

## Information Technology: Web & Digital Communications

### Career Pathway Plan of Study: Game Designer/ Game Programmer

**Average Salary**  
**\$65k - \$90K**

**Career Track Description:** Game designers exercise creative and analytical skills and can play with video games as part of their jobs.

Education Levels	Grade	Career and Technical Courses for Web & Digital Communications Pathway	eDL Course Recommended Elective Options	eDL Course Options For English, Science and Social Studies
<b>Secondary</b>	<b>9</b>	<ul style="list-style-type: none"> <li>Principles of Information Technology 1a: Introduction</li> <li>Principles of Information Technology 1b: Working with Computers</li> </ul>	<ul style="list-style-type: none"> <li>Workplace and Internship Readiness</li> <li>Social Media: Our Connected World</li> </ul>	<ul style="list-style-type: none"> <li>Anatomy and Physiology 1a: Introduction</li> <li>Anatomy and Physiology 1b: Discovering Form and Function</li> </ul>
	<b>10</b>	<ul style="list-style-type: none"> <li>Foundations of Game Design 1a: Introduction</li> <li>Foundations of Game Design 1b: Storytelling, Mechanics, and Production</li> </ul>	<ul style="list-style-type: none"> <li>Personal Psychology: The Road to Self-Discovery</li> <li>Personal Psychology: Living in a Complex World</li> </ul>	<ul style="list-style-type: none"> <li>Marine Science: Secrets of the Blue</li> <li>Introduction to Renewable Technologies</li> </ul>
	<b>11</b>	<ul style="list-style-type: none"> <li>Game Design 2a: Build a World</li> <li>Game Design 2b: Launch a Game</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft PowerPoint</li> <li>Microsoft Word</li> <li>Microsoft Excel</li> </ul>	<ul style="list-style-type: none"> <li>Astronomy 1a: Introduction</li> <li>Astronomy 1b: Exploring the Universe</li> </ul>
	<b>12</b>	<p><b>Optional Course Options:</b></p> <ul style="list-style-type: none"> <li>Animation 1a: Introduction</li> <li>Animation 1b: Animating Your Creativity</li> <li>3D Modeling</li> </ul>	<ul style="list-style-type: none"> <li>The Lord of the Rings: An Exploration of the Films &amp; Their Literary Influences</li> <li>Theater, Cinema &amp; Film Production</li> <li>Entrepreneurship 1a: Introduction</li> <li>Entrepreneurship 1b: Make Your Idea a Reality</li> </ul>	<ul style="list-style-type: none"> <li>Creative Writing: Unleashing the Core of Your Imagination</li> <li>Introduction to Programming 1a: Introduction</li> <li>Introduction to Programming 1b: Problem Solving Through Programming</li> <li>Gothic Literature: Monster Stories</li> <li>Mythology &amp; Folklore</li> </ul>
		<p><i>*Courses with an "a" and "b" version are each a semester in length and taught together over the course of one year.</i></p>	<p><i>*All courses listed above are options appropriate for grades 9-12</i></p>	<p><i>*All courses listed above are options appropriate for grades 9-12</i></p>

#### Middle School Course Recommendation:

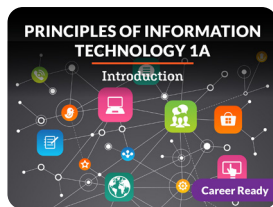
Middle School Exploring IT  
 Middle School Game Design 1a: Introduction  
 Middle School Game Design 1b: Creating a Game



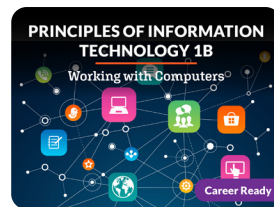
#### Industry Certifications

iC3 Computing Fundamentals (mid pathway)  
 iC3 Living Online (mid pathway)  
 iC3 Key Applications (mid pathway)  
 CompTIA IT Fundamentals (ITF+) (mid pathway)  
 ICT Gaming Essentials  
 NOCTI Visual Communications and Interactive Media Design

## Course Descriptions



Explore a range of concepts to gain the foundational knowledge you'll need to start exploring careers in this field to find out which ones suit your interests and abilities. [LEARN MORE >](#)



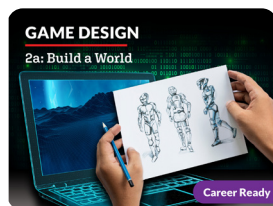
Starting with an overview of programming, algorithms, and compilers, you'll then learn the basics of web page design and creating graphics. [LEARN MORE >](#)



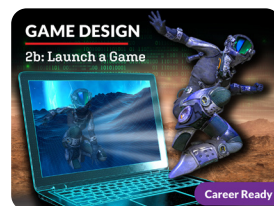
Pursue your passion by learning about the principles of game design through the stages of development, iterative process, critiques, and game development tools. [LEARN MORE >](#)



Develop your game creation skills and practice with the tools professionals use to launch your career options in the field of game design. [LEARN MORE >](#)



Beginning with conceptualization and the design process, you'll develop your game's story elements, narrative, plot, characters, and assets. [LEARN MORE >](#)



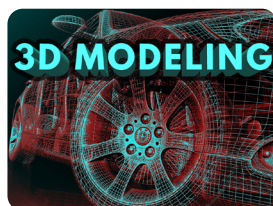
Coming soon! [LEARN MORE >](#)



Develop your story by exploring design, the 12 principles of animation, creating a storyboard, and leveraging the tools of the trade. [LEARN MORE >](#)



Discover 3D modeling and animation of characters. Explore the basics of human anatomy and form to apply rigging, joints, and texture. Examine rendering and lighting effects and how to apply sound. [LEARN MORE >](#)



Explore graphic design and illustration as you use 3D animation software to create design projects while developing your drawing, photography, and 3D construction techniques. [LEARN MORE >](#)



Discover how to build a well-rounded set of employability and leadership skills that allow you to guide your own career and nail your interviews. [LEARN MORE >](#)