

ACADEMY: STEM		CAREER CLUSTER: INFORMATION TECHNOLOGY				PATHWAY: GAME DESIGN			
CURRICULUM CREDITS									
		LANGUAGE ARTS (LA) 4 credits	MATH (MA) 4 credits	SCIENCE (SC) 4 credits	SOCIAL STUDIES (SS) 3 credits	HEALTH & PHYSICAL EDUCATION 1 credit	PATHWAY ELECTIVES 3 credits	OTHER ELECTIVES 4 credits	
		1 credit 9 th grade Lit. 1 credit 10 th Lit. 1 credit 11 th grade Lit. 1 credit 12 th Lit	1 credit Algebra 1 1 credit Geometry 1 credit Algebra II 1 credit 12 th grade math	1 credit Biology 1 credit Chemistry 1 credit Physics 1 credit science elective	1 credit World History 1 credit US History .5 credit Economics .5 credit Political Systems	.5 credit personal fitness and .5 Health OR 3 credits JROTC	3 courses in the same pathway	Other elective courses (any combination) (2 credits of the same modern or classical language are required for university admission in the state of Georgia)	
HIGH SCHOOL	9 th	9 th grade Literature & Composition (EOC)	Algebra I (EOC)	Biology (EOC)		Personal Fitness & Health	Intro to Digital Tech	Foreign Language 1	
	10 th	10 th Grade Literature & Composition	Geometry (EOC)	Chemistry	World History		Computer Science Principles	Foreign Language 2	
	11 th	11 th grade Lit. & Composition	Algebra II	Physics	US History		Game Design	Maxwell Grayson Tech Work-Based Learning Dual Enrollment	
	12 th	12 th grade British Lit.		Science Elective	Econ/Political Systems				
CTSOs and/or additional learning opportunities:									
OTHER	CTE DUAL ENROLLMENT AND WORK-BASED LEARNING OPPORTUNITIES								
		WORK-BASED LEARNING /INTERNSHIPS				DUAL ENROLLMENT			
		N/A				Game Development (Gwinnett Technical College) Information Technology (Georgia Gwinnett College)			
POST SECONDARY	Secondary career and technical education programs may lead to industry recognized certificates, occupational opportunities or postsecondary education programs. Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.								
		TECHNICAL CENTER PROGRAM(S) CERTIFICATIONS: GWINNETT TECH, WEST GEORGIA TECH, WIREGRASS GEORGIA TECH COLLEGE		COMMUNITY COLLEGE (2 Year Associate Degree) GEORGIA GWINNETT COLLEGE			UNIVERSITY PROGRAMS (4 Year Bachelor Degree) Georgia Tech, Georgia Southern, Kennesaw State, Savannah CAD, University of Georgia, Georgia State University		
CAREER	SAMPLE CAREER SPECIALTIES								
		Game Programmer		Game Artist, Quality Assurance			Video Game Programmer, Application Developer, Software Developer		

PATHWAY COURSE DESCRIPTIONS

COURSE TITLE	COURSE DESCRIPTION
Introduction to Digital Technology	Intro to Digital Tech is the first course in Information Technology that leads to the Web Development and Game Design pathways. This course covers careers in information technology, computational thinking applied to problem solving, and visual programming. Students will demonstrate employability skills and evaluate technologies appropriate for various situations. Introduction to Digital Technology provides an introductory look at becoming a professional in Information Technology.
Computer Science Principles	Computer Science Principles is the second course in the Web Development and Game Design pathways. This course covers digital artifacts, digital abstraction and operation of the internet. Students will demonstrate employability skills and create computer programs. Computer Science Principles provides an intermediate look at becoming a professional in Information Technology.
Game Design	Game Design is the third course in the Game Design Pathway. This course covers game design, animation and game physics. Students will develop 3D models for games, and design character animations. Game Design: Animation and Simulation provides an advanced look at becoming a professional in Information Technology.

Students in this pathway may also wish to consider:

ADDITIONAL PATHWAYS/ELECTIVE COURSES	RATIONAL
Programming/Apps & Game Design (Maxwell)	Game Design and Game Programming are specialized fields in the world of Application Programming
Digital Media (Grayson)	If Game Design sparks your artistic flair, the field of Digital Media will be a powerful accompaniment to your skills set.
IT & Network Systems (Grayson)	Once you know your way around the computer from the Software Development end, you should learn the back-end tools like networking and systems administration.