please see the [catalog](#).



### SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS

SEMESTER 1	ACTION ITEMS
ENC 1101 – Freshman Composition	<ul style="list-style-type: none"> <li>Complete the Florida Gateway College Application</li> <li>Complete the CITN program application</li> <li>Begin applying for Financial Aid and Scholarships. <i>(You can start the FAFSA in October for the next academic year – i.e. October 2023, you can complete the FAFSA for class registration for Fall 2024)</i></li> <li>Check with your advisor for important deadlines and dates.</li> <li>REQUIRED: Contact the Test Center and schedule to take the PERT Exam, which must be taken prior to registration for classes.</li> <li>Meet with your advisor to discuss your plan of study.</li> </ul>
COP 2000 – Introduction to Programming	
COP 2830 – Basic Web Page Programming	
CTS 1170 – Foundations of Information Security	
CGS 1030 – IT Concepts	
<b>TOTAL SEMESTER CREDIT HOURS: 15</b>	
SEMESTER 2	ACTION ITEMS
General Education Humanities Core Course	<ul style="list-style-type: none"> <li>Meet with your advisor to confirm or update your academic/career pathway and program of study.</li> </ul>
General Education Natural Science Core Course <i>(3-5 cr)</i>	
COP 2501 – Intermediate Programming	
CGS 2541 – Database Management	
COP 2851 – Designing Web Pages	
<b>TOTAL SEMESTER CREDIT HOURS: 15-17</b>	
SEMESTER 3	ACTION ITEMS
COP 2334C – Beginning C++ Programming	<ul style="list-style-type: none"> <li>Check with your advisor for important deadlines and dates.</li> </ul>
COP 2800 – JAVA	
COP 2801 – JavaScript	
CIS 2619 – Designing Secure Software	
MAC 1105 – College Algebra	
<b>TOTAL SEMESTER CREDIT HOURS: 15</b>	

SEMESTER 4	ACTION ITEMS
<b>Choose one:</b> AMH 2020 – US History from 1865 <b>OR</b> POS 1041 – American Government <sup>iv</sup> ( <i>Social Science &amp; civic literacy</i> )	<ul style="list-style-type: none"> <li>• Signup for and pass the Florida Civic Literacy Exam.</li> <li>• After reviewing your final program of study, apply for Graduation. <ul style="list-style-type: none"> <li>○ Meet with your advisor to apply for graduation for your degree.</li> <li>○ Sign up for commencement.</li> </ul> </li> <li>• Congratulations, graduate!</li> </ul>
CTS 2445 – SQL Programming	
COP 2660 – Programming for Mobile Devices	
CEN 2212 – Intro to Programming the IoT	
<b>Any Approved Computer Programming &amp; Analysis Elective</b>	
<b>TOTAL SEMESTER CREDIT HOURS: 15</b>	
<b>CPVM DEGREE PATHWAY TOTAL: 60-62 CREDIT HOURS</b>	

<sup>i</sup> Degree plans may change in later catalogs. You may use this pathway if you entered the college on or before this date.

<sup>ii</sup> Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by FGC to award the degree.

<sup>iii</sup> This is not an official degree plan. For official degree requirements, [click here](#).

<sup>iv</sup> You must earn a grade of "C" or better in all Gordon Rule classes.