



# CCSD CAREER PATHWAYS

## Advanced Academics: Mathematics



	9 <sup>th</sup> Grade Courses	10 <sup>th</sup> Grade Courses	11 <sup>th</sup> Grade Courses	12 <sup>th</sup> Grade Courses
<b>English</b>	9 <sup>th</sup> Grade Literature/Composition	10 <sup>th</sup> Grade Literature/Composition	American Literature/Composition or AP English or Dual Enrollment	British Literature/Composition or AP English or Dual Enrollment
<b>Math</b>	Coordinate Algebra or Accelerated Coordinate Algebra/Analytic GeometryA*	Analytic Geometry or Accelerated Analytic GeometryB/Advanced Algebra*	Advanced Algebra or Pre-Calculus or AP Math or Dual Enrollment*	Advanced Mathematical Decision Making or Pre-Calculus or AP or Dual Enrollment*
<b>Science</b>	Biology	Chemistry or Physics or Environmental Science or Earth Systems	Chemistry or Physics or AP Science or Dual Enrollment	Fourth Science Course or AP Science or Dual Enrollment
<b>Social Studies</b>	Government or AP Government	World History or AP World History	US History or AP History or Dual Enrollment	Economics or AP Economics or Dual Enrollment
<b>Other Required Courses/ Recommended Electives (Based on Pathway)</b>	Health and Personal Fitness Foreign Language	Foreign Language	Foreign Language	Foreign Language
<b>Required Pathway Courses</b>		Math Elective*	Math Elective*	Math Elective*
<b>Other Possible Electives</b>	Math Support, Fine Arts, GA Virtual	Math Support, Fine Arts, GA Virtual	Math Support, Fine Arts, GA Virtual, AP, Dual Enrollment, Career-Based Learning	Fine Arts, GA Virtual, AP, Dual Enrollment, Career-Based Learning

Sample Occupations Related to This Pathway
<ul style="list-style-type: none"> <li>• Engineers</li> <li>• Teachers</li> <li>• Statisticians</li> <li>• Mechatronics Technicians</li> <li>• Software Developers</li> <li>• Climate Analysts</li> <li>• Research Scientists</li> <li>• Forensic Analysts</li> <li>• Epidemiologists</li> <li>• Financial Analysts</li> </ul>

\*In order to complete this pathway, one of the courses must be taken at the Advanced Placement (AP), International Baccalaureate (IB) or dual enrollment level.

Mathematicians use math and technology to develop new principles of math and solve real-world problems. Many mathematicians work for the federal government in agencies such as NASA or the Department of Agriculture, scientific research and development services in a hospital or medical research labs and colleges/universities as well as local school systems. Career clusters like Science, Technology, Engineering and Math (STEM) contain occupations in the same field of work that require similar knowledge and skills. Secondary students who select this field of study should consider additional coursework in a more specific career-related pathway such as Engineering or Advanced Programming. Please visit [gacollege411.com](http://gacollege411.com) for more information about education, career planning and financial aid.

Please note that this is intended as a guide and is not exhaustive.