

# Professional Development Standards

**P**LAYING video games is a favorite activity for many teenagers. Since it is so popular, many teenagers dream of being able to design their own video games or of being able to test video games that people have created. What does it take to actually obtain this dream job?



## Objectives:



1. Define professional development for the gaming industry.
2. Review skills required by the gaming industry.

## Key Terms:



game designers  
game mechanics  
designers

gameplay  
lead designers  
level designers

project managers  
user interface designers

## Game Designers

Game designers have various responsibilities because many steps exist to design a video game.

## ROLES FOR GAME DESIGNERS

Game designers can play many roles in the process of making a video game design. People may be part of the coding process or may be game testers.

## Game Designers

**Game designers** are people who design gameplay, conceiving and designing the game rules and structure. **Gameplay** is the specific way in which players interact with a game. It is the pattern defined through the game rules, a connection between the player and the game, and overcoming challenges.

## Game Design Teams

Designers work with a team to develop and design video games. Teams consist of various members, each dedicated to a specific game design task.

- ♦ **Lead designers** are people who coordinate the work of other designers; they are the main visionaries of the game. The lead designers ensure team communication, make large design decisions, and present designs outside of the team.
- ♦ **Game mechanics designers** (systems designers) are people who design and balance the game's rules.
- ♦ **Level designers** are the people responsible for creating the game environment, levels, and missions.
- ♦ **User interface designers** are people who construct the user interactions and feedback interface, such as menus or heads-up displays.

## Game Designer Duties

Game designers are an important part of a comprehensive team of designers and developers who coordinate the complex task of creating new video games. Game designers have duties (e.g., designing characters, levels, puzzles, art, and animation). They may write code using various computer programming languages.

## Project Managers

Depending on their career duties, project managers may be responsible for project management tasks and for testing early versions of video games. **Project managers** are the people in charge of overseeing video game development. They work with the studio development team, information technology, treasury, accounting, legal, royalties, and more. Major role responsibilities include finance management,



**FIGURE 1.** A project manager often leads meetings. He or she may share knowledge with the team members or lead a discussion on a specific issue.

resource management, and quality control management. Last year, approximately 32,000 people were employed as game designers.

## Professional Development

Education is the key to becoming a professional game designer. Many colleges, technical schools, and universities offer classes, certificates, and advanced degrees in areas such as computer programming, computer engineering, software development, computer animation, and computer graphics. Universities are creating curriculums to support careers in video game design. The courses are usually offered within the computer science and media departments.

Video game designers typically have a bachelor's degree in game design, computer engineering, or computer science. These programs can take four to five years to complete. Courses in a game-design degree program may include project management, integrated video design and technology, game prototyping, and level design. Accredited training in these areas will show a prospective employer a degree of seriousness about the chosen field.

Many video game designers keep current with trends and further their education in new software or programs to meet demands and growth in the industry. Professional organizations, such as the International Game Developers Association (IGDA) and the Entertainment Software Association (ESA), help designers keep abreast of current trends.

## Skills Needed

Various skills are required to be a video game designer. The skills needed depend on what role you play in the process of creating a video game.

## REQUIREMENTS

Loving video games is a small part of the equation for becoming a game designer. To turn those dreams and visions into a reality, prospective game designers need training and skills. Video game designers must have a strong set of skills, including programming, video graphics, and hardware essentials.



## FURTHER EXPLORATION...

### ONLINE CONNECTION:

#### Degrees Required to Become a Video Game Designer

Are you interested in becoming a video game designer? Click on the following link to see a list of possible degrees that you must obtain: <http://www.degreetree.com/resources/how-to-become-a-video-game-designer>. It also lists skills needed and salary ranges. After reading the article, write a short summary of your findings.

## Required Computer Skills for a Video Game Designer

Game designers must be knowledgeable about computer programming and writing. Computer animation and graphics also play a huge role in video games, so game designers must have some skills in these areas. Graphics is what players actually see on the screen. In contrast, animation is putting items or characters in motion. Video game designers need a thorough knowledge of the workings of various game consoles (e.g., Playstation, Nintendo Wii, and Microsoft Xbox). Each system operates in its own way, using its own operating characteristics. Video game designers must be aware of these characteristics to ensure the software is compatible with the intended console. Also, game designers must have some familiarity with operating systems, chip design, and other factors that determine how consoles operate.



**FIGURE 2.** Game designers must have some skills in computer animation and graphics.

## Additional Skills Required

Game designers typically work in a managerial role on a video game project, helping to manage budgets, work schedules, and project timelines. Attention to detail is important, as are clear writing, communication skills, enthusiasm, and knowledge of the video game industry. Other so-called “soft skills” are required for video game designers, such as strong interpersonal and written communications abilities, organization, teamwork, an analytical mind, and up-to-date knowledge of the history and trends of the video game business and markets.

## Summary:



Game designers are an important part of a comprehensive team of designers and developers who coordinate the complex task of creating new video games. Game designers have duties such as designing characters, levels, puzzles, art, and animation. They may be responsible for project management tasks and testing early versions of video games. Video game project managers are the people in charge of overseeing the development of video games. Project managers work with the studio development team, information technology, treasury, accounting, legal, royalties, and others.

Education is the key to becoming a professional game designer. Many colleges, technical schools, and universities offer classes, certificates, and advanced degrees in areas such as computer programming, computer engineering, software development, computer animation, and computer graphics.

## Checking Your Knowledge:

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1. What does a game mechanics designer do?
2. What is one responsibility of a project manager?
3. What are user interface designers?
4. What is the definition of gameplay?
5. What is one example of a soft skill?

## Expanding Your Knowledge:

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Research a university that has video game design majors. What majors does the university offer? What classes are required within the major? After completing a full search, create a PowerPoint presentation to share with your classmates to inform them of the majors, courses required, cost, etc.

## Web Links:

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### Video Game Designer

<http://www.studydiscussion.com/how-to-become-a-video-game-designer/>

### Required Skills

[http://www.gamedegree.com/careers\\_Skills.asp](http://www.gamedegree.com/careers_Skills.asp)

### Education & Training

<http://work.chron.com/education-training-necessary-game-designer-4875.html>