

## INFORMATION TECHNOLOGY CLUSTER

GAME DESIGN  
PATHWAY

Students completing this pathway will gain an understanding of the fundamental principles used at every stage of the game creation process. After establishing foundational knowledge, game genres and modes of play are explored in terms of the psychology of incentives, motivation to play, and social networking. Virtual characters and non-player characters are reviewed from concept drawing to 2D and 3D art, rigging, and animation. Level design, storytelling, and animation are added to develop a virtual world around the characters. Students taking this pathway are strongly encouraged to add an internship to their curriculum which will give them real world experience and an understanding of how the computer game industry works. Employment of game designers is expected to increase 8 percent from 2016 – 2026, about as fast as the average for all occupations, resulting in 6,200 jobs available nationwide.

**PATHWAY COURSES**

- Introduction to Software Technology
- Computer Science Principles or AP Computer Science Principles
- Game Design: Animation and Simulation

**RECOMMENDED COURSES**

- Any Art Course
- Any Computer Science Course
- Any Mathematics Course
- Any Physics Course
- Student Internship

**POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES****TECHNICAL COLLEGES**

- Game Development
- Computer Information Systems
- Computer Programming
- Design and Media Production Technology

**COLLEGES/UNIVERSITIES**

- Computer Engineering
- Computer Science
- Management Information Systems

**CAREER AND TECHNICAL STUDENT ORGANIZATIONS**

- Alliance Academy for Innovation
- Denmark High School
- East Forsyth High School
- Forsyth Central High School
- Forsyth Virtual Academy
- Lambert High School
- North Forsyth High School
- South Forsyth High School
- West Forsyth High School

**TOP CAREER CHOICES**

**Computer Game Designer**  
Bachelor Degree Required  
\$63,970 annual salary

**Multimedia Artists and Animators**  
Bachelor Degree needed  
\$70,530 annual salary

**Computer and Information Systems Managers**  
Bachelor Degree Required  
\$134,679 annual salary  
333 annual average openings in Georgia

**ADDITIONAL CAREER CHOICES**

- Audio Engineer
- Computer Programmer
- Software Developer
- Technology Support Specialist
- Video Game Tester



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>



**CAREER  
EXPLORATION  
& Pathway Discovery**  
CTAE Career Pathways / Fine Arts Pathways